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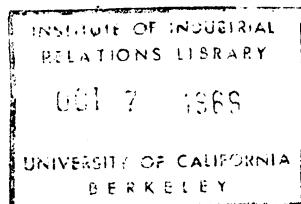
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EMPLOYER POLICIES
in a
CHANGING LABOR MARKET:

REPORT OF THE SAN FRANCISCO BAY AREA
EMPLOYER POLICY SURVEY

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and
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Report of the San Francisco Bay Area Employer Policy Survey,
1967

by

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The present study has been supported by the U. S. Office of Education and the Manpower Research Administration of the U. S. Department of Labor, with the major portion of the funds coming from the latter agency.

Early in 1966, a grant was received from the Office of Education under the provisions of Section 4(c) of the Vocational Education Act of 1963 permitting work to begin on the Employer Policy Survey as well as certain other aspects of the Institute's overall labor market research project. Through a separate agreement between the Department of Health, Education, and Welfare and the Department of Labor, the Office of Manpower Policy, Evaluation, and Research of the latter Department contributed 50 per cent of the project's funds in its first year, February 7, 1966 through January 31, 1967.

At the close of 1966, it became apparent that the U. S. Office of Education would not be able to provide further support for the project because of sharp reductions in the budget for research on vocational education. Beginning July 1, 1967, the Office of Manpower Policy, Evaluation, and Research assumed the funding of those portions of the original project on which research was to be done in 1967-1968, primarily the Employer Policy Survey. This Office, now part of the Department of Labor's Manpower Administration, has subsequently provided funds for another section of the Institute's labor market research program, a study of placement and counseling services in the Bay Area.

Among the groups and individuals that assisted the Institute in

planning the present survey, the members of the Employer Advisory Committee for the project were especially helpful. Not only did they participate in a number of meetings at which the plans for the survey and the interview schedule were extensively discussed, but members of the committee also provided continuous assistance during the interview phase of the study, through letters and personal contacts, in obtaining the cooperation of the employers participating in the survey.

Members of the Employer Advisory Committee were as follows:

Leonard Beanland Pacific Gas and Electric Co.	John B. Richards California Metal Trades Assoc.
William K. Brown Continental Can Co.	John A. Scalone California Processors and Growers, Inc.
Harold Buma Bank of America	Angelo J. Siracusa San Francisco Bay Area Council, Inc.
John Cantwell United Employers, Inc.	William H. Smith Federated Employers of the Bay Area
A. E. Ellison Pacific Telephone Co.	Stephen Snow Northern California Motor Car Dealers Assoc.
Harry Erickson Associated General Contrac- tors of America, Inc.	Percy Steele Bay Area Urban League
Jack B. McCowan Fireman's Fund Insurance Co.	G. Luther Weibel Macy's of California
Clarence Millman California Trucking Assoc.	
Roy R. Reynolds Kaiser Industries Corp.	

The plans for the survey also benefited greatly from the advice and assistance of the project's Faculty Advisory Committee which included Lloyd Ulman (chairman), E. R. F. W. Crossman, Varden Fuller, Joseph Garbarino, George Strauss, and Harold L. Wilensky. Extensively involved

in the detailed work of planning the interview schedule were Ulman, Sara Behman, Margaret Gordon, and Margaret Thal-Larsen. In addition, some of the problems in labor market analysis with which the study was concerned were extensively discussed in Ulman's graduate seminar during the academic year 1965-66.

Various representatives of state and federal agencies stationed in the Bay Area contributed invaluable technical assistance in connection with this study, some of them at the outset of the survey and others throughout its course. The officials who helped us are not limited to those named below, but the following were particularly generous in contributing their own time and that of their staffs or in sharing their resources of information and experience upon request:

Mr. Maurice I. Gershenson, former Chief of the Division of Labor Statistics and Research of the California Department of Industrial Relations, and Mrs. Noel Barber, Head of Employment Statistics of the Division, whose full cooperation in drawing the sample used in the Employer Policy Survey and in furnishing technical assistance as our study progressed was invaluable.

Mr. Charles A. Roumasset, San Francisco Regional Director of the Bureau of Labor Statistics, U.S. Department of Labor, and Mrs. Helen Charlton, Employment Analyst in that office, who facilitated our efforts to obtain needed information from the Cooperative Employment Statistics Program without violating the confidentiality of individual employer returns, an often difficult achievement.

Mr. Russell M. Fitzhugh, Chief, U.S. Employment Service Systems Support, and Mr. Walter Postle, Regional Economist, both of the San Francisco Regional Office of the Manpower Administration, U.S. Department of Labor, who read the interview schedule in draft form and gave us their advice and suggestions.

Mr. James Neto, Coastal Area Analyst of the California Department of Employment, and his staff who, upon our frequent requests, supplied facts and figures both published and unpublished concerning the Bay Area labor market.

In view of the many aspects of employer policies and practices

included in the scope of the interview, and the fact that the valuable time of busy executives was involved, we selected interviewers with a broad background knowledge of the labor market or of personnel administration gained from long experience in private industry or government. In fact, all the interviewees who participated in the pilot interviews warned us not to use "ordinary poll takers" in this survey. The interviewers included Gene Andres, Alma Comstock, John Dana, Janet Messman, Elmore Nelson, Elizabeth Morris, and Margaret Thal-Larsen. Also participating in some of the interviews were graduate students who were working on doctoral theses on related subjects. They included Sidney Ingerman and Stephen Welch.

We are also indebted to many other persons who participated in the study as coders, typists, or graduate assistants. The coders included Susan Brooke, Linda Brownstein, Susan Carroll, Jo Ellis, and Jan Lumas. Serving as office secretaries or typists at various stages of the survey were Dorothy Broido, Ethel Davis, Andrea Eiger, Catherine Geisert, Cecily Hubata, Enid Meyer, Caryl Schrock, and Carolyn Williams. Graduate students who participated as research assistants included David Kotz, Bernard Robinson, and Alan Sapoznick.

A very special debt of gratitude is owed to Barbara Palmer, who was responsible for the final typing of the text of the report and for supervising the work of the other typists, as well as to Jeanette Podvin, who carried the chief responsibility for the typing of the tables.

We are grateful for the valuable critical comments of George Strauss, Associate Director, Institute of Industrial Relations, on certain portions of an earlier draft of the manuscript. Although we have taken these and

other comments into account in the final revision of the report, the authors alone are responsible for the interpretation of the data and for the conclusions and policy recommendations.

Finally, we wish to express our very great appreciation to all the employer representatives who participated in the lengthy interviews that were involved in this survey. It is our hope that they will find the results interesting and useful.

MAJOR FINDINGS AND POLICY RECOMMENDATIONS

In summarizing the findings of the survey of employer policies in the San Francisco Bay Area, conducted by the Institute of Industrial Relations of the University of California (Berkeley) in 1967, an attempt will be made to present the results in order of their relative significance, with particular reference to policy implications for the U. S. Department of Labor, which provided major financial support for the survey. However, some of the results which do not receive priority treatment on this basis, relating, for example, to geographical wage differentials within the area, will be of special interest to labor economists and other industrial relations experts. Based on lengthy interviews with 309 establishments with 100 or more employees, representing all major industry groups, in the San Francisco-Oakland and San Jose metropolitan areas, the survey covered all major aspects of employer policies.

The Spatial Complexity of a Large Metropolitan Labor Market

Most of the labor market studies of the early postwar years were conducted in modest-sized labor market areas or in the central cities of large metropolitan areas. Apart from the series of studies of the New York Metropolitan Region directed by Vernon,¹ which was not particularly concerned with employer policies, and the recent Rees-Shultz study² of the Chicago labor market area, which was focussed primarily on wage differentials, there have been few, if any, studies which shed much light on variations in labor market relationships within a large metropolitan labor market area.

The industrial decentralization within metropolitan areas which has proceeded apace during the postwar period has clearly increased the spatial complexity of large metropolitan labor market areas. The decisions of employers as to where precisely within a large labor market area to locate--or whether or not to move within the area--are influenced by a complex interplay of demand and supply factors.

On the demand side, certain types of industries will continue to be induced to locate, at least their area headquarters, in central cities. Large banks, investment houses, and, to some extent, insurance companies are, of course, prime examples, as are hotels, restaurants, and other service establishments that cater to the sophisticated local and tourist clientele of a large central city. And, in San Francisco, at least, the downtown area is still considered a prime location by many of the large department stores, even though these firms have in many cases established branches in suburban areas. But our data also indicate that there are other types of establishments that find it advantageous, from the demand point of view, to have a central city headquarters or single unit office. Examples are large construction companies that cater to an areawide or in some cases to a national or international clientele and printing establishments whose customers are the large central city financial and commercial establishments.

On the other hand, for many other types of establishments whose customers are located throughout the labor market area and adjacent areas or whose products and services are "exported" to broad regional, national, or worldwide markets, demand factors do not require a central city location, while many supply factors militate against location in the

central city.

On the supply side, we have found a good deal of evidence to the effect that the need for more and/or cheaper space and access to transportation have played a leading role in industrial decentralization. This is consistent with the findings of the study of the New York region.³ But, also consistently with those findings, we have uncovered a good deal of evidence that labor cannot be ignored as a factor influencing location outside the central cities and also as a factor influencing just where, in the outer ring, a given type of industrial establishment is likely to be located. The aerospace industries were induced to locate in Southern San Mateo and Santa Clara counties, not only because there was ample space available and access to transportation, but also because the residential areas had a middle or upper middle class character that was attractive to executives and engineers. And, at the same time, the presence of Stanford University and other educational institutions helped to ensure a constant flow of engineering and scientific graduates, as well as access to sophisticated researchers on their faculties and in nearby research institutions. The University of California at Berkeley, although as distinguished as Stanford in many scientific and engineering fields and superior in some, has not been in a position to attract aerospace establishments, or even research and development activities, to anything like as great an extent, largely because of the high cost and scarcity of land in Berkeley and adjacent areas of Oakland, although the UC Radiation Laboratory at Livermore has been in a position to attract such establishments to a certain degree. Thus, it is clear that it was a combination of access to educational and research institutions, an attractive residential area, and

availability of land and transportation that influenced the spectacular growth of the aerospace industries on the Peninsula.

On the other hand, Southern Alameda County appears to be a superior location for certain types of heavy durable goods manufacturing industries, partly because it has become predominantly a blue-collar residential area and also because there were open-space locations somewhat removed from residential areas suitable for the establishment of large factories engaged in the manufacture of heavy durable goods, whereas in the area around Stanford University zoning regulations would undoubtedly have prevented location of that type of factory. Contra Costa County also continues to be a superior location for certain types of heavy industries because of a combination of access to a supply of blue-collar workers, availability of low-cost land, and of particular importance in this area, access to ports. Similar comments apply to the southeastern portion of San Francisco and to South San Francisco, along the shore of the Bay.

We also found that wage rates for blue-collar workers were relatively low on the Peninsula and in the San Jose area. Moreover, a good many of the aerospace establishments were not unionized, and here, as in other outlying areas, unionized establishments were considerably less likely to be required to hire through unions than in the central city areas.

Another important aspect of our findings is the evidence that actual movement of establishments out of the central city areas has not been the primary factor in industrial decentralization in the Bay Area, although it has played a role. While a significant proportion of our establishments had moved in recent years, the great majority of these moves had occurred

within one of the central city areas (defined, for purposes of this analysis, as San Francisco and the Oakland-Berkeley area) or within one of the six outlying areas (Southern Alameda County, Santa Clara County, Northern San Mateo County, Southern San Mateo County, Contra Costa County, and Marin County). Less than a third of the moves had been from a central city area to a more outlying area. In interpreting this finding, it is important to recognize that a "move" was defined as a change in the location of the main address of the establishment within the Bay Area and does not take account of changes that may have occurred, for example, in the location of branches of headquarters establishments.

On the other hand, our evidence strongly suggests that industrial decentralization within the area has taken the form primarily of the location of new industrial establishments or the expansion of existing establishments outside the older central city areas. There was a distinct tendency for the establishments in the rapidly expanding outlying areas to be younger and, in the case of the manufacturing establishments, to be more likely to have experienced substantial expansion in employment in the 1960-1967 period.

The impact of industrial decentralization on relative employment opportunities for various types of workers could not be fully explored on the basis of our data, but some of the implications appear to be quite clear. There is little question that employment opportunities for blue-collar workers are declining in the central city areas as compared with the more outlying areas. This is indicated not only by the declining trend in manufacturing employment in San Francisco and Oakland, as contrasted with rapid expansion around the southern rim of San Francisco Bay,

but also by various types of evidence indicating that much of the expansion of employment in the central city areas is in headquarters establishments, with their predominantly white-collar occupational composition. Interestingly, also, there were indications that the movement of blue-collar workers to rapidly expanding working class tract residential developments in the suburbs was making it relatively difficult to recruit some types of blue-collar workers, particularly the semi-skilled, in central city areas.

Consistently with the findings of several other studies, moreover, we found that Negroes tended to represent a considerably smaller proportion of employees in establishments, both manufacturing and non-manufacturing, outside the central city areas than in establishments within the central cities. There was also evidence that employers outside the central cities were somewhat less likely to have been making special efforts to recruit and select minority group employees. We were not in a position, however, to test Mooney's finding that changes in the industrial and occupational composition of jobs within central cities have tended to favor female employment, both Negro and white, over male employment, although it appears plausible.⁴

These findings have a number of policy implications, with particular relevance to the Department of Labor:

- 1. There is a strong case for publishing labor market statistics, not only for the currently defined standard metropolitan areas, but also for combinations of these areas, whenever it is found that the labor market cuts across several standard metropolitan areas. This is likely to be the case in many large labor market areas as well as the Bay Area. If, for example, employment and wage data were published for the combined San Francisco-Oakland and San Jose areas, as well as for the two areas separately, it would*

become far more clear that the Bay Area is, in fact, one of the most rapidly growing areas in terms of employment, and it might become apparent--although here one can only speculate--that the Bay Area is not the highest wage area in the nation.

On the other hand, there is a case, whenever sample size permits, for publishing statistics that will shed light on wage and other differences within large labor market areas, e.g., for counties or for central cities versus the outer-ring. The current practice, for example, of publishing occupational wage data for the entire San Francisco-Oakland Metropolitan Area obscures significant wage differences within the area which we have only partially been in a position to uncover in this study. Perhaps more important, in terms of implications for manpower policies, there is a serious need for employment data based on establishment reports relating to geographical areas smaller than the larger standard metropolitan statistical areas, that will shed light on changing patterns of employment opportunities in central cities versus the outer ring by occupation, sex, race, and age, as well as by industry. Except for occasional sample surveys, we must rely largely on decennial census (household) data for information on changes in the characteristics of workers by area, and of course this information is, for the most part, based on place of residence rather than place of work. If a program of regular collection of job vacancy data could be developed, it would be desirable, also, to base such data on a large enough sample of establishments so that they could be revealed for parts of, as well as for entire, metropolitan areas.

2. The evidence that employment opportunities for various occupational groups are expanding at very different rates in various parts of this large labor market area--and undoubtedly the same thing is true in other large labor market areas--suggests that urgent need for improved communication between local offices of the public employment service with respect to job openings and job applicants. Preliminary results of our current study of employment agencies and placement services suggests that there is much room for improvement in this respect, as did some of the findings of the evaluation of the Oakland Adult Minority Group Employment Project in which the Institute was engaged several years ago.⁵ Within large labor market areas as well as among labor market areas throughout the country, there is a critical need for exchange of computerized data on job openings and job applicants.

3. There has as yet been much too little recognition of the need to organize manpower programs on a broad areawide basis. The Bay Area presents a clear example--and many others could be found throughout the country--of an area in which Negroes and, to some extent, members of other minority groups

are concentrated residentially within the central cities, while rapid expansion of employment opportunities is occurring largely outside the central cities. To a very considerable extent, federal funds have been used to support programs aimed at expanding employment opportunities for minority groups within the City of Oakland and within the City of San Francisco, whereas almost certainly more effective results could be obtained if more emphasis were placed on opening up jobs for Hunters Point Negroes on the Peninsula and for Oakland Negroes in Southern Alameda County. The inauguration of Bay Area Rapid Transit District service between Oakland and Southern Alameda County within the next few years--not matched by a comparable development between San Francisco and the Peninsula--will make it much easier for Oakland ghetto residents to commute to jobs in "South County," but commuting in a used car is certainly not out of the question for many. This is not to deny, to be sure, that many of the jobs in the aerospace industries are beyond the reach of unskilled Negroes.

There is, of course, growing interest in efforts to encourage the establishment of industrial enterprises in ghetto areas--stimulated not only by increased interest on the part of some political and business leaders but also by black separatist movements. Undoubtedly, one of the most challenging issues of the next decade will be over how much relative emphasis to place on an integrated approach to the problem of Negro unemployment--encouraging not only decentralization of job opportunities for Negroes but also decentralization of residential opportunities--as opposed to a separatist solution relying on expanding job opportunities and improving the quality of life in the ghettos. Our study sheds a good deal of light on the locational disadvantages of central city areas for manufacturing establishments and certain other types of industrial establishments. On the other hand, we uncovered here and there a certain amount of evidence--not discussed appreciably in our report--that certain types of industrial enterprises derive advantages from access to the type of labor supply available in the central city areas which may offset such disadvantageous factors as the high cost of land and congested transportation conditions. Labor intensive industries, such as the manufacturing of women's apparel, offer one type of example, while industries employing substantial numbers of relatively unskilled service workers provide another, despite the predominant trend toward activities employing white-collar workers. All these considerations have a bearing on the feasibility of expanding employment in ghetto areas.

Recruitment Channels and the Changing Occupational Structure

Our study indicates a relatively more important role for formal

channels of recruitment than most other studies have tended to suggest, even after due allowance is made for differences in methods of collecting the data and the labor market conditions prevailing at the time. In part, the explanation lies in the prevalence of hiring through unions in the Bay Area--a factor unlikely to play as important a role in many other labor market areas--but it also reflects the fact that this survey collected data on channels of recruitment for all major occupation groups in a broadly representative sample of establishments, whereas many other employer surveys have been largely concerned with the recruitment of blue-collar workers in manufacturing. In general, we found that formal channels of recruitment were more likely to be used for occupations requiring a high degree of education and training, on the one hand, or specialized manual skills, on the other. Moreover, as other studies have also found, professional and technical workers tend to be recruited on a nationwide basis to a considerably greater extent than other types of workers.

In view of the growing relative importance of white-collar workers, and particularly professional and technical workers, in the labor force, it follows that formal channels of recruitment are likely to become increasingly more important in the future, as is recruitment on a broad regional or nationwide basis. Moreover, since they play a comparatively more important role in the recruitment of white-collar workers, private employment agencies and college placement services are likely to assume increasing relative importance, in comparison with the public employment service or the unions.

These findings have a number of important policy implications:

1. Although the difficulties posed for the public employment offices in maintaining effective placement services have long been recognized, our findings suggest that these difficulties may become even more formidable in the future. At the same time, it is apparent that some local offices are seen by employers as providing relatively satisfactory service. Our current study of employment agencies and placement services will yield significant data on the differences among local offices of the public employment service and between the public and private employment agencies. Without anticipating the results of that study in any detail, it can surely be pointed out that the public employment service cannot be expected to play a central role in connection with expanding manpower programs for the disadvantaged and at the same time provide effective placement services for the growing ranks of professional, technical and other white-collar workers without greatly increased resources.

Carefully considered recommendations for strengthening the public employment service were, of course, presented in the 1965 report of the Shultz Task Force,⁶ but in some ways the situation has become even more complex since that report was prepared. Increasingly, job development and placement services are being conducted by local anti-poverty organizations and other community agencies and are also beginning to be incorporated in Model Cities plans and programs. It seems probable that the degree of coordination of such programs with the job development and placement activities of the public employment service varies considerably in local areas throughout the country. That there is lack of coordination in some communities in the Bay Area is apparent on the basis of preliminary results of our employment agency survey. Despite the attempts now being made to coordinate manpower programs in local areas through the Coordinated Area Manpower Services (CAMPS) program, a more vigorous effort to prevent overlapping, duplication, and competition in local job development and placement services seems imperative. Without being prepared to propose possible solutions in any detail, we would suggest that the expansion and strengthening of multi-service centers, particularly in central city areas, should be undertaken. If the current trend toward transferring all responsibility for manpower programs to the Department of Labor continues, it should become easier to define the relationships between the public employment service and other publicly supported agencies engaged in job development and placement efforts. At the very minimum, exchange of information with respect to job applicants and job orders should be required. Beyond that, there is a strong case for strengthening the role of the public employment service in all matters relating to the local planning and coordination of manpower programs, including the preparation and dissemination of labor market information.

2. An obvious implication of our findings with respect to the relatively important role of unions in the Bay Area recruitment

picture is that access to union membership in a number of sectors of the labor market is the key to access to employment. Thus, as is now widely recognized but not yet sufficiently emphasized in practice, efforts to provide employment opportunities for the hard-core need to be concerned with the unions as well as with the employers.

3. Our data also suggest that, except at the professional and managerial levels, there is relatively little recruitment through school and college placement services in the Bay Area. Although our current study of employment agencies and placement services should provide considerable data on whether and to what extent placement services and effective career counselling services exist in high schools and junior colleges in the area, the findings of our employer policy survey strongly suggest that high school and junior college placement services are very limited. There also were indications that some employers find high school graduates lacking in work-orientation and motivation. Certain other studies, however, suggest that school placement services may have been more extensively developed in some other labor market areas.⁷ Nevertheless, to the extent that junior colleges and high schools in various parts of the country may have neglected career counselling and placement services, there is a strong case for joint efforts by the Department of Labor and the Department of Health, Education, and Welfare to improve the situation.

Moreover, in view of the dilemma facing the public employment service, as indicated above, there would appear to be a strong case for more effective coordination of the placement activities of the public employment offices with those of high school and junior college placement offices, as well as union hiring halls and perhaps in some situations other agencies. In part, this could be accomplished through the expansion and strengthening of multi-service centers, but there would also have to be clear inter-agency policy decisions and procedural changes at the federal, state, and local levels to accomplish the desired result.

Employer-sponsored Training

Despite the expansion of publicly subsidized on-the-job training programs, this type of training played a relatively insignificant role in the establishments of our Bay Area sample in 1967 as compared with the more traditional types of employer-sponsored training. Our findings tended to confirm the long-established fact that larger establishments are considerably more likely to provide training programs than smaller

establishments and that the types of training available in larger establishments are much more varied. Moreover, with the exception of apprenticeship training, each individual type of training on which we collected data tended to be more prevalent in the larger firms. Less familiar, perhaps, was the indication that out-service training was provided by a considerably larger proportion of establishments than other types of formal employer-sponsored training, and, although we did not collect direct evidence on this point, it seems apparent that there has been a decided trend toward expansion of this type of training in the postwar period, along with the growing relative importance of the white-collar work force. Moreover, although there has been some tendency to think of employer-sponsored training as largely a matter of developing blue-collar skills, it is apparent that major emphasis in our Bay Area firms is being given to developing and maintaining professional, technical, and managerial know-how.

Relatively few of our employers had hired persons who had experienced MDTA, Job Corps, or NYC training or work experience programs, and, here, as in connection with "special efforts" to select minority group employees, it was clearly the largest establishments that were most involved.

The fact that larger employers enjoy the advantages of economies of scale in developing industrial training programs, as well as in making special efforts to employ the disadvantaged, is, of course, widely recognized. Staff and equipment expenses involved in administering training programs, or in providing special counselling services for the disadvantaged, can be spread over a larger number of trainees or

employees. Another consideration, perhaps less widely recognized, comes out clearly in our section on promotion policies--there are, in general, more opportunities for promotion and upgrading in larger establishments and, accordingly, greater possibilities of spreading the costs of training designed for employee upgrading over a larger number of workers.

Another implication of some of our findings is that an establishment's training needs may fluctuate, not only with changes in the state of the labor market, as has been widely recognized, but also with the degree to which the establishment is involved in technological change at any given time. We found that a large proportion of the employers that had been involved in significant technological change "actions" had provided training or retraining for employees affected by the change, but that this training had tended to be informal and short-lived. Moreover, it was clearly largely designed for adaptation of the occupational skills of existing employees rather than for training new employees. In fact, our training data suggest that employer-sponsored training tends to be directed more toward upgrading the skills and know-how of employees with some months or years of service than toward newly hired employees.

Although a good many of the employers in our sample reported working with various community agencies to improve basic and vocational education programs, there was little evidence that this type of community involvement was considered to have produced fruitful results, while occasional interviewees expressed dissatisfaction with the preparation and work-orientation of high school graduates.

Especially in view of the growing emphasis on programs involving

the private sector in efforts designed to expand employment opportunities for the hard-core unemployed, these findings have a number of policy implications:

1. *Involvement of the private sector is likely to continue to have disappointingly limited results as long as it is chiefly the largest establishments that cooperate. It is conceivable that additional subsidies and/or tax incentives would overcome this difficulty, but it is not clear that this approach would altogether remove the obstacles to expansion of on-the-job training opportunities in smaller establishments. There appears to be a need for careful study of public policies, such as those that have been adopted in certain European countries, which are designed to encourage joint training efforts in order to equalize training opportunities among the employees of smaller and larger firms. In effect, the use of out-service training programs represents such a sharing of resources, but it is not easily adaptable to the types of technical and blue-collar training that require access to highly specialized equipment within the firm. Most registered apprenticeship programs, also, are joint interfirm training programs, particularly when apprentices are systematically rotated from firm to firm and when the Joint Apprenticeship Committee offers related instruction through the school system. Yet there would appear to be possibilities of expanding interfirm sharing of resources to other types of on-the-job training.*

2. *Although employers and unions are represented on joint apprenticeship boards, they have not been as extensively involved as in some European countries on joint advisory bodies concerned with other types of on-the-job training or with vocational education in high schools and technical schools. There is a need for consideration of how such involvement could be made more effective at the local level, perhaps through amendments of the Vocational Education Act of 1963, which at present provides for such bodies on a permissive basis at the federal and state levels.*

Wage Policies and Wage Differentials

Undoubtedly the most interesting of our wage findings relate to patterns of spatial or geographical wage differentials within the Bay Area. Not only do these findings appear to be consistent in many ways with those of the recent Rees-Shultz study of the Chicago labor market area, but they also strongly suggest that further research along these lines in

large labor market areas would be very fruitful. Moreover, they indicate that differences in demand and supply relationships in various parts of a large labor market area play a significant role in explaining these spatial wage differentials and may well be a fairly important factor in accounting for the phenomenon that has always been regarded as somewhat baffling on the basis of neoclassical wage theory--the phenomenon of persisting wage differentials among firms in a local area. Although we have not been in a position to undertake a thorough analysis of the relative role of geographical as opposed to other factors in explaining interfirm wage differentials, our results suggest that geographical differentials cannot be explained fully by differences in the industrial composition of establishments in the various parts of the Bay Area.

Nevertheless, there were significant wage differences among major industry groups. Moreover, to a considerable extent, the limited reports of wages actually paid which we obtained from our Part II wage schedules tended to confirm patterns of inter-industry, as well as of geographical wage differences, indicated by the much more complete data based on employers' assessments of their relative wages obtained in the interviews. Inter-industry differences appeared to reflect variations in the relative strength of unions as well as in employer wage policies. Our results suggest that, to some degree at least, the decisions of employers to maintain their wage rates at a given level either above, below, or equal to prevailing rates in given occupations plays something of a role in explaining inter-industry wage differences, although data bearing on this point were very limited.

For the white-collar groups represented in our Part II data, the

lowest rates prevailed in San Francisco and the highest rates in Southern Alameda County, with the other areas occupying an intermediate position. These differences were narrowed, however, when we compared the median rather than the lowest rates paid by establishments.

On the other hand, for blue-collar workers, there was some tendency for the highest rates to prevail in the Oakland-Berkeley area, although we could not be certain, because of limited wage reports from Contra Costa County, that they may not have actually been higher in that area. In the case of janitors, the highest rates appeared to prevail in Southern Alameda County, tending to confirm the assessments of a relatively large proportion of employers in that area that their wage rates for service workers were comparatively high.

All these patterns of differences bear interesting resemblances to the findings of the Chicago study--high blue-collar rates in the portion of the area which historically was the center for the location of heavy industry, relatively low white-collar rates in the heart of the central city area (downtown San Francisco, in this case), and high rates for service workers in an outlying area in which very few Negroes and relatively few members of other minority groups lived. Even so, some of our findings must be regarded as very tentative and in need of much more research, in view of our limited data.

Neither employers' assessments nor Part II wage data suggested any consistent pattern of variation by size of establishment, within this sample of establishments with 100 or more employees. The absence of consistent size variations in our data persisted when we controlled, as best we could, for industrial variations among size groups. This

finding would appear to be somewhat inconsistent with studies based on nationwide data which have clearly indicated a positive relationship between earnings rates and size of firm within specific manufacturing industries, not only for size groups below 100 employees but also for size groups within the 100 or more range.⁸ However, as has been suggested by others, this may in part reflect a tendency for smaller establishments to be located in smaller communities where wage rates are lower.

Our data shed no light on the interesting hypothesis advanced by Doeringer and others, based on a study conducted in the Boston area, that disadvantaged workers tend to find jobs in low-paying marginal firms.⁹ However, their findings, which have important implications for manpower policies, along with those of the Chicago and San Francisco area studies, strongly suggest that additional research on patterns of wage differentials in large labor market areas would be very fruitful.

Also of considerable interest were our findings with respect to the relationship between wage rates in the Bay Area and other areas --as viewed by employers associated with organizations which had branches in other areas. Since most of our employers were associated with such organizations, the responses to this sequence of questions were sufficiently numerous to permit considerable analysis.

First of all, despite the wealth of evidence indicating that the San Francisco area is one of the highest wage areas in the nation, if not the highest, fairly sizable proportions of our reporting establishments indicated that their wage rates were about the same as those paid by branches of their organization in other areas. These proportions ranged from 31 per cent of the relevant employers in the case of

blue-collar wage rates in manufacturing, to 41 per cent in the case of white-collar wage rates (with practically no difference between manufacturing and nonmanufacturing establishments), to 51 per cent in the case of blue-collar rates in nonmanufacturing establishments. In this connection, it should be kept in mind that interarea competition is not confined to manufacturing but prevails to some extent in large construction enterprises, a good many branches of the transportation industry, and in certain other sectors, such as business services.

Secondly, there was clear evidence that blue-collar wage rates were particularly likely to be about the same as in other areas in the strongly unionized group of nonmanufacturing sectors which included construction, transportation, and wholesale trade.

Another group of industries likely to report that blue-collar wage rates were about the same as in other areas were those in which wage rates set under nationwide collective bargaining were uniform throughout the nation, such as in the steel and automobile industries.

Establishments faced with higher wage rates than those paid by branches of their organizations in other areas were not inclined, for the most part, to report that these higher wages were offset by other factors, such as higher productivity. Nevertheless, it is of considerable interest to observe that the proportion reporting such offsetting factors, in the case of blue-collar rates, was relatively high in the combined machinery and aerospace industry group. It may well be, also, that the aerospace industries, employing predominantly nonproduction workers, are not plagued by the phenomenon of relatively high rates in the Bay Area for such groups as engineers and technicians, since interarea differentials

in the compensation rates of these highly mobile groups of workers tend to be relatively small.

Thus, although the Bay Area's high wage level is a matter of concern to those of its industries that are engaged in interarea competition, the increase in the proportion of nonproduction workers in manufacturing, any tendency toward a spread of uniform rates established in nationwide collective bargaining agreements, and expansion of unionization in areas in which it is weak (particularly the South) are all factors which would tend to result in greater equality of wages throughout the nation. At the same time, it should also be recognized that relatively high wage rates in the Bay Area may well have been a factor tending to speed up technological change in the area.

As for policy implications, our wage findings chiefly point to the need for encouragement of increased research:

1. *The results of the Boston, Chicago, and San Francisco area studies all suggest, not only the probable value of further studies of wage differentials within large labor market areas, but also that the BLS might well consider presenting the findings of its area wage surveys in such a way as to shed more light on size-of-firm and spatial differentials within these areas, along with the industry group breakdowns which are now included in its reports.*

2. *There is clearly a need for considerably more research on interarea wage differentials, including studies of the impact, if any, of industrial consolidation on these differentials, as well as the relationship between wage differentials and interarea differences in rates of technological change. As suggested in Section IV, one possible approach to analysis of the latter phenomenon might be through a study of interarea differences in ratios of nonproduction to production workers in selected manufacturing industries and their relationship to interarea wage differences.*

Industrial Consolidation and Its Implications

The fact that only 23 per cent of the establishments in our sample were

single unit organizations, along with certain other evidence, suggests that, among establishments with 100 or more employees, the single unit establishment may be virtually in the process of disappearing. Although our question on type of organization did not have a time dimension, comments volunteered in a number of our interviews suggest, as do nationwide data on manufacturing mergers and acquisitions, that the process of industrial consolidation has been proceeding at a relatively rapid pace in the 1960's. Moreover, three-fourths of the manufacturing establishments in our sample, along with more than half of the nonmanufacturing establishments, were parts of organizations with branches in other areas.

Probably the most important implications of this trend relate to technological change. That this stepped-up pace of industrial consolidation played a significant role in explaining the generally high annual rates of increase in productivity in the 1960's is suggested by our data. Among the smaller establishments--those with 100 to 250 employees--single unit establishments were considerably less likely to have been involved in varied types of technological change in the 1960-66 period than branch or headquarters units. And, although this difference disappeared among the larger establishments, the proportion of single unit establishments also declined sharply with increasing size of establishment.

The declining relative importance of single unit establishments also has implications for various aspects of employer policies, which were only partially explored in our analysis. In general, however, we found evidence that, in connection with aspects of employer policies that clearly varied by size of establishment, the small single unit establishment was more likely to display the characteristics associated with small size

than the small branch or headquarters establishment. A good example may be found in connection with employer-sponsored training. As was to be expected, there was a decided tendency for the number of types of training provided by establishments to increase with increasing number of employees, but in our smallest size class the single unit establishments were considerably more likely to provide none of the types of training about which we inquired and appreciably less likely to offer three or more types of training than either the branch or headquarters establishments. Another example relates to selection tests, which were considerably more likely to be used by larger than by smaller establishments. However, in our smallest size group, a decided majority of both branch and headquarters establishments used selection tests to some extent,¹⁰ whereas only about a third of the single unit establishments made any use of them. This difference was less pronounced in the next larger size group and tended to disappear in the remaining groups.

There were also indications that small single unit establishments were relatively unlikely to have been involved in special efforts to employ minority groups, although, interestingly, in response to our question as to whether the establishments had made special efforts to encourage the selection of minority group employees, both single units and headquarters units in our smallest size class were considerably less likely to respond in the affirmative than branch units, whereas these differences tended to disappear with increasing size, along with a pronounced tendency for the proportion of affirmative responses to rise with increasing size.

The implications of this set of findings relate in large part to

research needs, but there are also some implications for operational programs:

1. *Clearly, research aimed at analyzing and projecting technological change and occupational shifts associated with such change should take more explicit account of the influence of type of organization. A plausible hypothesis, for example, might be that, even if the rate of industrial consolidation were to slow down, the consolidation that has already occurred in recent years may result in a more rapid rate of technological change for some years to come than would have been the case without such consolidation.*

2. *Industrial consolidation may well have a number of implications for labor market and wage relationships that deserve more thorough analysis than it has been possible to undertake in this report.*

3. *Despite the undesirable effects that industrial consolidation may, but does not invariably, have on entry and competition in business, our data suggest that it may, among other things, facilitate the implementation of national manpower policies that require cooperation between business and government.*

Size of Establishment Differences in Employer Policies

That the employer policies of large establishments are likely to be more structured and formalized than those of small establishments has long been recognized, but our study suggests that they may also be more flexible and amenable to change, at least in some respects. This is of particular interest in view of the evidence that larger establishments appear to be increasing their share of relative employment. Such evidence took the form, not only of a tendency for the larger establishments to be relatively likely to report substantial increases in employment in the 1960-1967 period, but also to have been more extensively involved in technological change than the smaller establishments and to be less likely to anticipate decreases in staffing associated with technological change in the next decade.

Some of the differences between the policies of larger and smaller establishments, of course, reflect differences in the industrial composition of our larger and smaller size groups, which complicate the problem of identification of the influence of size per se. Because of limitations of sample size, the relative influence of industry-mix and size could not be extensively analyzed through cross-tabulation techniques. Nevertheless, where policies varied markedly and consistently with size of establishment, it seemed clear that size exerted an independent influence.

When large numbers of employees are involved, formal procedures for ensuring equitable treatment tend to become more important, as exemplified by the relatively greater tendency of larger establishments to adjust salaries of white-collar employees on the basis of formal periodic review rather than on a purely individual basis. The fact that larger establishments are more likely to have personnel departments tends to encourage the development of formal and systematic personnel procedures and probably, in many cases, more or less continuous review of those procedures.

Differences in recruitment channels used by larger and smaller employers were not fully explored, but we found that larger establishments were more likely at least to list their job openings with the public employment service, although they went in for a good deal of direct hiring, whereas smaller establishments were more likely to make use of the services of private employment agencies, at least in recruiting white-collar workers. The relative absence of use of the public employment service by the smaller establishments was at least partly explained by the fact that they were more likely to be unionized, reflecting industry-mix

differences, and to be required to hire blue-collar workers through unions. Lacking personnel departments, they tended to turn to private employment agencies which, to some degree at least, performed screening services for them in the recruitment of white-collar workers. In fact, we would argue that it is probably more economical for the smaller employers to use such recruitment channels as private employment agencies and newspaper advertising than to maintain their own personnel departments.¹¹

It was in connection with selection policies and opportunities for promotion that the differences between larger and smaller establishments appeared most clearly. There was pervasive evidence of a positive association between number of employees and the use of formal selection policies, such as educational requirements and selection tests. At the same time, there were indications that the selection policies of larger employers were more flexible in some respects than those of smaller employers. For example, they were more likely to report that police records were evaluated rather than used as an arbitrary basis for refusal to hire, they were considerably less likely to indicate marked reluctance to hire housewives with child care responsibilities, and they were much more likely to report having considered modifying selection tests to encourage the hiring of persons whose limited or non-English speaking background hampers their test performance.

These indications of flexibility all suggest that the larger employers are more likely to be sensitive to the various types of pressures against arbitrary exclusion of particular groups from employment. Similarly, the larger employers were considerably more likely

to report having made special efforts to select minority group employees and to have hired persons who had experienced MDTA, Job Corps, or NYC training or work experience.

There is a certain paradox in these findings. Despite the indication that large employers were relatively likely to cooperate with civil rights groups, parole boards, and other agencies concerned with the disadvantaged, they were also more likely to use selection practices, such as educational requirements and aptitude tests, which might well tend to screen out the disadvantaged. The paradox was present, particularly, in the policies of government agencies, at least in connection with the use of selection tests.¹²

To some degree, at least, the apparent paradox is explained by the relatively greater stress on encouragement of promotion from within in the larger firms. Desirous of pursuing policies which will make it possible for all employees to look forward to promotional opportunities, a good many larger employers require a certain minimum educational achievement and ability to pass tests for all whom they hire. Whether and to what extent the National Alliance of Businessmen program has succeeded in altering these patterns is not yet clear, although there is a good deal of case material available on special training and counselling programs conducted by certain large firms.

As for policy implications, these findings suggest that:

- 1. There is a need for a program of public education and persuasion with regard to the desirability of continuous evaluation of selection standards. The comments of a good many of our interviewees indicated that selection tests, for example, were not validated, and clearly it is difficult for all but the largest firms to carry through programs of validation. There would appear to be possibilities of stimulating coordinated efforts through*

employer associations and other appropriate organizations to evaluate tests used for selected occupations through appropriately designed studies of samples of employees in selected establishments. Tests used by local government agencies in selecting policemen and firemen, for example, would seem to lend themselves to this approach. We would suggest that this is a matter which might be considered by the Advisory Committee on Placement and Testing which was appointed by outgoing Secretary Wirtz in January 1969.¹³

2. *The comments of some of our interviewees suggest that, although parole boards have achieved progress in persuading employers to consider hiring persons with police records, local police departments may not always cooperate by providing the needed information. Here again, a program of public education and persuasion, including appropriate sessions at police association meetings, would probably make a contribution.*

3. *In view of the importance attached to providing promotional opportunities and of the apparent predominance of training designed for the upgrading and adaptation of existing employees as compared with "new hires," it is clear that in the implementation of equal employment opportunity policies, increasing emphasis must be placed, not just on who gets hired, but also on equality of access to promotion and the training programs designed to enhance promotability.*

Industrial Variations in Employer Policies

Although there were indications that variations in employer policies by size of establishment were to be found within all or most of our major industry groups, there were also many industrial differences that could not be fully explained by variations in size or other characteristics, such as location or type of organization. These industrial differences, as has long been recognized, are associated with differences between industries in occupational structure, in patterns of employment relationships (whether employment tends to be long-term or temporary, short-term, or casual), and in technological level, which in turn exert an influence on the relative degree to which unions have been able to achieve strength and on variations in union policies.

In a summary of our findings, it would not be feasible to review

all of these industrial variations, which in any case are more familiar on the basis of previous studies than some of our other results.

Perhaps the most pertinent comment that can be made about these patterns of differences is that, in general, major industry groups in which white-collar and nonunionized employment predominates are gaining an increasing share of employment. This tendency has been largely recognized, although the implications of the predominance of nonproduction workers in some of the most rapidly expanding manufacturing industries have not perhaps received as much attention in this context as they deserve.

Whether these trends will be associated with a gradual weakening of the relative influence of unions in American society, however, cannot be predicted at this point with any degree of confidence. The indications of growing strength of unionism in public employment and the trend toward liberalizing collective bargaining rights of public employees may conceivably have an impact on the growth of white-collar unionism in private employment, which at present continues to be weak in the Bay Area and generally in other parts of the country.

Finally, in view of the fact that most other studies of employer policies have not included public employers, some of our findings relating to differences between public and private employer policies are of considerable interest. The fact that civil service policies have tended to emphasize job security has, of course, long been recognized. Our data relating to factors considered effective by employers in reducing voluntary quits indicated that government employers were considerably more likely than private employers to single out job security as the

most effective factor in reducing voluntary quits. Interestingly, also, although less than two fifths of our respondents thought that pension plans reduced voluntary quits, three fourths of the public employers considered them effective in reducing quits.

Another difference between public and private employment was the indication that public employers appeared to be more sensitive to considerations of equity in the relative treatment of various types of employees. The clearest example of this was in the tendency for general salary increases in public employment to apply to all employees, whereas in private employment they were usually not granted to all employees at the same time, but rather tended to be granted to unionized workers in collective bargaining settlements and to be extended later to white-collar employees, though not necessarily involving the same rates of increase granted to the blue-collar workers. The relative absence of collective bargaining agreements in public employment, of course, is in part responsible for this difference in wage policies, but it is also true that public employers in the Bay Area, along with private employers, have faced recruitment difficulties primarily with respect to various types of white-collar workers in recent years, whereas there has been a surplus of available workers for unskilled and service jobs. Thus, there was no need for public employers to grant periodic wage increases to workers at lower occupational levels on the basis of labor market considerations alone, whereas considerations of equity tended to be a deterrent to differential treatment of higher-level and lower-level workers. In the first half of the 1960's, moreover, increases in the consumer price index were very gradual and would not alone have provided

a basis for general salary increases of the magnitude typically granted in public employment during those years, although more recently the acceleration of consumer price increases has been an important factor in influencing substantial wage increases. The increases of the first half of the 1960's in public employment were largely motivated by a desire to prevent relative wage levels of professional and white-collar workers from deteriorating in relation to those of other employers but were extended to lower-level employees on grounds of equity.

Clearly, one of the most interesting questions of the next decade will be whether the expansion of collective bargaining in public employment will continue, how it will affect these patterns of differences between public and private employer policies, and what repercussions there may be on nonunionized sectors of private employment.

Footnotes to Major Findings

1. The Vernon study resulted in a number of volumes by various authors. The volume most closely related to the present study is Martin Segal, Wages in the Metropolis (Cambridge, Mass.: Harvard University Press, 1960).

2. Albert Rees, "Spatial Wage Differentials in a Large City Labor Market," Proceedings of the Twenty-First Annual Meeting, Industrial Relations Research Association, 1968, pp. 237-247.

3. Segal, op.cit.

4. Joseph D. Mooney, "Housing Segregation, Negro Employment and Metropolitan Decentralization," Quarterly Journal of Economics, LXXXIII (May, 1969), pp. 310-311. Although employers returning our Part II (statistical) schedules provided data on women as a percentage of total employees, various biases in the characteristics of establishments reporting these data suggested that they would not be likely to provide a reliable indication of relative employment opportunities for women in central city versus outlying areas.

5. William B. Woodson, Final Report of the Oakland Adult Follow-up Study (Berkeley, Calif.: Institute of Industrial Relations, University of California, 1967).

6. A Report to the Secretary of Labor from the Employment Service Task Force (Washington, D. C.: 1965). The text of the report, as well as commentary on it, may be found in Robert Aaron Gordon and Margaret S. Gordon, editors, Toward a Manpower Policy (New York: Wiley, 1967), Chap. 6. See, also, Herbert S. Parnes, "Employment Service Task Force Report," Proceedings of the Nineteenth Annual Meeting, Industrial Relations Research Association, 1966, pp. 34-46.

7. See, for example, George P. Shultz, "A Nonunion Market for White Collar Labor," in Aspects of Labor Economics, A Conference of the Universities-National Bureau Committee for Economic Research (Princeton, N. J.: Princeton University Press, 1962), pp. 139-140.

8. See, for example, Richard A. Lester, "Pay Differentials by Size of Establishment," Industrial Relations VII (October, 1967), pp. 57-67; and Albert Rees, New Measures of Wage-Earner Compensation in Manufacturing (New York: National Bureau of Economic Research, 1960).

9. See Peter B. Doeringer, "Manpower Programs for Ghetto Labor Markets," Proceedings of the Twenty-First Annual Meeting, Industrial Relations Research Association, 1968, pp. 257-267; and Penny H. Feldman, David M. Gordon, and Michael Reich, Low Income Labor Markets and Urban Manpower Programs: A Critical Assessment, A Report Submitted to the Office of Manpower Research, U. S. Department of Labor, January, 1969.

10. In this analysis, unlike those reported in Section VII, an employer was classified as using selection tests if they were used in connection with any of the occupation groups which he employed.

11. As suggested in Section VI, this appears to be somewhat at variance with Stigler's characterization of newspaper advertising and private employment agencies as high-cost information channels. See George J. Stigler, "Information in the Labor Market," Journal of Political Economy, LXX (October, 1962), 94-105.

12. For a report on an experimental study of possible cultural biases in selection tests, conducted by the Personnel Department of the City of Berkeley in cooperation with the Educational Testing Service, see John C. Bianchini, William F. Danielson, Robert W. Heath, and Clinton

A. Hilliard, The Berkeley Project: Race and Socio-Economic Status in the Selection Testing of Municipal Personnel (Personnel Department, City of Berkeley, Berkeley, California: 1966).

13. Daily Labor Report, No. 13, January 21, 1969, A-12.

I. INTRODUCTION

It is now nearly two decades since most of the labor market studies of the early postwar years were conducted -- studies that have had great influence on accepted concepts about the functioning of labor markets ever since. Probably the most important results to come out of those studies were (1) recognition of the persistence of wage differentials within local labor market areas, despite a great deal of mobility of workers between firms; (2) the formulation of certain hypotheses relating to the persistence of wage differentials in terms of differences in wage and other personnel policies among large and small employers, imperfections in the market, and recognition of the fact that relative monetary compensation represented only one of a number of factors which a worker tended to evaluate in selecting among available jobs; (3) the influence of seniority and other related personnel policies in inhibiting workers from shifting jobs in a search for higher wages; (4) -- closely related to the first three -- the tendency of individual employers to adjust to changing labor market conditions by modifying selection standards rather than changing wage rates; and (5) recognition of the fact that, despite all of these considerations, changes in underlying demand and supply conditions did have a very important effect on changes in wage levels and on occupational wage differentials.

Since those studies of the early postwar years a great many changes have occurred, and yet, until quite recently, there has been something of a hiatus in local labor market studies. Probably the most important changes that might be expected to have an impact on the functioning of local labor

markets have been:

1. The increasing spatial complexity of labor markets as a result of the suburbanization of the population and of industrial decentralization;

2. The increasing complexity of personnel problems resulting from the growing relative importance of white-collar workers in general and professional and technical workers in particular;

3. The development of comparatively stable patterns of collective bargaining in relation to blue-collar workers and, in some areas, to service workers;

4. The failure of strong unionism to develop among white-collar workers, the indications that this pattern may change as unionism gains strength in public employment, and the consciousness on the part of employers of potential unionization of white-collar workers;

5. Closely related to the development of stable patterns of collective bargaining, the acceptance of annual rounds of wage and salary increases as part of our way of life;

6. The impact of the civil rights movement and urban riots on employer policies toward minority groups, especially in the last few years; and

7. The spread of automation and computerization.

The present study, which is designed to shed light on the impact of all these changes on employer policies, is part of a broader labor market research program inaugurated by the Institute several years ago. Initially, the broader program was planned to include studies of (1) employer policies,

(2) union policies, (3) the role of employment agencies, placement services, and school counsellors, (4) the impact of automation on skill requirements, (5) labor mobility, and (6) various more specialized studies, taking the form, chiefly, of doctoral dissertations. Although the San Francisco Bay labor market area was to form the laboratory for our investigations, the study as a whole was designed to contribute to the mainstream of the literature on labor market analysis.

Whether it will be possible to complete the entire research program, as initially planned, is not clear at this stage, but the employer policy survey is completed, the study of employment agencies and placement services is well under way, and several doctoral theses and other specialized studies related to the program are either completed or approaching completion.

Our entire labor market research program was, of course, designed to build up a complete picture of the functioning of a major metropolitan labor market by drawing information from each of the major relevant sources in turn -- much as a photographer would build up a multi-dimensional image of his subject by taking a series of photographs from different angles. Thus, in introducing this report on our employer policy survey, it is important to emphasize the point that it is, in effect, a photograph taken from one angle and that, although it yields much interesting and significant new data on employer policies, in many respects it yields a frustratingly incomplete picture. Not only are the data based on employer interviews, but the unit of analysis is the establishment. Thus, an employer may tell us that he recruits a given type of worker from unions, private employment agencies, public employment agencies, and recommendations of existing employees -- in that order of relative importance -- but his response does

not tell us just what proportion of his new hires in any given time period come from each of these sources. Nor do the responses of all our employers provide an accurate picture of the relative importance of the channels through which workers of this type find jobs in the area as a whole or in any particular part of the area. Similarly, our data may indicate that a substantial proportion of employers in the area report that they are making special efforts to recruit and select minority group employees, but our results tell us relatively little about the impact of these efforts on minority group employment or unemployment.

Despite these limitations, we believe that many inferences of importance may be drawn from our data and that in some respects our results are uniquely comprehensive. Yet the limitations inherent in the methodology must constantly be kept in mind, even though, for the sake of avoiding tedium, we shall not call attention to them at every stage of the report.

Design of the Survey

In designing the Bay Area Employer Policy Survey, we hoped to gather comprehensive data on employer policies and practices and to undertake an extensive analysis of variations in practices by industry, size, and other characteristics of the firm. Thus we needed to draw a sample which would be broadly representative of Bay Area employers.

One of our first decisions was to include the San Jose Metropolitan Area, along with the five-county San Francisco-Oakland Metropolitan Area, in the study. The San Jose Area has experienced exceedingly rapid growth and economic expansion in the last two decades. In addition, there has been

a decided merging of industrial, commercial, and residential development in the southern portions of Alameda and San Mateo counties with that in Northern Santa Clara County. Omission of the San Jose Area from our "Bay Area" would have had the effect of eliminating from the study the most rapidly growing section in the region. It would have limited the opportunity to compare the practices of employers whose employment was experiencing pronounced growth with those whose work force was expanding slowly or leveling off. It would also have severely restricted the possibility of studying the aerospace industries, with their highly specialized technology, in view of their relative concentration in the San Jose Area (Santa Clara County).

Hence, for purposes of the Bay Area Employer Policy Survey, the six counties included are Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara.

The desire to achieve comprehensiveness of coverage was a major consideration with respect to industries to be included. Moreover, unlike many previous analysts of employer policies, we decided to include public along with private employers. Government employment is growing relatively more rapidly than is the private work force, and many significant developments are occurring in public employment. Our final decision, therefore, was to include all major industry divisions within the sample, to stratify the universe of establishments in accordance with these divisions, and to select a proportional random sample of establishments from each of the strata.

Drawing the Sample

In designing the sample, we were most fortunate in securing the cooperation of the Division of Labor Statistics and Research of the California Department of Industrial Relations. Using both unpublished and published materials available in mid-1966, the Division prepared estimates by industry of the universe of employment accounted for by establishments employing 100 or more workers. The first sample of 300 employers was drawn randomly from an array of employers representing this universe. Then, using the same procedures, a second sample of 300 establishments was drawn, so that, in cases of nonresponse (which were surprisingly few) substitutions could be made from within the same 2-digit industry group of the second sample. Such substitutions were made randomly or, if circumstances appeared to warrant this departure, with a view to duplicating as nearly as possible certain characteristics of the nonrespondent, such as county of location or type of organizational structure. After all such substitutions were made and a few establishments were added, the number of establishments in our sample totaled 309.

It should be noted that, in the selection of the sample, the techniques were not as rigorous as would have been required if the primary purpose had been to develop quantitative data which could be extrapolated statistically to the universe from which the sample was drawn. However, for the purposes of our survey, the sample seems adequately representative, as will be indicated when we consider its composition by industry and size class. On the average, each employer included accounts for the employment of 900 Bay Area workers; together, these 309 respondents have on their payrolls nearly 280,000 employees, or about 20 per cent of all nonfarm

wage and salary workers in the six counties.

Nevertheless, there is a need for caution in drawing inferences from our data, particularly with respect to industries or size groups that are represented only in small numbers. In presenting and interpreting the data we have attempted to observe an appropriate degree of caution, avoiding inferences based on small numbers of observations or small differences between proportions of firms with given characteristics or practices. Whenever the number of establishments included in a given percentage distribution is fewer than 15 -- i.e., the base is less than 15 -- the percentages are designated by an asterisk. In some of the tables, especially those relating to policies or practices that are not relevant for all of our respondents, the number of establishments in a given major industry group or size classification may be considerably smaller than the number in the sample as a whole. In such cases, major industry groups or size classes (or other types of categories) have been combined in order to avoid presenting percentage distributions based on very small numbers of cases. In making decisions on combining major industry groups, the percentage distributions have been studied, in order to prevent the obscuring of relationships by combining groups with sharply differing distributions. The reader may safely assume, in most cases, that there is little variation among the groups that have been combined with respect to the particular policy or practice involved.

Methods and Procedures

Our final research instrument consisted of two sections: Part I, the interview schedule, which was 33 pages in length, and Part II, a 19-page

supplement of statistical tables to be completed at the option of the employer.

In designing the schedule, it was decided (at the suggestion of the Employer Advisory Committee) that questions requiring resort to company records should be left with the employer as a statistical supplement (Part II) for subsequent completion. Also included in the statistical supplement were requests for certain data which we had reason to believe, partly on the basis of our pilot interviews, employers would not be likely to furnish. For example, it was generally believed that information on the age distribution of employees and on separations and accessions by occupation would usually be unavailable, and this, indeed, proved to be the case.

In any event, our experience with respect to the return of the Part II tables was somewhat disappointing. For one thing, the types of data requested were so varied that the services of more than one person were frequently required to complete all the tables. As a result, persons who had not been present at the interview (where such matters as definition of the establishment were discussed) became involved, without adequate instruction, in the completion of these tables. Moreover, in many instances, particularly in connection with the wage tables, special machine runs or laborious hand counts would have been required to supply the requested data.

All in all, 174 of the 309 establishments included in the survey returned complete or partially complete Part IIs. In addition, we gathered at the time of the interview the data needed to complete another 130 of the recruitment tables from Part II. Information on the industrial distribution of the 174 establishments that returned Part IIs (apart from the

recruitment table) is included in Appendix A. For purposes of this report, it has not been possible to analyze all the Part II data, but we have included some of the employment and some of the wage data from Part II. In all cases, tables based on Part II data are clearly so designated, to remind the reader that they are based on information relating to only part of the total sample. Moreover, since many Part IIs were incomplete, the number of establishments reporting any given type of data is usually considerably less than 174, and, in the case of the wage data, not all the occupations for which we requested data were represented in all the establishments returning Part IIs. However, complete information on the number of establishments providing data on any given item, by industry, size class, etc., will be clearly presented in all Part II tables. It is hoped that some of the unanalyzed Part II data will provide a basis for future Ph.D. theses or other specialized studies.

Whether or not the employer was willing and able to complete the supplementary tables, the interview we proposed demanded much of his time and patience. Generally, numerous telephone calls were required before a firm appointment date was arranged, either with the executive initially approached by letter or with the official or officials he designated. To the very great credit of Bay Area employers, our difficulties in arranging appointments were attributable far more to the crowded calendars of beleaguered executives than to any reluctance to cooperate in the study. However, it is scarcely surprising that these difficulties frequently produced exceedingly long delays in confirming appointment dates.

Nearly all the interviews were conducted during the course of 1967, while a few were carried out in the latter part of 1966 and a small proportion,

also, in the very early months of 1968 (Appendix Table A-4).

In view of the length of the interview schedule, and the amount of time required for busy corporation executives to participate, the refusal rate (15.7 per cent) was encouragingly low (Appendix Table A-3). In all such cases, of course, substitutions were made from the second sample. Further details on procedures and problems involved in connection with the interviews are included in Appendix A. Also reproduced in the Appendix is the Part I schedule, as well as the definitions of occupations for which we collected wage data in Part II schedules. Copies of complete Part II schedules are available from the Institute on request.

Characteristics of the Final Sample

The establishments included in our final sample are distributed by major industry group in roughly the same proportion as are all Bay Area establishments with 100 workers or more (Table 1-1). Manufacturing establishments are somewhat overrepresented, relatively, whereas trade and service establishments are underrepresented to some degree. In terms of workers, also, there are some differences between the sample and the universe in the extent to which workers in the various major industry groups are represented -- differences which in some cases are greater than those found in terms of numbers of establishments. The proportion of manufacturing workers in the sample exceeds that in the universe, as does that in finance, insurance, and real estate. On the other hand, government workers are underrepresented in the sample as compared to the universe.

These differences between the sample and the universe must be kept

Table 1 - 1

Establishments Included in the Survey, and All Bay Area Establishments
with 100 or More Employees, by Major Industry Group,
for Establishments and Employees, September 1966

Major industry group	Establishments		Employees	
	Survey establish- ments	All establish- ments	In survey establish- ments	In all establish- ments
Total				
Number	309	1.690	279,123	873,837
Per cent	100.0	100.0	100.0	100.0
Mining and construc- tion	8.4	7.5	2.3	3.4
Manufacturing	38.6	31.2	34.1	29.2
Transportation and utilities	8.7	8.6	14.9	13.1
Trade	14.9	19.8	12.4	11.1
Finance, insurance, and real estate	8.1	8.9	10.1	5.9
Services	11.6	14.6	7.5	7.7
Government	9.7	9.4	18.7	29.6

Source: Unpublished tabulation, Division of Labor Statistics and Research,
California Department of Industrial Relations.

in mind in interpreting the results of the survey, and will be specifically mentioned in the report in connection with the interpretation of some of the results.

Smaller establishments outnumbered larger establishments, as was inevitable in view of the size distribution of Bay Area establishments (see Appendix A). The smallest size class -- establishments with 100 to 249 employees -- led all others by a considerable margin in terms of proportion of all employers represented, while 65.7 per cent of the establishments had fewer than 500 employees (Table 1-2). At the other end of the scale, 9 per cent had 2,000 or more employees.

There were significant variations among the major industry groups with respect to the size of establishments included -- differences that must constantly be kept in mind in interpreting our data. The mining and construction group, along with nondurable goods manufacturing and wholesale trade, included more than the average proportion of establishments in the smallest size class, whereas the reverse was true of transportation and utilities; retail trade; finance, insurance, and real estate; and government. The proportions found in the largest size class were relatively high -- though distinctly a minority of the total -- in transportation and utilities, and government.

A more detailed understanding of the industry groups included in the sample will aid the reader in the interpretation of the results (Appendix Table A-2). In this connection, it should be pointed out that the mining and construction group is composed almost entirely of construction employers. For this reason, in discussing the results of the survey, we shall refer to this group as "construction" throughout the report.

Table 1 - 2
Number of Employees by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Number of employees				
	Num- ber	Per cent	100 to 249	250 to 499	500 to 999	1,000 to 1,999	2,000 or more
All establishments	309	100.0	42.1	23.6	16.2	9.1	9.0
Mining and construction	26	100.0	57.7	30.8	7.7	3.8	--
Manufacturing							
Durable	57	100.0	47.3	24.6	8.8	7.0	12.3
Nondurable	62	100.0	50.0	22.6	17.7	6.5	3.2
Transportation and utilities	27	100.0	33.4	7.4	22.2	14.8	22.2
Trade							
Wholesale	13	100.0	53.8*	30.8*	7.7*	7.7*	--
Retail	33	100.0	39.4	30.3	18.2	--	12.2
Finance, insurance, and real estate	25	100.0	31.9	24.0	20.0	12.0	12.0
Services	36	100.0	41.6	22.2	16.7	16.7	2.8
Government	30	100.0	16.7	23.3	26.6	16.7	16.7

*Percentages based on fewer than 15 cases.

Perhaps the only other comment that seems appropriate with regard to the detailed industry composition of the sample is that service industries are a very heterogeneous group. One tends to think of service industries as employing large numbers of chambermaids, janitors, and other relatively low-paid workers, but this is true with respect to only part of this broadly varied sector. Some of the establishments in such groups as "miscellaneous business services" and "educational services" employed substantial numbers of professional and technical workers. Thus, differences in employer policies in services from those found in other major industry groups are not always in the direction one might expect.

Interestingly, less than a fourth of the establishments in the sample are single-unit establishments (Table 1-3). Branch units and headquarters units predominate, while a small group consists of area, regional, or divisional headquarters. Moreover, the number of single-unit establishments in some of the industry groups is exceedingly small. In finance, insurance, and real estate, for instance, only 4 per cent consists of single-unit establishments, reflecting the longstanding predominance of branch banking in California, as well as the fact that the insurance and real estate establishments in the sample tend to be headquarters establishments. Other major industry groups with relatively few single-unit establishments are manufacturing (especially nondurable goods) and transportation and utilities. On the other hand, the proportions of single-unit establishments in construction, services, and government are relatively high.

An exceedingly large proportion of our establishments were parts of organizations with branches in other parts of the country or abroad. More

Table 1 - 3

Type of Organization by Major Industry Group --
Bay Area Employee Policy Survey, 1967

Major industry group	Total		Single unit	Branch unit	Head-quarters unit	Area, regional, or divisional headquarters
	Num-ber	Per cent				
All establishments	309	100.0	23.0	31.4	34.6	11.0
Mining and construction	26	100.0	46.1	15.4	30.8	7.7
Manufacturing						
Durable	57	100.0	12.3	57.9	26.3	3.5
Nondurable	62	100.0	6.5	51.6	27.4	14.5
Transportation and utilities	27	100.0	11.1	25.9	48.1	14.8
Trade						
Wholesale	13	100.0	--	7.7*	69.2*	23.1*
Retail	33	100.0	21.2	9.1	60.6	9.1
Finance, insurance, and real estate	25	100.0	4.0	16.0	72.0	8.0
Services	36	100.0	58.3	13.9	13.9	13.9
Government	30	100.0	53.3	26.7	6.7	13.3

* Percentages based on fewer than 15 cases.

than three-fourths of all the manufacturing establishments, and nearly nine-tenths of those engaged in food processing, were in this category (Table 1-4). Even among the nonmanufacturing establishments, well over half were parts of organizations with branches in other areas, and, if the governmental units (not particularly relevant to the question of industrial consolidation in the private sector) were excluded, the proportion would be even higher (Table 1-5). Establishments in wholesale trade, the finance group, and transportation and utilities were especially likely to be parts of organizations with branches in other areas, whereas those in construction and services were least likely to be in this classification.

In responding to our question relating to how long the establishment had been in the Bay Area, many of the interviewees volunteered comments indicating that the establishment had originally been a single unit, locally owned firm, which at some point in the past had become a branch or subsidiary of a corporation with headquarters in the East or Middle West. In other cases, locally owned establishments had expanded and acquired branches or subsidiaries in other areas. Although our information was not sufficiently complete to undertake a statistical analysis of the timing of these developments, there had clearly been a substantial number of instances in which they had occurred in the last ten years or so.

Nationwide data suggest that there has been a substantial acceleration of industrial consolidations and mergers in manufacturing and mining in the latter half of the 1950's and throughout the 1960's. The average annual number of mergers and acquisitions involving manufacturing and mining concerns was as follows:¹

1950-1954	1955-1959	1960-1964	1965-1967
285	673	873	1,166

Table 1 - 4

Manufacturing Establishments With and Without Branches of Organization
in Other Areas, by Type of Organization, for Four Industry Groups --
Bay Area Employer Policy Survey, 1967

Existence of branches in other areas and type of organization	Total	Durable			Nondurable		
		Total	Machinery and Aerospace	Other	Total	Food	Other
All manufacturing establishments							
Number	119	57	22	35	62	28	34
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No branches in other areas	23.5	24.6	31.8	20.0	22.6	10.7	35.3
Single unit	9.2	12.3	13.6	11.4	6.5	3.6	8.8
Branch unit	6.7	8.8	18.2	2.9	4.8	--	8.8
Headquarters unit	7.6	3.5	--	5.7	11.3	7.1	17.7
Branches in other areas	76.5	75.4	68.2	80.0	77.4	89.3	64.7
Branch unit	46.3	49.1	31.9	60.0	43.6	46.4	41.2
Headquarters unit	19.3	22.8	31.8	17.1	16.1	14.3	14.7
Area, regional, or divisional headquarters	10.9	3.5	4.5	2.9	17.7	28.6	8.8

Table 1 - 5

Nonmanufacturing Establishments, With and Without Branches
of Organization in Other Areas, by Type of Organization --
Bay Area Employer Policy Survey, 1967

Existence of branches in other areas and type of organization	Major industry groups except manufacturing							
	Total	Con- struc- tion	Trans- porta- tion and util- ities	Whole- sale trade	Retail trade	Finance, insurance and real estate	Ser- vices	Govern- ment
All establishments ^a								
Number	188	24	27	13	33	25	36	30
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No branches in other areas	43.6	62.5	25.9	--	48.5	16.0	61.1	60.0
Single unit	31.4	50.0	11.1	--	18.2	4.0	58.3	53.3
Branch unit	1.1	4.2	--	--	--	4.0	--	--
Headquarters unit	10.1	8.3	14.8	--	27.3	8.0	--	6.7
Area, regional, or divisional headquarters	0.5	--	--	--	--	--	2.8	--
Other unit	0.5	--	--	--	3.0	--	--	--
Branches in other areas	56.4	37.5	74.1	100.0	51.5	84.0	38.9	40.0
Branch unit	16.0	8.3	25.9	7.7 [*]	12.1	12.0	13.9	26.7
Headquarters unit	29.8	25.0	33.4	69.2 [*]	33.3	64.0	13.9	--
Area, regional, or divisional headquarters	10.6	4.2	14.8	23.1 [*]	6.1	8.0	11.1	13.3

* Percentages based on fewer than 15 cases.

^aTotal excludes employers that did not provide information.

This type of development is not without its historical precedents. The average number of these mergers and acquisitions in 1960-1964 was very similar to that in the latter half of the 1920's, when a similar acceleration occurred.

Social security data on the number of employer units reporting covered earnings indicated that the number of larger units increased at a considerably more rapid rate than the number of smaller units between 1964 and 1966:²

Less than 100	100-249	250-499	500 and over
2%	12%	12%	15%

The social security data, which include all major industry groups, suggest that consolidation has been occurring, not only in manufacturing and mining, but in other major industry groups as well.

It is, of course, impossible to predict whether this trend will continue, but our data on technological change, presented in Section IV, provide considerable evidence that the stepped-up rate of industrial consolidations was probably a significant factor contributing to the generally rapid year-to-year productivity increases that have characterized the 1960's. Our data, of course, apply only to the Bay Area, but it seems reasonable to suppose that other large labor market areas were likewise being affected by the acceleration of mergers and consolidations, with a similar impact on technological change. The reduced relative importance of the single-unit establishment also has implications for many employer policies and practices, which cannot be fully explored in this report but which will be briefly considered in various parts of the report.

Footnotes to Section I

1. Computed from data in Statistical Abstract of the United States, 1968, p. 487.

2. Computed from data in Statistical Abstract of the United States, 1966, pp. 489-490, and ibid., 1968, p. 476. Data for earlier years are not available in comparable detail.

II. EMPLOYMENT

The Labor Market Setting of the Survey

The year 1967, when most of our interviews were conducted, was a highly prosperous year in the Bay Area, as in the nation. Employment had been expanding rapidly for some time and was about 30 per cent above its 1960 level in the six-county area as a whole (Table 2-1) -- an increase which was somewhat more pronounced than that in the nation. If we consider the San Jose Area alone, however, the experience had been far more spectacular, with employment increasing 69.5 per cent between 1960 and 1967.

When we observe employment behavior in the various major industry groups, we find that the rate of expansion in the Bay Area, relative to that of the nation, had varied considerably. The rate of increase in the Bay Area exceeded the national rate by very substantial margins in durable goods manufacturing, transportation and utilities, and services. Moreover, the relative rates of increase in these three sectors in the San Jose Area were spectacular. On the other hand, in construction and wholesale trade the rates of increase in the Bay Area were actually somewhat below those in the nation, and in nondurable goods manufacturing employment declined slightly in the Bay Area, as compared with a modest increase in the nation. Even in the booming San Jose Area, the rates of employment increase in construction and nondurable goods manufacturing were very slight. In construction, this reflected to some extent the fact that the industry was experiencing a temporary slump at the time of our survey (see Appendix tables), but in nondurable goods manufacturing the explanation was almost certainly a pronounced increase in productivity, which permitted increases in production to

Table 2 - 1

Changes in Number of Wage and Salary Workers
in Nonagricultural Establishments,
by Major Industry Group,
Bay Area, San Jose Area, and United States,
July 1960 to July 1967

Major industry group	Bay Area ^a (including San Jose Area)	San Jose Area	United States
<hr/>			
All wage and salary workers (in thousands)			
July 1960	1,157.7	196.5	54,353.0
July 1967	1,502.6	333.0	66,097.0
Percentage change, 1960-1967	29.8	69.5	21.6
Mining and construction	2.0	3.0	5.7
Manufacturing	18.6	66.6	15.1
Durable goods	38.2	99.9	20.4
Nondurable goods	-3.9	1.6	8.0
Transportation and utilities	23.8	53.7	7.1
Trade	24.6	66.0	19.9
Wholesale	14.9	96.5	18.7
Retail	29.2	59.9	20.3
Finance, insurance, and real estate	23.6	56.0	20.6
Services	54.2	110.3	35.5
Government	47.7	85.6	39.8
Federal	37.7	75.5	24.9
State and local	52.8	88.1	45.6

Source: Percentages for the total six-county Bay Area and for the San Jose Area alone were computed from data in Estimated Number of Wage and Salary Workers in Nonagricultural Establishments by Industry, San Francisco-Oakland Metropolitan Area, 1949-1967, and Estimated Number of Wage and Salary Workers in Nonagricultural Establishments by Industry, San Jose Metropolitan Area, 1949-1967, Division of Labor Statistics and Research, California Department of Industrial Relations (San Francisco: 1967); percentages for the United States were computed from Employment and Earnings Statistics for the United States, 1909-68, Bulletin 1312-6, U. S. Bureau of Labor Statistics (Washington, D. C.: U. S. Government Printing Office, 1968).

^aThe percentage increase in total employment for the five-county San Francisco-Oakland Area, alone, was 21.7.

be associated with stable or declining employment, as some of our survey data will indicate.

The sharp increase in employment in durable goods manufacturing was largely explained by the spectacular expansion of the aerospace industries -- generally defined to include ordnance and accessories, electrical machinery, aircraft and parts, and instruments and related products. However, most of the employment in these industries in the Bay Area is in the ordnance and electrical machinery industries, with a modest amount in instruments, whereas there is very little employment in Northern California in the aircraft sector.

The significance of the gains in the aerospace industries is indicated by the fact that they accounted for about seven-tenths of the total increase in number of manufacturing employees in the six-county area between 1960 and 1967,¹ and a very large proportion of this increase occurred in the San Jose Area.

Despite the expansion of employment that was occurring, the unemployment rate in the Bay Area was somewhat higher than in the nation as a whole in 1967, and this had been true in the San Jose Area throughout most of the period since 1960; whereas in the San Francisco-Oakland Area it had been the case only since 1964.

Unemployment Rates²

	<u>San Francisco- Oakland Area</u>	<u>San Jose Area</u>	<u>United States</u>
1960	5.1	5.9	5.5
1961	5.9	6.4	6.7
1962	5.2	5.7	5.5
1963	5.3	5.7	5.7
1964	5.3	6.2	5.2
1965	5.0	6.0	4.5
1966	4.4	4.8	3.8
1967	4.5	4.5	3.8

In the San Jose Area, the relatively high average annual unemployment rate tends to reflect the continued comparative importance of the growing and processing of fruits and vegetables -- highly seasonal activities -- with the result that the unemployment rate tends to be higher in the winter, when these activities are at a low ebb. In the San Francisco-Oakland Area as a whole, the persistence of an unemployment rate slightly above that in the nation is less easy to explain, but there are indications that the pattern of employment expansion may have created relatively fewer employment opportunities for semiskilled and unskilled workers in this area than in other parts of the nation. The booming aerospace industries, for example, are characterized by an exceedingly high proportion of nonproduction workers.

Moreover, the Bay Area has had its persistent problems of ghetto unemployment, along with other metropolitan areas throughout the nation. Special surveys conducted in ghetto areas of Oakland in 1966, San Francisco early in 1967, and in Berkeley in the spring of 1967 indicated Negro unemployment rates in these areas of about 13 to 15 per cent and Negro teenage rates in the neighborhood of 35 to 40 per cent.³ Thus, employers have faced a labor market that is tight for many categories of specialized and skilled workers but in which there is a labor surplus affecting those with relatively little skill or experience.

Employment Changes in Survey Establishments, 1960-1967

In the light of this background, it is scarcely surprising to find that most employers in our sample reported employment increases between 1960 and 1967, while nearly half reported substantial increases (Table 2-2). However, about a seventh indicated that their employment had decreased, while

Table 2 - 2
Changes in Number of Employees, 1960-1967,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Change in employment					
	Num- ber	Per cent	In- creased sub- stan- tially	In- creased slight- ly	De- creased sub- stan- tially	De- creased slight- ly	Re- mained rela- tively stable	Fluctu- ated -- little net change
All establish- ments ^a	307	100.0	49.2	16.6	10.7	3.6	13.9	5.9
Mining and construction	25	100.0	40.0	28.0	4.0	--	8.0	20.0
Manufacturing								
Durable	57	100.0	49.1	14.0	19.3	--	12.3	5.3
Nondurable	61	100.0	31.1	14.8	14.8	11.5	18.0	9.8
Transportation and utilities	27	100.0	70.4	11.1	--	--	14.8	3.7
Trade								
Wholesale	13	100.0	46.2*	15.4*	15.4*	7.7*	15.4*	--
Retail	33	100.0	51.5	21.2	18.2	--	9.1	--
Finance, insur- ance, and real estate	25	100.0	56.0	12.0	8.0	8.0	8.0	16.0
Services	36	100.0	58.3	13.9	5.6	2.8	16.7	2.8
Government	30	100.0	56.7	23.3	--	--	20.0	--

^aTotal excludes establishments not reporting change in employment.

approximately a fifth reported that it had remained relatively stable or had fluctuated with little net change.

That the proportion of manufacturers of nondurable goods reporting substantial increases in employment was well below average, while the percentages reporting decreases or stable employment were comparatively high in this industry group, is consistent with what might have been expected on the basis of the employment data presented in Table 2-1. This was the only industry group that experienced an actual decline in employment between 1960 and 1967. Construction experienced only a slight increase in employment during the period, and, here again, it is not surprising to find that the proportion of establishments reporting substantial increases in employment was below average.

Differences in employment experience within major industry groups reflect, to some degree, the fact that specific industries within broad major industry group categories may have very different employment trends. Within transportation and utilities, for example, the railroad industry has been experiencing declining employment for decades, whereas employment in the airlines industry has been expanding rapidly. Similarly, within durable goods manufacturing, the trend of Bay Area ordnance employment bears little resemblance to that of shipbuilding. And in the construction industry, the fact that very few of our respondents reported declining employment in a period when residential building in the area was not flourishing is explained at least partly by a disproportionate representation of firms in heavy construction and nonresidential building in our sample. This is, of course, to be expected in a sample of establishments with 100 or more employees, since the larger firms are more likely to be engaged in

heavy construction and nonresidential building, whereas, with the exception of a relatively small number of mass production builders, residential contractors tend to operate on a small scale.

Also of considerable interest is the fact that the proportion of establishments reporting that they had experienced substantial increases in employment rose quite consistently with increasing numbers of employees (Appendix Table B-3). Although this was explained in part by differences in the industry-mix of the various size classes, it nevertheless is consistent with the evidence cited in Section I that larger establishments have recently been gaining ground at the expense of smaller establishments in their share of total employment.

Factors Responsible for Employment Changes

In a period of pronounced economic expansion, and in an area characterized by relatively rapid population growth, it is not surprising to find that nearly three-fourths of the establishments that had experienced substantial changes in employment attributed the change to demand factors. Only a minority indicated that structural or technological changes were responsible.

However, it was primarily among the firms that had experienced substantial increases in employment that the explanations for the increase tended to revolve around demand factors, whereas the factors mentioned by establishments that had experienced substantial declines were more likely to relate to technological or structural changes (Tables 2-3 and 2-4). About 78 per cent of the reasons mentioned by the former group of respondents related, in one way or another, to increases in demand. Although very few indicated that the increase was associated with the Vietnam conflict,

Table 2 - 3

Reasons for Substantial Increases in
Number of Employees, 1960-1967 --
Bay Area Employer Policy Survey, 1967

Reasons for substantial increases	
<hr/>	
All reasons ^a	
Number	203
Per cent	100.0
Change in demand for products or services	77.8
Greater volume of business or activity	52.2
New, improved, or changed products, services	12.3
Increase attributable to population growth	6.9
Increased demand associated with Vietnam conflict	3.9
Other	2.5
Structural changes	17.7
Opening of new units or establishments	12.8
Acquisition of other establishment or merger	3.4
Other	1.5
Technological change or need to increase productivity	1.5
Other types of changes	3.0

^aTotal reasons given by the 151 establishments reporting substantial increases in employment; some establishments gave more than one reason.

Table 2 - 4
Reasons for Substantial Decreases in
Number of Employees, 1960-1967 --
Bay Area Employer Policy Survey, 1967

Reasons for substantial decreases	
All reasons ^a	
Number	37
Per cent	100.0
Changes in demand for product or services	40.6
Discontinuance or change in kind of product or service	21.7
Lower volume of business activity	16.2
Other	2.7
Technological change or need to increase productivity	32.4
Conversion to or intensified use of modernized equipment other than electronic data processing equipment	24.3
Need to increase productivity or profitability, involving primarily staff reorganization or reductions	8.1
Structural changes	21.6
Acquisition by other establishment or mergers	18.8
Other	2.8
Other types of changes	5.4

^aTotal reasons given by the 33 establishments reporting substantial decreases in employment; some establishments gave more than one reason.

it seems likely that a good many establishments in which this factor was not specifically mentioned had in fact been affected directly or indirectly by defense-related expenditures.

About 18 per cent of the reasons mentioned by employers experiencing substantial increases in employment involved structural changes, but most of the reasons so classified related to the opening of new units, the acquisition of other establishments, or mergers -- developments which may have been influenced at least in some cases by increases in demand. Very few responses of this group of employers attributed substantial increases in employment to technological change.

On the other hand, among the much smaller group of employers reporting reasons for substantial decreases in employment, only 41 per cent of the factors mentioned were related to decreases in demand for the firm's product or services. Another 22 per cent of the responses related to structural changes, but most of these involved acquisitions by other establishments or mergers. In some of these cases, reduced demand may have been involved in the establishment's decision to sell out or agree to a merger, whereas in others the reduced employment that resulted may have reflected modernization of equipment or more efficient procedures introduced by the new owner. About a third of the responses related to technological changes or other types of measures aimed at increasing productivity.

It should be kept in mind, in connection with these responses, that it is difficult for the individual employer -- just as it is difficult for the analyst of aggregative employment statistics -- to distinguish clearly among the factors responsible for employment changes. Increased productivity associated with technological change may lead to increases in demand

by making possible lower prices for the same product or services than might otherwise have prevailed, for example.

Changes in the Occupational Composition of Employment, 1960-1967

An employer survey provides an opportunity to develop information, at the level of the firm, on the factors underlying the aggregative changes in the occupational composition of employment occurring in the economy. Occupational changes in the nation as a whole from 1960 to 1967 represented, in large part, a continuation of long-term trends (Table 2-5). White-collar employment increased much more sharply than blue-collar employment. There were particularly pronounced increases in the numbers of persons employed in professional and technical occupations and in clerical jobs, along with gains at about the average rate for craftsmen and operatives, and at a rate well above average for service workers not employed in private households. Consistently with long-term trends, on the other hand, the number employed as laborers declined slightly, while there was a sharp drop in farm employment and in private household employment. Employment in sales occupations increased only slightly. Unfortunately, data on occupational changes in the Bay Area during this period are not available.

However, it is important to keep in mind the fact that, at the time of the 1960 Census, relatively more Bay Area workers were employed in white-collar occupations than in the nation as a whole and that the differences were particularly pronounced in professional and technical occupations and in clerical work. On the other hand, blue-collar workers tended to be relatively underrepresented in the Bay Area, especially in the semi-skilled category -- reflecting the fact that, despite rapid development of manufacturing

Table 2 - 5

Changes in Number of Employed Persons, by Major Occupational Group
(Excluding Farm Workers), United States, 1960 to 1967

Major occupational group	Number		Percentage change, 1960-1967
	1960	1967	
All employed persons (excluding farm workers)	60,614	70,818	16.8
White-collar workers	28,516	34,232	20.0
Professional and technical workers	7,474	9,879	32.2
Managers, officials and proprietors	7,067	7,495	6.1
Clerical workers	9,759	12,333	26.4
Sales workers	4,216	4,525	7.3
Blue-collar workers	24,067	27,261	13.3
Craftsmen, foremen, and kindred workers	8,500	9,845	15.8
Operatives and kindred workers	11,950	13,884	16.2
Laborers, excluding farm and mine	3,557	3,533	-0.7
Service workers	8,031	9,325	16.1
Private household workers	1,980	1,769	-10.7
Service workers, except private household	6,051	7,556	24.9

Source: Manpower Report of the President, 1968, p. 232.

in the postwar period, factory employment was still relatively less important in the area in 1960 than in metropolitan areas in the nation as a whole. Moreover, much of the growth, as indicated above, had occurred in the aerospace industries, in which the proportion of nonproduction workers is relatively high.

When asked whether significant changes had occurred in the occupational composition of the establishment's work force between 1960 and 1967, only about a third of our respondents replied in the affirmative (Table 2-6). The interpretations of what changes were significant in this context were the employers' own, but they tended to include (1) changes in job classifications that may have been minor but affected large numbers of employees, (2) changes that were major even though relatively few employees were involved, and (3) the addition of workers in occupations not previously represented in the establishment.

One aspect of employer replies not reflected in any of our data was the frequently volunteered comment to the effect that skill requirements of jobs throughout the entire occupational spectrum of the employer's work force had tended to increase since 1960. However, changes in job requirements that were not reflected in actual job reclassifications could not be recorded as changes from one defined occupation to another. If our respondents' judgments were accurate in this respect -- and there is no reason to believe they were not -- our data tend to understate the extent of upgrading of job requirements that was actually occurring.

Variations in the proportions of enterprises reporting significant changes in the occupational composition of employment by major industry group were not very pronounced. However, the percentages were well above

Table 2 - 6

Significant Changes in Occupational Composition of Employment,
1960-1967, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group —	Total		Significant change	No significant change
	Number	Per cent		
All establishments ^a	307	100.0	32.2	67.8
Mining and construction	25	100.0	20.0	80.0
Manufacturing				
Durable goods	57	100.0	33.3	66.7
Nondurable goods	60	100.0	31.1	68.9
Transportation and utilities	27	100.0	33.3	66.7
Trade				
Wholesale	13	100.0	30.8 [*]	69.2 [*]
Retail	33	100.0	27.3	72.7
Finance, insurance, and real estate	25	100.0	44.0	56.0
Services	23	100.0	25.0	75.0
Government	30	100.0	46.7	53.3

^{*} Percentages based on fewer than 15 cases.

^a The total number of establishments excludes two employers that did not provide information.

average in government and in finance, insurance, and real estate. Since these two sectors employ relatively large proportions of white-collar employees, these results suggest -- as do some of our other data -- that changes in occupational composition during this period were affecting white-collar employees to a greater extent than blue-collar or service workers (Table 2-7).

On the other hand, construction establishments were relatively unlikely to report significant changes. This is consistent with the data to be discussed in Section IV, indicating that relatively fewer construction employers had undertaken actions leading to technological change than in other industry groups. Also below average in the extent to which respondents reported significant changes in the occupational composition of employment were retail trade and services.

Whereas more than two-thirds of the changes affecting white-collar occupations took the form of increases in the relative importance of the occupation group in question, more than half of the changes affecting blue-collar workers took the form of decreases. However, almost all the changes affecting professional and technical workers involved increases, as did the great majority of those affecting skilled blue-collar workers. The picture for other white-collar workers was more mixed, with half of the changes affecting clerical workers taking the form of shifts in the nature of the work, while for other white-collar workers increases and decreases were almost equally frequent. The latter situation appeared also to prevail for semi-skilled workers, although the number of responses relating to this group was small. For the unskilled and service group, decreases in relative importance were reported in the great majority of

Table 2 - 7

Direction of Change by Occupational Group, 1960-1967 --
Bay Area Employer Policy Survey, 1967

Major occupational group	All directions of change		Direction of change		
	Number	Per cent	Increase	Decrease	Shift
All changes ^a	158	100.0	60.7	30.4	8.9
White-collar	110	100.0	68.2	20.0	11.8
Professional and technical	56	100.0	96.4	3.6	0.0
Clerical	24	100.0	25.0	25.0	50.0
Other white collar ^b	30	100.0	50.0	46.7	3.3
Blue-collar	48	100.0	43.7	54.2	2.1
Skilled	16	100.0	81.2	18.8	0.0
Semiskilled	13	100.0	46.2*	46.2*	7.6*
Unskilled and service	19	100.0	10.5	89.5	0.0

* Percentages based on fewer than 15 cases.

^a Total changes mentioned by establishments that reported significant occupational changes; some employers described more than one change.

^b Includes managerial, sales, and white-collar unspecified.

instances.

It is important, in this connection, to observe that the number of responses relating to white-collar groups constituted about 70 per cent of the total changes in occupational composition reported -- providing further evidence that white-collar workers were being affected to a considerably greater extent than blue-collar workers by the occupational shifts occurring in our sample.⁴

Reasons for Changes in Occupational Composition of Employment

Changes in occupational composition of the work force were, for the most part, attributed by our respondents to technological change or the need to increase productivity. About three-fifths of the reasons mentioned by interviewees -- some of whom gave more than one reason -- related to these factors (data not shown). Most of the other responses referred to changes in demand as the explanation of changes in occupational mix. This result is scarcely surprising. Whereas changes in numbers of employees tended to be associated with changes in demand, changes in occupational structure were much more likely to be associated with changes in methods of producing or supplying goods and services.

When the change in occupational composition took the form of an increase in the relative importance of one or more occupation groups, however, it was considerably more likely to be attributed to a change in demand than in those cases in which the occupational shift took the form of a decline in the relative importance of various job categories (Tables 2-8 and 2-9). Another interesting result of this line of questioning was that conversion to electronic data processing or intensified use of EDP

Table 2 - 8
Reasons for Changes in Occupational Composition Associated with
Increases in Particular Occupation Groups --
Bay Area Employer Policy Survey, 1967

Reasons for changes	
<hr/>	
All reasons ^a	
Number	96
Per cent	100.0
Technological change or need to increase productivity	52.1
Conversion to or intensified use of EDP	21.9
Conversion to or intensified use of modernized equipment other than EDP	11.5
Need to adjust to complex societal requirements	8.3
Need to increase productivity or profitability, involving primarily changes in procedures or equipment	5.2
Need to increase productivity or profitability, involving primarily staff reorganizations, additions, or reductions	4.2
Other	1.0
Changes in demand for products or services	40.6
Changes, addition, or discontinuance of kinds of products or services	19.8
Greater volume of business or activity	13.5
Changes in demand for products or services associated with Vietnam conflict	2.1
Increased sales effort	2.1
Changes in demand for products or services not associated with Vietnam conflict	1.0
Other	2.1
Structural changes	6.3
Changes in number of units of the establishment	2.1
Reorganization of units or functions within an organization, including changes in the degree of centralization or decentralization	1.0
Other	3.2
Other types of changes	1.0
<hr/>	

^aTotal reasons reported by the employers experiencing changes in occupational composition associated with increases in particular occupation groups; some employers gave more than one reason.

Table 2 - 9

Reasons for Changes in Occupational Composition Associated
with Decreases in Particular Occupation Groups --
Bay Area Employer Policy Survey, 1967

Reasons for changes	
All reasons ^a	
Number	48
Per cent	100.0
Technological change or need to increase productivity	64.6
Conversion to or intensified use of modernized equipment other than EDP	35.4
Need to increase productivity or profitability, involving primarily staff reorganizations, additions or reductions	14.6
Need to increase productivity or profitability, involving primarily changes in procedures or equipment	10.4
Conversion to or intensified use of EDP	2.1
Other	2.1
Changes in demand for products or services	20.8
Changes, addition, or discontinuance of kinds of products or services	16.6
Changes in demand for products or services not associated with Vietnam conflict	2.1
Other	2.1
Structural changes	14.6
Reorganization of units or functions resulting in establishment's loss of employment to new or existing units of the organization outside of Bay Area	6.2
Changes in number of units of the establishment	4.2
Reorganization of units or functions within an organization, including changes in degree of centralization or decentralization	2.1
Other	2.1

^aTotal reasons reported by the employers experiencing changes in occupation composition associated with decreases in particular occupation groups; some employers gave more than one reason.

accounted for a significant proportion (22 per cent) of the explanations given for increases in the relative importance of occupational categories, but for only a tiny proportion of explanations for decreases. On the other hand, conversion to or intensified use of modernized equipment other than EDP figured quite prominently (35 per cent) among the reasons given for decreases, but considerably less prominently (12 per cent) among the explanations for increases.

Fluctuations in Employment

Questions relating to seasonal fluctuations yielded no information not available from other sources and are not reported. Of greater interest were the responses to a question relating to whether the firm experienced abrupt nonseasonal changes. Slightly more than a fifth of the establishments reported vulnerability to this type of fluctuation.

Foremost among the reasons reported for this type of fluctuation was the availability of work and next in relative importance were government orders (Table 2-10). These factors were particularly likely to be reported by employers in construction, durable goods manufacturing, and services industries -- activities in which work is frequently performed on contract. Respondents in nondurable goods manufacturing, on the other hand, were more likely to report vulnerability to changes in market conditions for their products.

Minority Group Employment

Negroes represented about 9 per cent of the population of the San Francisco-Oakland Metropolitan Area in 1960 but were heavily concentrated

Table 2 - 10

Reasons for Abrupt Changes in Employment
other than Seasonal Changes --
Bay Area Employer Policy Survey, 1967

Reasons for abrupt changes	
<hr/>	
All reasons ^a	
Number	73
Per cent	100.0
Availability of work	31.6
Government orders	16.4
Changes in economic conditions	13.7
Labor disputes or the possibility of labor disputes	9.6
Changes in specific market conditions	6.8
Promotional programs	5.5
Defense activities, including Vietnam	4.1
Port activity	2.7
Other reasons	9.6

^aThe 66 establishments reporting their employment as subject to abrupt changes account for the above 73 entries.

in the central cities of San Francisco, Oakland, Berkeley, and Richmond. Between 1960 and 1965, the proportions of Negroes in the populations of Oakland, San Francisco, and Berkeley increased substantially, as will be indicated in Section III, but no recent data are available on the racial composition of the entire metropolitan area. There were relatively few Negroes in the San Jose Area in 1960 or in Southern Alameda or San Mateo counties, although there was a significant Negro settlement in East Palo Alto and in a few other Peninsula cities.

Our Part II schedules included 115 in which the racial composition of the employer's work force was reported. The results cannot, of course, be regarded as reliably indicative of Negro representation in the area's establishments, in view of the fact that there were various types of biases in the composition of the reporting establishments in relation to the total sample, but the percentage of Negroes in all reporting establishments (8.1 per cent) was remarkably close to the percentage reported for the San Francisco-Oakland Metropolitan Area in 1966 by the U.S. Equal Employment Opportunity Commission (8.0 per cent).⁵

Relatively few employers reported no Negro employees, but nearly three-fifths indicated that less than 5 per cent of the work force consisted of Negroes (Appendix Table B-4). About a fourth included 10 per cent or more Negroes among their employees, but these establishments with relatively large proportions of Negroes were very unevenly represented in the various major industry groups. In terms of Negroes as a percentage of total employees reported, the combined services and government group (combined because of the small numbers reporting in each group) led by a wide margin, with all other major industry groups falling below the general

average. A particularly small percentage of Negro employees was found in durable goods manufacturing, related, as we shall find in the next section, to the small proportion of Negroes employed in manufacturing outside the central city areas.

Although we also obtained data for "other nonwhite" employees, it would appear that some of our respondents may have included Mexican-Americans among other nonwhites, whereas others did not. Thus the reports of the various establishments are apparently not consistent and for this reason are not presented.

Part-time Workers

One of the most significant developments of the postwar period has been the pronounced increase in the proportion of part-time workers in the labor force. Between 1950 and 1960, part-time employment increased 40 per cent as compared with a rise of only 8 per cent in full-time employment.⁶ The comparison in the 1960's has not been quite so spectacular, but between 1960 and 1967 average annual voluntary part-time employment increased 37 per cent, while full-time employment increased 11 per cent.⁷ In the meantime, average annual part-time employment for economic reasons, which had been relatively high in 1960, reflecting depressed business conditions, declined somewhat.

It was the rise in the relative importance of employment in the trade and service industries, in which most part-time employment occurs, that largely

explained, at least on the demand side of the labor market, the growing relative importance of part-time workers. But, on the supply side, the increase in part-time employment opportunities helped to encourage the marked increase in the labor force participation rate of married women that has been another significant development of the postwar period.

Although our questions on the use of part-time workers did not yield information that was new or surprising with respect to the major industry groups or occupations in which part-time work was particularly prevalent, they did shed a good deal of light on employers' reasons for using or avoiding part-time workers and on the influence of unions on policies relating to part-time work.

While less than half of our employers employed part-time workers, the proportions were much higher than this in four industry groups, amounting to well over four-fifths in retail trade and in finance, insurance, and real estate, to more than three-fourths in government, and to more than seven-tenths in services (Table 2-11). At the other end of the spectrum, relatively few employers in construction or in durable goods manufacturing used part-time workers, while nondurable goods manufacturing, transportation and utilities, and wholesale trade occupied an intermediate position. Clearly, as national employment statistics also indicate, part-time work was most prevalent in industry groups in which the employment of women was especially common and in which, to a considerable extent, work loads were not evenly spread throughout the day and evening.

It should be noted that our question on the use of part-time workers related to persons regularly working 1 to 34 hours per week in the establishment and specifically excluded workers hired for seasonal reasons, vacation

Table 2 - 11
Employment of Regular Part-time Workers
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Employs part-time workers	Does not employ part-time workers
	Number	Per cent		
All industries	309	100.0	47.0	53.0
Construction	26	100.0	11.5	88.5
Manufacturing				
Durable goods	57	100.0	19.3	80.7
Nondurable goods	62	100.0	32.3	67.7
Transportation and utilities	27	100.0	25.9	74.1
Wholesale trade	13	100.0	30.7*	69.3*
Retail trade	33	100.0	87.9	12.1
Finance, insurance, and real estate	25	100.0	84.0	16.0
Services	36	100.0	72.2	27.8
Government	30	100.0	76.7	23.3

* Percentages based on fewer than 15 cases.

relief, or to meet temporary emergencies. Although this definition of part-time work is not precisely comparable with the concept of voluntary part-time workers used in federal government statistics, it is probably true that most workers holding regular part-time jobs do so because they prefer part-time work or at least are not actively seeking full-time work. In any case, the relative prevalence of the use of part-time workers among establishments in the various major industry groups was about what would have been expected on the basis of nationwide statistics on the industrial distribution of voluntary part-time workers, which indicated that 85 per cent of all voluntary part-time wage and salary workers, on an annual average basis, were employed in trade, the finance group, and services. Relatively few were employed in government. However, the definition of government agencies (public administration) used in the compilation of these statistics differs from ours in that public educational bodies (e.g., local school districts) are not classified as government agencies but are included, rather, in the services group.⁸ Among the government agencies, one would be inclined to expect that local school districts would be likely to have the greatest need for part-time workers, whereas in most other types of government agencies the actual numbers of part-time workers employed are probably relatively small.

Among the reasons cited by employers for using part-time workers, the most common, accounting for about three-tenths of the responses, was the need to accommodate to peak or slack periods or special jobs. Also relatively prominent were comments to the effect that (1) work of a part-time nature exists in the form of odd-hour or partial shifts, (2) workers desiring part-time work were available, (3) work of a part-time nature exists

during normal working hours, and (4) the establishment had a policy of aiding students and other types of applicants desiring part-time work.

On the basis of the first reason given by respondents, there were some rather pronounced variations by major industry group in the relative importance of factors influencing the use of part-time workers (Table 2-12). In retail trade, for example, more than two-thirds of the respondents mentioned the need to accommodate to peak or slack periods or special jobs, and this reason was also relatively prominent in the services industries and in "all other industries" (the latter group including those in which part-time work was not especially prevalent). In the other industry groups, the reasons were more broadly distributed among the various considerations influencing the use of part-time workers.

Employers not making use of part-time workers were particularly likely to indicate that they did not fit in with the establishment's mode of operations, including work schedules, or that there was no need for them. In fact, these two reasons accounted for more than 80 per cent of the responses relating to considerations weighing against the use of part-time workers. Only about 10 per cent of these responses indicated that the union did not permit the use of part-time workers or restricted their employment, and yet, as we shall see, well over a third, in response to a later question on the nature of union influence on the use of part-time workers, did indicate that the union exerted some influence on this practice. There was relatively little variation by major industry group in the relative importance of the reasons given for not employing part-time workers, which, of course, came chiefly from establishments in the industry groups in which the employment of part-time workers was least prevalent.

Table 2 - 12

Reasons for Employing Regular Part-Time Workers, by
Major Industry Group --
Bay Area Employer Policy Survey, 1967

(Data relate to the first reason given by the respondent)

Reasons	Total	Manufac- turing	Retail trade	Finance, insur- ance and real estate	Services	Govern- ment	All other indus- tries ^b
All establishments ^a							
Number	135	29	28	21	22	21	14
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
To accommodate to peak or slack periods and special jobs	40.8	38.1	67.9	23.9	45.6	14.3	49.9*
Part-time work exists outside working hours as odd hour or partial shift	16.3	13.8	21.4	23.8	9.1	19.0	7.1*
Availability of workers desiring part-time work	15.6	24.1	--	19.0	22.7	14.3	14.3*
Part-time work exists during normal working hours	14.8	17.2	--	4.8	13.6	42.8	14.3*
More economical	4.4	--	10.7	9.5	--	--	7.1*
To accommodate to shortage occupations	4.4	3.4	--	9.5	4.5	4.8	7.1*
To contribute to re- cruitment of potential full-time workers	3.7	3.4	--	9.5	4.5	4.8	--

* Percentages based on fewer than 15 cases.

^a Total includes all establishments giving a first reason for employing part-time workers, except for those that gave miscellaneous reasons

^b Includes construction, transportation and utilities, and wholesale trade.

Although the use of part-time workers was considerably less frequently reported by employers with fewer than 250 employees than in the larger establishments, this difference probably was influenced primarily by the industry mix of this smallest size group rather than by the effect of size per se (see Table 1-3).

As suggested above, a rather considerable proportion of employers (37.5 per cent) indicated that the union (or unions) did exert some influence on the establishment's policies with respect to the employment of part-time workers, and the proportion so responding was particularly large in retail trade, transportation and utilities, and nondurable goods manufacturing (Table 2-13). The nature of the union influence, however, varied greatly among major industry groups. Particularly prominent among the responses of durable goods manufacturers was an indication that the collective bargaining agreement precluded the use of part-time workers or that a full day's pay was required under the union contract for the part of the day worked (Table 2-14). However, the significance of this type of response should not be overemphasized. Although durable goods manufacturing was an industry group in which the employment of part-time workers was relatively uncommon, only 35 per cent of the employers in the group indicated that the union influenced their practices with respect to the use of part-time workers, and this was approximately the size of the group citing the nature of union influence.

All in all, union influence in restricting the use of part-time workers appeared to be relatively most important in nondurable goods manufacturing and in transportation and utilities, in which, not only was the proportion of employers mentioning union influence comparatively high, but

Table 2 - 13

Union Influence on Employment of Part-Time Workers,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Union influ- ences	Union does not influ- ence	No collective bargaining agreement	Informa- tion not available
	Number	Per cent				
All establishments	309	100.0	37.5	31.4	29.4	1.6
Construction	26	100.0	38.5	42.3	7.7	11.5
Manufacturing						
Durable	57	100.0	35.1	45.6	17.5	1.8
Nondurable	62	100.0	50.0	37.1	11.3	1.6
Transportation and utilities	27	100.0	55.6	37.0	11.3	1.6
Trade						
Wholesale	13	100.0	46.2*	38.5*	15.4*	--
Retail	33	100.0	57.6	27.3	15.2	--
Finance, insurance, and real estate	25	100.0	4.0	8.0	88.0	--
Services	36	100.0	36.1	22.2	41.7	--
Government	30	100.0	3.3	10.0	86.7	--

* Percentages based on fewer than 15 cases.

Table 2 - 14
Union Methods of Influencing or Controlling Employment of
Part-Time Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Methods	Total	Manufac- turing-- durable	Manufac- turing-- non- durable	Transpor- tation and utilities	Retail trade	All other indus- tries ^b
All establishments ^a						
Number	113	19	30	14	19	31
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Collective bargaining agreement precludes part-time workers	26.6	57.8	23.4	42.9*	--	19.4
Guaranteed work week or work day provided by collective bargaining agreement	15.9	5.3	30.0	14.3*	--	19.4
Full day's pay required for part of day worked	14.2	26.3	13.3	7.1*	--	19.4
Hours worked specified by collective bargain- ing agreement	10.6	5.3	3.3	--	42.1	6.5
Part-time workers re- quired to be union members	9.7	--	13.3	14.3*	15.8	6.5
Ratio of part-time to full- time workers predeter- mined by collective bargaining agreement	8.0	5.3	3.3	14.3*	21.0	3.2
Premium rates required for part-time workers	6.2	--	6.7	--	15.8	6.5
Pay and/or fringe benefits specified by collective bargaining agreement	4.4	--	--	--	5.3	12.9
Other	4.4	--	6.7	7.1*	--	6.5

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments with no unions, with union exercising no influence or control, and those not providing information.

^bIncludes construction; wholesale trade; finance, insurance, and real estate; services; and government.

the nature of the union influence appeared, on the whole, to be restrictive.

Very different was the situation in retail trade, where part-time work was, as we have seen, especially prevalent, and where the main thrust of union influence appeared to be, not so much to restrict the use of part-time workers, as to regulate their hours, to influence the ratio of part-time workers to full-time workers, to require part-time workers to be union members, and in some instances to require premium rates for part-time workers.

Clerical, sales, and service occupations accounted for the great majority of the responses indicating the types of jobs in which part-time workers were used, with the clerical group leading the other two by a considerable margin. Interestingly, however, professional and technical workers accounted for about 15 per cent of all these responses, with nurses, teachers, and teacher aides figuring prominently among the groups mentioned. Scarcely more than 10 per cent of the responses mentioned blue-collar occupations, and, among these, unskilled occupations were much the most frequently cited.

Interestingly, when asked from what groups employers characteristically recruited part-time workers, the group most frequently mentioned, accounting for 37 per cent of the responses, was students. Also relatively prominent were housewives, accounting for 26 per cent, while other specific groups mentioned, in order of relative importance, were dual jobholders (10.5 per cent), youth (7.3 per cent), and retired persons (6.5 per cent).

It may well be, in view of the proliferation of institutions of higher education, including junior colleges, in the Bay Area, that students represent a relatively more important source of part-time workers than they

might in some other labor market areas.

However, perhaps the most important inference to be drawn from our results is that part-time work will probably continue to increase in relative importance, not only because it tends to be prevalent in industry groups in which employment is increasing relatively rapidly, but also because such groups as students and housewives are clearly interested in taking advantage of opportunities for part-time work. On the whole, our data do not suggest that unions are rigidly restricting the use of part-time workers to any very great extent. True, a good many employers indicated that unions influenced the practice, but only about a tenth of the responses relating to reasons for not using part-time workers mentioned union prohibitions or restrictions on their use. Moreover, the industries in which use of part-time workers tended to be less prevalent were those in which work schedules were least likely to lend themselves to part-time work.

Temporary Staff Agencies

Another rapidly expanding, and more novel, labor market practice in the postwar period has been the use of temporary staff agencies, or, more familiarly, agencies supplying "Kelly girls." Technically, these are agencies carrying on their own payrolls workers who are referred for temporary jobs to establishments which reimburse the temporary staff agency at an hourly rate for the services of the worker.

All in all, about 73 per cent of our establishments indicated that they made use of the services of temporary staff agencies. For the most part, there were few variations by major industry group in the relative

frequency of this response, although the proportion was well above average in finance, insurance, and real estate (92 per cent) and far below average in government (17 per cent), where regulations frequently prohibit the use of the services of these agencies.

There were no significant variations by size of firm in this practice, but there was a slight tendency for establishments reporting that they had experienced difficulties in recruiting to be especially likely to use temporary staff agencies.

Not unexpectedly, the vast majority of establishments that used these agencies indicated that they did not use them regularly, but only as the need arose. This is consistent, also, with the reasons employers gave for using the agencies, in which such factors as staff emergencies, the existence of a short-term or seasonal work load, and various unspecified types of emergencies predominated (Table 2-15). And, although these reasons, taken together, represented the vast majority of first responses given by employers in all major industry groups, the distribution of responses among these three varied considerably (Appendix Table B-5). Not surprisingly, the problem of a short-term or seasonal work load figured particularly prominently in the answers of establishments in trade, the finance group, and services.

Among the much smaller group of employers not using these agencies, by far the most frequently cited reason for not using them, particularly by the private employers, was that there was no need, whereas in the case of government agencies the fact that they were prohibited by statute or administrative regulation accounted for the majority of the explanations, while "no need" took second place.

Table 2 - 15
Reasons for Using Temporary Staff Agencies --
Bay Area Employee Policy Survey, 1967

All reasons ^a	
Number	282
Per cent	100.0
Staff emergencies (vacations, illnesses, other absences)	32.7
Short-term or seasonal work load	28.0
Emergencies, type not specified	20.2
Use of temporary employment period as a means of screening for permanent employees	3.9
Convenience, as opposed to process of hiring permanent employees	3.2
Immediate availability of workers	2.8
Availability of trained personnel	2.8
Economical	2.5
Seasonal work load	1.8
Other	2.1

^aTotal includes all reasons given by the 218 establishments reporting reasons for using temporary staff agencies.

Although the temporary staff agencies in the area advertise the availability of workers in a variety of occupations, in fact clerical occupations accounted for 95 per cent of all the responses of our employers relating to types of workers whom they obtained through the staff agencies. These included, not only stenographers and typists, but also -- though somewhat less frequently -- clerks, office machine operators, telephone operators and receptionists, and stock clerks. Of the remaining responses, professional and technical occupations accounted for the majority, with draftsmen mentioned specifically by a significant number of respondents.

Here, as in the case of the use of part-time workers, very few employers mentioned union restrictions as a reason for not using temporary staff agencies, and yet almost a third of all the establishments indicated, in response to a more specific question about union influence, that unions did exert an influence on their use. Moreover, in about two-thirds of these cases, the interviewee indicated that the temporary workers had to be hired through the union. Although we did not undertake a statistical analysis of the relationship between these responses and union hiring requirements, it was apparent that these responses tended to come from establishments that were required to hire office employees either through the Teamsters (which, as we shall see in Section V, tends to have jurisdiction over office employees in trucking establishments and warehouses) or the Office Employees Union. Thus, although employers did not tend to mention union restrictions as a reason for not using temporary staff agencies, it would appear that this was a factor in explaining their nonuse by some of our establishments.

Probably less restrictive in practice was the other type of union

influence mentioned -- a requirement that temporary employees were required to become union members after the period of time established under the collective bargaining agreement. Since it seems likely that workers obtained through temporary staff agencies usually worked less than the 30 days, which is the relevant period of time in most collective bargaining agreements, this provision would be unlikely to have much effect on the use of these agencies.

Labor economists have tended to speculate that a major reason for the growth in the practice of using temporary staff agencies has been the increasing cost of getting a temporary worker on and off the payroll, associated in part with more formal selection practices and in part with the expansion of fringe benefits, which inevitably entail a good deal of paper work in connection with accessions and separations. (Although some fringe benefits do not become applicable until an employee has been working for a certain minimum period, others, such as workmen's compensation, are immediately applicable.)

Interestingly, very few of our respondents mentioned this reason for using temporary staff agencies. On the other hand, a number of their comments on their experience in using them indicated that they were generally very well satisfied with the competence of the workers obtained in this manner. Thus, it would appear that it is not so much the cost of getting a temporary worker on and off the payroll, as the difficulty of recruiting competent workers for temporary jobs through the usual channels that is probably a major explanation of their increasing use. In this connection, it should be kept in mind that there tended to be a shortage of qualified clerical workers in the Bay Area at the time of our survey. Thus, the use of

temporary staff agencies might have been more prevalent than it would have been in a period in which there was a surplus of such workers and perhaps, also, than would be found in other areas with less acute shortages of qualified clerical workers.

An aspect of the use of temporary staff agencies that is particularly interesting is that this is the first example, among a number that we shall encounter in the course of our report, in which specialized services were being developed outside the establishment to serve its needs. Viewed in this manner, temporary staff agencies provide simply another example of the increasing complexity of the labor market which is forcing an even finer division of labor between those performing functions necessarily handled by the establishment itself and those concerned with services best left to other organizations. The pervasive use of temporary staff agencies in firms in which their use is feasible reflects, indeed, the appeal to employers of an ability to refer qualified workers promptly when needed. However, this ability rests, in turn, upon the agency's service of organizing a labor supply available primarily for temporary and short-hour work so that it can be effectively utilized on demand. This latter function is, unquestionably, one which few employers could attempt individually.

As in the case of part-time workers, there is every reason to believe that the use of temporary staff agencies will continue to expand, particularly since their use is especially prevalent in some of the rapidly expanding industry groups, such as finance, and since a rapidly expanding occupation group, clerical workers, is primarily involved. Moreover, short-term jobs are particularly attractive to some married women who do not want to be tied down to a regular or permanent job but appreciate the opportunity to work from time to time.

Subcontracting

Subcontracts are, of course, a familiar aspect of the construction industry and also of certain branches of manufacturing, but rarely has information been systematically collected on the role of subcontracting in other industry groups. We found that 68 per cent of our establishments did, regularly or from time to time, let out subcontracts but that the proportions varied widely among the major industry groups (Table 2-16). Not unexpectedly, the percentage was especially high in construction, but it was also about equally high in government, reflecting, at least in part, the fact that many government agencies, such as counties, cities, and school districts are frequently involved in construction projects on which bids are sought from private contractors. (In this connection, it should be made clear that our question relating to subcontracts was not narrowly interpreted as applying exclusively to subcontracts but as involving also work done for the establishment on a contract basis by another organization.)

Table 2 - 16

Per Cent of Establishments Letting Out Subcontracts,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Number	Per cent letting out subcontracts
All establishments	309	68.0
Construction	26	88.5
Manufacturing		
Durable goods	57	78.9
Nondurable goods	62	66.1
Transportation and utilities	27	77.8
Trade		
Wholesale	13	69.2*
Retail	33	39.4
Finance, insurance, and real estate	25	40.0
Services	36	55.6
Government	30	90.0

* Percentage based on fewer than 15 cases.

Well below average, on the other hand, in the extent to which employers indicated a practice of letting out subcontracts were retail trade, the finance group, and services.

Information on the types of activities that were subcontracted or contracted out sheds light, not only on the differences among major industry groups in the relative extent of subcontracting but also on the reasons why there was a considerable amount of contracting out in industry groups in which it might not have been expected (Table 2-17). Subcontracting "operations related to the principal product or service" was the most frequently reported type of activity, but next in relative importance were "activities of a custodial nature." This is another significant example of what is apparently a growing practice of purchasing from outside the establishment services which can be more efficiently performed by another organization. Judging from the comments of some of our interviewees, one of the advantages of entering into a contract with a specialized firm for custodial services relates to the fact that such services are frequently performed in the evening or early morning when it is difficult for the establishment to provide adequate supervision of the custodial workers performing the services.

That types of services other than custodial were also obtained on a contract basis is indicated by the relative frequency of the category "activities other than custodial or protective not related to the establishment's principal product or services." An example of such services, of growing importance, is computer work. "Activities of a protective nature" were mentioned comparatively infrequently, but there are indications that, under the impact of a growing crime rate and consequent pressure on public law

Table 2 - 17

Activities Subcontracted, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Activities subcontracted	Total	Construction	Manufacturing	Transportation and utilities	Trade	Finance, insurance, real estate and services	Government
All activities ^a							
Number	339	37	125	31	45	48	53
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Operations related to principal product or service	27.4	21.6	40.8	29.0	24.4	16.7	11.3
Activities of a custodial nature	27.1	5.4	25.6	42.0	33.4	43.8	18.9
Construction activities in which establishment does not customarily engage	18.6	62.2	12.0	3.2	4.4	6.2	35.8
Activities other than custodial or protective not related to establishment's principal product or services	18.0	--	15.2	12.9	26.7	22.9	28.3
Activities of a protective nature	4.4	2.7	4.8	12.9	--	6.2	1.9
Concession operation	2.1	--	--	--	11.1	4.2	--
Construction activities--volume exceeds establishment's capacity to handle	1.2	8.1	--	--	--	--	1.9
Other	1.2	--	1.6	--	--	--	1.9

^aTotal includes all types of subcontracted activities mentioned in the first and second responses of the 221 establishments that reported letting out subcontracts. About 15 per cent of these establishments also mentioned a third type of subcontracted activity while a few mentioned fourth and fifth types, but these responses are not included.

enforcement agencies, there has been something of an increasing tendency for business enterprises to purchase protective services from private organizations on a contractual basis.

Variations in the relative importance of these subcontracted or "contracted out" activities by major industry group require little comment, since they speak for themselves. That construction establishments should mention "construction activities in which the establishment does not customarily engage" relatively frequently, that manufacturing employers should refer to "operations related to the principal products or services" more often than any other type of subcontracting, that government agencies are frequently involved in contracts for construction activities, and that "activities of a custodial nature" should play a relatively important role in the other major industry groups are differences entirely to be expected.

Among the establishments letting out subcontracts or entering into contracts for various types of services, about 65 per cent said that these subcontracts or contracts were confined to the Bay Area, whereas the other employers indicated that they were involved in such relationships "both within and outside the Bay Area." Most of these respondents indicated that these practices did not affect their employment level, but nearly a fourth indicated that they did. Most of this group reported that the employment level of the establishment was reduced as a result of the subcontracting, while a minority indicated that subcontracting or contracting prevented fluctuations in employment. Among the respondents indicating that the level of employment in the establishment was affected, the great majority also reported that the occupational composition of employment was likewise affected. These responses scarcely require explanation, except

insofar as one might expect that any subcontracting or "contracting out" activity would affect employment within the establishment. Presumably the employers responding that it did not were referring to types of subcontracting activities, e.g., in the construction industry, which were so well established that they did not in any way affect the usual level or pattern of employment in the establishment.

Interviewees were also asked about their reasons for subcontracting, but, on the whole, their responses were quite obvious in the light of the types of subcontracting in which they engaged and require little comment. Prominent among the reasons mentioned were "does not have the facilities or staff for the kinds or volume of activities involved," "more economical," and "greater efficiency or convenience."

Again, as in the case of the use of temporary staff agencies, by far the most frequent reason for not engaging in subcontracting was the fact that there was "no need." Very few respondents, indeed, referred to union restrictions as a reason for not engaging in such practices.

Nevertheless, we find once again that, in answer to a question relating directly to union influence which was asked only in unionized establishments, a considerable proportion indicated that the union did exercise some influence over subcontracting practices (Table 2-18). Not unexpectedly, the percentage of unionized employers responding in the affirmative to this question was especially high in construction, while it was particularly low in services, where the subcontracted or "contracted out" activities tended to be unrelated to the establishments principal functions.

Clearly union influence was primarily directed toward making certain

Table 2 - 18

Per Cent of Unionized Establishments in Which
Unions Exercised Influence on or Control of
Subcontracted Activities,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Number	Per cent in which unions exercise influence or control
All unionized establishments ^a	218	30.3
Construction	25	64.0
Manufacturing		
Durable goods	46	30.4
Nondurable goods	55	30.9
Transportation and utilities	26	23.1
Retail trade	26	38.5
Services	20	5.0
All other industries ^b	20	10.0

^aTotal excludes unionized establishments not providing information on union influence.

^bIncludes wholesale trade; finance, insurance, and real estate; and government.

that subcontracting was not used as a means of transferring work to non-union establishments, for the most frequently reported type of influence was a provision that "subcontracted work must be given to union workers and/or paid for at union wage rates" (Appendix Table B-6). However, more than a fifth of these respondents indicated that the union restricted or prohibited subcontracting, while approximately another fifth indicated either that "activities customarily conducted by the establishment cannot be subcontracted" or that the union required "notification of any planned subcontracting and/or has the right to restrict or prohibit it."

One additional comment that is perhaps in order with reference to subcontracting in the Bay Area is that, in the aerospace industries, as is generally known, a good deal of subcontracting of a highly specialized and often experimental nature is quite common. And, in one or two well publicized cases, subcontracting of electronics work has been arranged as a means of encouraging minority group enterprise.

Concluding Remarks

For the most part, the results of our questions relating to employment did not yield information that was particularly novel or surprising. Our findings with respect to employment changes are generally consistent with those indicated by aggregate employment data and by the results of studies of the impact of technological change on the occupational composition of employment.

Of considerable interest, however, is the finding that there was a tendency for the proportion of establishments experiencing substantial increases in employment to vary directly with the size of the establishment

in terms of number of employees. In some respects, also, our results relating to the use of temporary staff agencies and the practice of subcontracting are of interest, reflecting, as they do, what appears to be a growing tendency to purchase specialized services from organizations outside the establishment. Moreover, there is little question that the use of part-time workers and of workers supplied by temporary staff agencies will continue to expand, in view of the fact that, particularly in the case of part-time workers, they are being employed in the most rapidly expanding major industry groups.

With respect to the employment of Negro workers, our results suggest wide variability among major industry groups in the relative representation of Negro employees. A particularly small proportion of Negro employees was found in durable goods manufacturing, related, as will be found in the next section, to the small proportion of Negroes employed in manufacturing outside the central city areas.

One of the problems that has long been of serious concern in California and in the Bay Area has been the extent of dependence in the state and in its major metropolitan areas on federal defense expenditures. We had hoped to shed some light on this problem in a series of questions relating to the involvement of establishments in defense production, but relatively few employers indicated that they were currently significantly engaged in defense production, reflecting the fact that only a small proportion of establishments in our survey were in industries that would be likely to be involved directly in defense contracts.

In this connection, however, it is important to keep in mind the fact that, with or without a sharp cutback in defense expenditures of the

type that could conceivably develop as a result of a Vietnam settlement, employment in at least some of the establishments in the aerospace industries tends to be quite unstable because of changes in defense contracts. Moreover, in view of the high proportion of nonproduction workers in these industries, such groups as engineers are susceptible to unemployment as a result, and there have been several episodes of appreciable unemployment among engineers on the Peninsula. Thus far, however, these episodes have tended to be short-lived. A major cutback in federal spending affecting these industries could precipitate a serious problem of unemployment among groups of workers not ordinarily particularly susceptible to unemployment and in suburban residential areas in which unemployment has tended to be a rare phenomenon. Particularly in view of the growing interest in intensified efforts to control the arms race, the question which we had hoped to elucidate -- relating to any plans establishments might have for converting to nondefense types of production -- continues to be of great interest.

Footnotes to Section II

1. For employment in the aerospace industries, see Aerospace Employment: California and Metropolitan Areas, 1949-1968, California Department of Industrial Relations (San Francisco: 1969); for total manufacturing employment, see California Statistical Abstract (annual).
2. Manpower Report of the President, 1968, pp. 221 and 287.
3. Sub-Employment in the Slums of Oakland, U.S. Department of Labor (Washington, D.C.: 1967); Sub-Employment in the Slums of San Francisco, U.S. Department of Labor (Washington, D.C.: 1967); and Jan Dizard, Patterns of Unemployment in Berkeley, California (Berkeley, California: Survey Research Center, University of California, 1968).
4. The statistical reporting of changes in numbers employed by occupational group in the Part II schedules was too sparse to permit much analysis. A major difficulty was that many of the Part II schedules that were returned did not include data on the occupational composition of employment in 1960, although they did report this information for 1965 and 1966. Thus, the number of schedules permitting analysis of 1960-1966 changes was limited, and we did not consider 1965-1966 changes to be particularly reliable indicators of trends. Although the occupational breakdowns varied, this did not prove to be a major problem, since it was not difficult to identify the various categories reported (e.g., hourly workers, exempt salaried workers, etc.) as either white-collar or blue-collar.
5. Equal Employment Opportunity Report No. 1: Job Patterns for Minorities and Women in Private Industry, 1966, U.S. Equal Employment Opportunity Commission (Washington, D.C.: U.S. Government Printing Office, 1968),

pp. D206-D208. The EEOC results, of course, applied to the five-county San Francisco-Oakland Metropolitan Area, whereas our results also included reports from the San Jose Metropolitan Area. However, the number of establishments reporting Negro employment on our Part II schedules in the San Jose area was quite small and had relatively little effect on our overall percentage of Negroes. The EEOC found that Negroes represented only 2.4 per cent of employees in the establishments included in their sample in the San Jose Metropolitan Area in 1966. (Ibid., p. D209.)

6. See R. L. Stein and J. L. Meredith, "Growth and Characteristics of the Part-time Work Force," Monthly Labor Review, LXXXIII (November, 1960), 1166-1175.

7. Computed from data in Manpower Report of the President, 1968, pp. 244-245. These data are not precisely comparable with those cited for 1950 and 1960, which are based on decennial census statistics.

8. The classification, public administration, is used in the compilation of household data, whereas "government" is used in connection with establishment data.

III. THE LOCATION OF INDUSTRY

One of the most significant developments of the postwar period has been the pronounced tendency toward industrial decentralization within large metropolitan areas. In contrast with the movement of population to the suburbs, which has been widely recognized and extensively analyzed, the movement of industry to the suburbs has come to be recognized only relatively recently as a highly significant phenomenon, even though a trend in this direction has been clearly discernible for some time.

As long as suburban areas remain relatively nonindustrialized, employment expansion in the suburbs tends to be largely concentrated in the trade and service industries which cater to the resident population. When manufacturing industries locate in suburban areas, however, a more complex process of employment expansion takes place. Not only are jobs created in manufacturing, but the development of manufacturing industries tends to create a demand for economic activities that serve the factories (e.g., transportation), while the movement of factory workers to the suburbs has a multiplier effect on trade and service industries over and above the stimulation provided by the increase in population consisting of families whose breadwinner commutes to the central city.

A recent analysis by the U.S. Bureau of Labor Statistics indicated clearly that industrial decentralization within large metropolitan areas is a nationwide phenomenon. During the 1954-1965 period, 63 per cent of the valuation of industrial building permits in 14 of the largest metropolitan areas throughout the country were issued for locations outside of the central cities. The proportions issued for outlying locations tended to be

higher in the Northeast and the West than in the North Central states or the South. The San Francisco Area, with 84 per cent of the value of industrial building permits issued for locations outside its central cities, and the Los Angeles Area, with 86 per cent, were among the three or four areas in which the tendency was particularly pronounced.¹

The central cities of the Bay Area, in accordance with the classification used by the U.S. Bureau of the Census and other government agencies, are San Francisco and Oakland. Both cities are relatively small in land area and have comparatively little vacant land available for industrial expansion. San Francisco, which is both a city and a county, occupies 45 square miles of land and Oakland occupies 52 square miles, out of a total of 3,788 square miles in the six-county area included in this study.²

During the postwar period, by far the greater part of the employment expansion that has occurred in the Bay Area has been outside its two central cities. In the case of San Francisco, we find that the total number of employees in private firms covered by unemployment insurance increased only 10 per cent between 1950 and 1966, as compared with an increase of 117 per cent in the rest of the six-county area included in this study.³ And, during this same period, employees in manufacturing in San Francisco declined 11 per cent, while manufacturing employees in the rest of the six-county area increased 108 per cent. Comparable data for Oakland are not available, but Census of Manufactures data show little change in manufacturing employment in Oakland between 1947 and 1958, while recent estimates prepared by the California Department of Employment indicate that total manufacturing employment in Oakland declined from 40,400 in 1958 to 31,300 in 1966, or 22.5 per cent. During the same period, manufacturing

employment in the rest of Alameda County rose from 31,500 to 54,500, or 76 per cent. Meanwhile, estimated total civilian employment in Oakland rose a modest 5 per cent, while employment in the rest of the county increased 54 per cent.⁴ It is clear, on the basis of general observation and such limited data as are available, that most of the employment expansion in manufacturing in Alameda County in the postwar period has occurred south of Oakland, in such communities as San Leandro, Hayward, and Fremont. The Oakland-Emeryville-Berkeley-Albany area, which we shall treat as the central city area of Alameda County in reporting the results of this survey, has generally been characterized by stagnating or declining manufacturing employment.

In fact, as indicated in Section I, most of the expansion of manufacturing employment in the Bay Area in the last 20 years or so has been occurring around the southern rim of San Francisco Bay. However, it is Santa Clara County that has experienced particularly spectacular expansion, increasing its share of total manufacturing employment in the Bay Area from 10.2 per cent in 1947 to 32.0 per cent in 1965, with the most rapid gains occurring between 1954 and 1963 (Appendix Table C-1). San Mateo County has also increased its share, but on a much more modest scale, while relatively nonindustrialized Marin County's tiny share has crept up a little. The other three counties, which accounted for 84 per cent of the total in 1947, have all lost relative ground, and together accounted for only 57 per cent in 1965. Clearly, the sharpest decline occurred in San Francisco County, but Alameda and Contra Costa counties also lost substantial relative ground, although both showed gains in number of workers employed, and, as we have seen, substantial industrial development has been occurring in

Southern Alameda County. Moreover, Santa Clara County's spectacular gains are in considerable part explained by the fact that nearly four-fifths of the expansion in employment in the aerospace industries from 1950 to 1966 occurred in the San Jose Metropolitan Area, while a considerable portion of the remainder evidently occurred in adjacent Southern San Mateo County, although precise statistical data are not available for the latter area.

Another way of describing what has been happening is that the older industrial centers in the Bay Area have lost ground, relatively, to younger and rapidly expanding areas. We have commented on the decline of manufacturing employment in San Francisco and relative stagnation in the Oakland-Berkeley area. Certain other established industrial centers, such as Richmond and Pittsburg in Contra Costa County, have also lost relative ground.

Moreover, particularly in San Francisco, the loss of blue-collar jobs in manufacturing has been considerably more serious than data on total manufacturing employment suggest, for there has been a sharp decline in the ratio of production workers to total manufacturing employees (Appendix Table C-2). This change, of course, has occurred throughout the Bay Area and is in line with the nationwide trend, but only in San Francisco County, among the six counties included in our study, has it occurred along with a decline in total manufacturing employment. San Francisco's relatively low ratio of production workers is at least partly explained by the fact that many of the manufacturing firms there are headquarters units, employing large proportions of administrative and other white-collar workers. The low ratios in San Mateo and Santa Clara counties, on the other hand, are explained by the predominance of the aerospace industries, which tend to

have high proportions of nonproduction workers.

Apart from the broader significance of declining or stagnating employment opportunities for blue-collar workers in the central cities, industrial decentralization tends to complicate the problem of opening doors to jobs for Negroes. The vast majority of Negroes in the Bay Area are heavily concentrated in San Francisco and Oakland, along with several smaller cities with long-established Negro areas, such as Berkeley and Richmond. There are very few Negroes in Southern Alameda County or in Santa Clara County and only small percentages in San Mateo and Marin counties (Appendix Table C-3). The largest community of Negroes in San Mateo County is in the southern portion of the county, in East Palo Alto. As for "other nonwhites," the largest proportion of this group is found in San Francisco, with its long established Chinese-American and Japanese-American populations, while there are smaller percentages of other nonwhites in the Oakland-Berkeley area and in Santa Clara County. On the other hand, Santa Clara County, with its hitherto predominantly agricultural character, has a sizable Mexican-American minority group population, and there are also rather substantial proportions of Mexican-Americans in Alameda, San Francisco, and Contra Costa counties.

If anything, the residential concentration of Negroes in the central cities has increased since 1960. A sample survey indicated that Oakland's Negro population rose from 22 per cent to an estimated 30 per cent of the total between 1960 and 1965 and Berkeley's from 19 to 25 per cent of the total in the same period, whereas the Negro population of rapidly expanding Southern Alameda County declined from 1.3 to 0.1 per cent of the total in these five years.⁵ San Francisco's Negro population also increased from

10 per cent of the city's total population in 1960 to an estimated 13 per cent in 1967.⁶ Recent data relating to the racial composition of other parts of the Bay Area are not available.

Our Part II employment data, discussed briefly in Section II, indicated that Negroes were considerably more likely to be employed in establishments in the central cities (San Francisco and the Oakland-Berkeley area) than in the outer ring of the Bay Area (Appendix Table C-4). The difference was pronounced in both manufacturing and nonmanufacturing establishments, although nonmanufacturing establishments reported relatively more Negro employees in both types of locations.

The Role of Industrial Structure

The older industrial centers could have lost relative ground in terms of employment because the manufacturing industries which had historically found it advantageous to locate there tended to be those with stagnant or declining employment trends in the postwar period, or because their proportion of total Bay Area employment in these and other industries declined, or through some combination of the two. In other words, we need to determine whether or not the older centers had a disadvantageous industry mix in relation to employment trends in the postwar period.

With respect to Contra Costa County, the answer is fairly clear -- manufacturing employment expansion tended to be slow in the postwar period in considerable part because of specialization in industries in which

employment growth was slow or in which it was stagnant or declined. If we take 1950 as an appropriate starting point, since postwar readjustments had largely occurred by that time -- particularly the sharp cutback in shipyard employment -- we find that about 60 per cent of Contra Costa County's manufacturing employment was concentrated in the chemical, petroleum, and primary metal industries -- industries which were to experience relatively slow or stagnant employment expansion in the next 16 years (Appendix Table C-5). And this was not because their production was failing to expand but because, especially in the petroleum industry, expansion of production could be achieved under highly mechanized conditions along with a slowly declining or only slightly rising trend in employment.

The San Francisco picture is less clear. The apparel industry, which was represented among San Francisco manufacturing employees to a considerably greater extent than elsewhere in the Bay Area, experienced only very moderate growth in employment in the 16-year period, while the furniture and food products industries, which were represented on a comparable or slightly larger scale in San Francisco than in the Bay Area experienced stagnant or declining employment. But the other industries in which San Francisco was somewhat specialized in 1950, in comparison with the Bay Area as a whole -- printing and publishing and fabricated metal products -- experienced fairly substantial rates of employment growth in the Bay Area in the next 16 years. And Alameda County, with its relatively heavy concentration in durable goods industries, particularly nonelectrical machinery and motor vehicles, did not appear to be particularly handicapped by a poor industry mix in relation to postwar patterns of employment expansion.

Location or Relocation

One of the questions in which we were interested was whether industrial decentralization had occurred primarily as a result of actual movement of establishments out of central cities, or as a result of location of new establishments and expansion of existing establishments in the more outlying areas. Although the results of our survey are not entirely conclusive on this point, they suggest that movement of establishments out of the central cities has not been the primary factor, although it has been occurring on a relatively modest scale.

When asked whether they had moved within the last five years, only 37 establishments, or 12 per cent of all establishments in our sample, indicated that they had. The question related to whether the main location of the establishment in the Bay Area had been moved. Moreover, although most of the firms that had been involved in such moves had previously been located in San Francisco or the Oakland-Berkeley area (i.e., central city areas), only a minority of these moves had been to more outlying areas (Table 3-1). And, interestingly, the great majority of moves involving San Francisco establishments had been to other locations within San Francisco County. Some of these were from the downtown parts of San Francisco to less built-up sections, chiefly along the Bay in the direction of South San Francisco.⁷ All in all, however, only about 3 per cent of our establishments had moved out of a central city area.

Had we chosen to ask whether the establishment had moved within the last ten years, we would have apparently found a considerably larger number of moves, which could have been subjected to more intensive analysis.⁸ This is suggested by the data in Table 3-2, which indicate that, although only

Table 3 - 1

Main Address of Establishment by Previous Location, for
Establishments That Had Moved in Last Five Years --
Bay Area Employer Policy Survey, 1967

Main address	Previous location			
	San Francisco County	Oakland- Berkeley Area ^a	Other	Total
All establishments				
Number	19	9	9	37
Per cent	100.0	100.0	100.0	100.0
Same area ^b	78.9	44.4*	88.9*	73.0
Different area -- not a central city	15.8	55.6*	11.1*	24.3
Different area -- central city	5.3	--	--	2.7

*Percentages based on fewer than 15 cases.

^aIncludes Oakland, Emeryville, Berkeley, and Albany.

^bA move to the same area means a move within any one of the following areas: San Francisco County, Oakland-Berkeley area, Southern Alameda County, Northern San Mateo County, Southern San Mateo County, Santa Clara County, Contra Costa County, or Marin County. For definitions of the areas that are smaller than an entire county, see the footnotes to Table 3-3.

Table 3 - 2

Establishments by Number of Years in Bay Area,
in Present City, and in Present Premises --
Bay Area Employer Policy Survey, 1967

(Information relates to main address of establishment in Bay Area)

Number of years	In Bay Area	In present city	In present premises
All establishments			
Number	309	309	309
Per cent	100.0	100.0	100.0
Less than five years	0.6	3.6	12.6
Five years but less than ten years	3.9	6.8	13.9
Ten years but less than 25 years	20.1	24.6	31.8
25 years but less than 50 years	36.3	30.6	26.9
50 years but less than 75 years	22.0	18.8	11.3
75 years but less than 100 years	9.4	9.1	2.6
100 years or over	7.1	6.5	0.6
Information not available	0.6	--	0.3

4.5 per cent of all the establishments in the sample had been located in the Bay Area less than ten years, 10.4 per cent had been located in the city in which their present main address was found less than ten years, while 26.5 per cent had been located in their present premises less than ten years. In other words, about 22 per cent of the establishments had evidently been involved in some type of move within the Bay Area in the last ten years, although in most of these cases the move had apparently been within the same city. About a third of the establishments had been involved in some type of move in the last 25 years, but again mostly within the same city.

On the other hand, what is perhaps most striking about the data in Table 3-2 is that the great majority of establishments in our sample -- about three-fourths in all -- had been located in the Bay Area 25 years or more, and nearly two-fifths had been in the area 50 years or more. Had our sample included firms with fewer than 100 employees, the proportion of young establishments might well have been larger, since turnover tends to be high among small companies. It is also possible that there has been more movement within the area on the part of small firms.

Not unexpectedly, the central city areas -- San Francisco and the Oakland-Berkeley area -- especially San Francisco, tended to have relatively large proportions of establishments that had long been located in the Bay Area and relatively small proportions of young establishments, particularly as contrasted with Southern Alameda, Southern San Mateo, and Santa Clara counties (Table 3-3). Northern San Mateo County and the combined Contra Costa and Marin area, also, tended to be characterized by older establishments -- in fact, somewhat more so than the Oakland-Berkeley area. These

Table 3 - 3

Number of Years in Bay Area, by Main Address of Establishment in Bay Area --
Bay Area Employer Policy Survey, 1967

Main address	Total		Number of years in Bay Area					
	Num- ber	Per cent	Less than 10	10 to 25	25 to 50	50 to 75	75 to 100	100 or more
All establish- ments	307 ^a	100.0	4.6	20.2	36.5	22.1	9.4	7.2
San Francisco County	112	100.0	3.6	9.1	31.0	27.3	14.5	14.5
Oakland- Berkeley Area ^b	63	100.0	1.6	19.0	50.8	23.8	4.8	--
Southern Alameda County ^c	38	100.0	10.5	31.6	34.2	13.2	5.3	5.3
Northern San Mateo County ^d	21	100.0	--	19.0	42.8	28.6	9.5	4.8
Southern San Mateo County ^e	22	100.0	9.1	40.9	36.4	--	9.1	4.5
Santa Clara County	25	100.0	12.0	40.0	24.0	8.0	12.0	4.0
Contra Costa and Marin counties	28	100.0	--	17.9	35.7	35.7	3.6	7.1

^aTotal excludes establishments not reporting number of years in Bay Area.

^bIncludes Oakland, Emeryville, Berkeley, and Albany.

^cIncludes all of Alameda County south of Oakland.

^dIncludes the City of San Mateo and all communities in the county north of that city.

^eIncludes all communities in the county south of the City of San Mateo.

data lend support to the inference that industrial decentralization has occurred primarily through the establishment of new firms and expansion of existing firms in the newer industrial areas.

For aid in the interpretation of our data on manufacturing establishments, we provide some indication of area differences in the composition of the sample for four manufacturing sub-groups in Table 3-4. The relatively high percentage of establishments in the electrical and nonelectrical machinery group in Santa Clara County, in the other durable group in Southern Alameda County, and in the food products group in the Oakland-Berkeley Area are deserving of comment. However, the area differences should not be interpreted as accurately reflecting the composition of the universe of manufacturing establishments from which the sample was drawn.

If we consider all establishments in the sample, we find that manufacturing firms represented a particularly large proportion of the total in Santa Clara County and relatively large proportions, also, in the Oakland-Berkeley area, Southern Alameda County, Southern San Mateo County, and the combined area of Contra Costa and Marin counties (Table 3-5). San Francisco County, on the other hand, included a relatively large proportion of firms in transportation and utilities, and in the trade, finance, and service groups. In interpreting these differences, it must be kept in mind that many non-manufacturing establishments outside of San Francisco were likely to have been excluded from the sample because they had fewer than 100 employees. San Francisco establishments in these categories were more likely to be included because the headquarters of firms with branches throughout the Bay Area were particularly likely to be located in San Francisco. They were also relatively likely to be located in the Oakland-Berkeley area, chiefly in Oakland (Table 3-6).

Table 3 - 4

Four Manufacturing Industry Groups, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Main address	Total		Durable goods		Nondurable goods	
			Electrical and non- electrical machinery	Other durable	Food products	Other non- durable
	Number	Per cent				
All manufacturing establishments	119	100.0	16.0	31.9	23.6	28.5
San Francisco County	20	100.0	15.0	25.0	25.0	35.0
Oakland-Berkeley Area ^a	30	100.0	13.4	23.3	39.9	23.4
Southern Alameda County ^a	18	100.0	11.2	55.5	11.1	22.2
San Mateo County	17	100.0	23.5	23.6	23.5	29.4
Santa Clara County	16	100.0	37.4	25.1	24.9	12.6
Contra Costa and Marin counties	18	100.0	22.1	22.3	55.6 ^b	

^aFor definition of these areas, see footnotes to Table 3-3.

^bDetail not shown because of problems of confidentiality.

Table 3 - 5

Major Industry Group, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Major industry group	Total	San Francisco	Oakland-Berkeley Area ^a	Southern Alameda County ^a	Northern San Mateo County ^a	Southern San Mateo County ^a	Santa Clara County	Contra Costa and Marin counties
All establishments								
Number	309	112	63	38	21	22	25	28
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mining and construction	8.4	6.2	9.5	10.5	19.0	9.1	8.0	3.6
Manufacturing								
Durable	18.4	7.1	17.5	31.7	4.8	31.9	40.0	28.6
Non-durable	20.1	10.7	30.3	15.8	19.0	22.7	36.0	35.6
Transportation and utilities	8.7	16.1	6.3	2.6	14.3	--	4.0	--
Trade								
Wholesale	4.2	5.4	3.2	7.9	--	--	4.0	3.6
Retail	10.7	13.4	12.7	10.5	14.3	4.5	4.0	3.6
Finance, insurance, and real estate	8.1	16.1	6.3	--	4.8	9.1	--	--
Services	11.7	20.5	6.3	10.5	4.8	4.5	8.0	3.6
Government	9.7	4.5	7.9	10.5	19.0	18.2	8.0	21.4

^aFor definition of these areas, see footnotes to Table 3-3.

Table 3 - 6

Main Address of Establishment in Bay Area, by Type of Organization --
Bay Area Employer Policy Survey, 1967

Main address of firm in Bay Area	Total	Single unit	Branch unit	Head- quarters unit	Regional head- quar- ters ^a	Other
Total						
Number	309	71	97	107	32	2
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
San Francisco County	36.3	38.0	22.7	43.0	50.0	50.0*
Oakland-Berkeley Area ^b	20.4	15.5	15.5	25.2	28.1	50.0*
Southern Alameda County ^b	12.3	12.7	14.4	12.1	6.2	--
Northern San Mateo County ^b	6.8	9.9	4.1	7.5	6.2	--
Southern San Mateo County ^b	7.1	7.0	11.3	5.6	--	--
Santa Clara County	8.1	11.3	12.4	2.8	6.2	--
Contra Costa County	7.1	4.2	16.5	1.9	3.1	--
Marin County	1.9	1.4	3.1	1.9	--	--

*Percentages based on fewer than 15 cases.

^aIncludes area, regional, or divisional headquarters or unit, with principal headquarters elsewhere.

^bFor definitions of these areas, see footnotes to Table 3-3.

As further evidence that industrial decentralization reflected in large part the more rapid expansion of employment in establishments in the newly developing industrial areas, we find that manufacturing establishments in Santa Clara and San Mateo counties were considerably more likely to indicate that their employment had increased substantially from 1960 to 1967 than establishments in other areas, while in the combined Contra Costa and Marin area the proportion of establishments reporting a substantial increase in employment was particularly small (Table 3-7). If we attempt to extend this comparison to all establishments, manufacturing and nonmanufacturing, we find that area differences were less pronounced (data not shown). More than half of all establishments in San Francisco County, for example, indicated that their employment had increased substantially, a proportion slightly larger than for the entire Bay Area. Since large percentages of establishments in many of the nonmanufacturing sectors reported substantial increases in employment, this result is not surprising. In fact the largest proportion of establishments reporting substantial increases in employment among the major industry groups was in transportation and utilities (70.4 per cent), an industry group which was particularly well represented among San Francisco establishments. However, it is important to recognize that a good many establishments, particularly among those located in San Francisco, had branches in other parts of the Bay Area and were reporting changes in their total employment in the area, not just in a particular county.

Santa Clara and San Mateo counties were not only the areas with the largest proportions of establishments reporting substantial increases in employment, but they were also the areas in which comparatively large proportions of establishments reported having built a new plant in the 1960-1966

Table 3 - 7

Extent of Change in Employment, 1960-1967, for Manufacturing Establishments, by Main Address --
Bay Area Employer Policy Survey, 1967

Main address	Total		Extent of change in employment				
	Number	Per cent	Increased substantially	Increased slightly	Decreased substantially	Decreased slightly	Relatively stable Fluctuating
All establishments ^a	118	100.0	39.9	14.4	16.9	5.9	15.3 7.6
San Francisco County	19	100.0	36.8	5.3	26.3	10.5	15.8 5.3
Oakland-Berkeley Area ^b	30	100.0	33.4	23.3	20.0	3.3	16.7 3.3
Southern Alameda County ^b	18	100.0	38.8	16.7	5.6	--	22.2 16.7
San Mateo County	17	100.0	52.9	17.6	11.8	11.8	5.9 --
Santa Clara County	16	100.0	68.7	6.3	12.5	--	-- 12.5
Contra Costa and Marin counties	18	100.0	16.7	11.1	22.2	11.1	27.8 11.1

^aTotal excludes one manufacturing firm that did not report extent of change in employment.

^bFor definitions of these areas, see footnotes to Table 3-3.

period (Table 3-8). But the combined Contra Costa and Marin area was not far behind in this respect and led all areas in the proportions of establishments having remodeled a plant, installed new equipment, or modernized equipment. If employment was not increasing rapidly in the combined Contra Costa-Marin area, this apparently not only reflected the fact, mentioned above, that its leading manufacturing industries tended to be highly mechanized, but also that they were undergoing very substantial technological change. (It will be recalled, in this connection, that nearly two-thirds of the establishments in our sample in this area were manufacturing concerns.)

What is perhaps most interesting about the data in Table 3-8, however, is the evidence that a great deal of technological change was going on throughout the Bay Area. The proportion of establishments reporting that they had installed new equipment, for example, in the 1960-1966 period was very large, and, except for the particularly high percentage in the Contra Costa and Marin area, did not vary greatly among the various areas.

Locational Advantages and Disadvantages

When asked to indicate the advantages of the establishment's present location, ranked in order of relative importance, the advantage most likely to be mentioned as of the first importance was nearness to market (Table 3-9). Other establishments mentioned, in approximate order of frequency, access to transportation, a desirable site in relation to the immediate neighborhood, centrality in relation to the establishment's own operations, centrality in relation to the community, miscellaneous environmental factors, good quality labor, and space for expansion or reasonably priced land. It

Table 3 - 8

Per Cent of Establishments Which Took Action to Build
or Modernize Plant, Equipment, or Operations,
1960-1966, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Main address	Type of action, 1960-1966				
	Built new plant	Remodeled plant	Installed new equipment	Modernized equipment	Changed operating procedures
All establishments ^a	28.2	34.0	74.8	53.7	41.2
San Francisco County	24.0	28.8	73.1	48.1	42.3
Oakland-Berkeley Area ^b	27.0	36.5	73.0	50.8	46.0
Southern Alameda County	25.7	31.4	77.1	51.4	42.9
San Mateo County	35.9	35.9	69.2	61.5	33.3
Santa Clara County	36.0	32.0	72.0	52.0	32.0
Contra Costa and Marin counties	32.1	50.0	92.9	75.0	42.9

^aIn computing these percentages, a few establishments not reporting information on types of action taken were excluded from the denominator.

^bFor definitions of these areas, see footnotes to Table 3-3.

Table 3 - 9

Advantages of Present Location --
Bay Area Employer Policy Survey, 1967

Nature of advantage	Advantages mentioned in order of importance				All responses
	First	Second	Third	Fourth	
All establishments (or all responses)					
Number	309	309	309	309	523
Per cent	100.0	100.0	100.0	100.0	100.0
Proximity to markets	36.6	5.5	0.6	0.3	25.4
Access to transportation	8.3	16.8	6.8	1.2	19.7
Desirable site re immediate neighborhood	8.1	3.9	1.0		7.6
Good quality labor	5.2	6.1	2.6		8.2
Proximity to materials	4.5	3.2	0.3		4.8
Centrality in relation to community	4.9			0.3	3.1
Centrality in relation to own operations	5.8	0.6	1.0	0.3	4.6
Space for expansion available or reason- ably priced land	4.2	6.5	4.2	0.6	9.2
Establishment owns land and/or building	1.6		0.6		1.3
Distinctive type of facility, etc.	1.9				1.1
Proximity to educational/ research institutions	2.9	1.9	0.6		3.3
Miscellaneous environ- mental factors	5.8	3.1	1.6		6.3
Reasonable wage rates	--	0.3			0.2
All other	1.9	0.9	0.3		1.8
No advantages	5.8				3.4
Information not avail- able, or no second, third, or fourth advantage mentioned	2.6	51.2	80.4	97.3	

should be noted that in some cases "access to transportation" meant access to transportation for the establishment's employees, but in most instances it meant access to transportation for the movement of goods into and out of the establishment. Good parking facilities for the firm's employees, mentioned in a relatively small proportion of cases, is a factor also included in this category.

Access to transportation figured prominently as the second most important advantage, while good quality labor and space for expansion or reasonably priced land were mentioned slightly more frequently as a second advantage than as a first. When all the responses were cumulated, proximity to markets, access to transportation, space for expansion or reasonably priced land, and good quality labor, in that order, turned out to be the most frequently mentioned factors. These results are quite similar to those obtained in a recent mailed questionnaire survey of about 1,800 East Bay industrial firms.⁹

One would expect that proximity to markets would be a crucial factor for establishments in wholesale and retail trade, banking, and real estate as well as for manufacturing firms serving primarily local or Bay Area markets. And, indeed, the variations by major industry group indicated in Table 3-10 tend to confirm this expectation. Moreover, since durable goods manufacturing establishments were more likely to be producing for a nationwide or worldwide market than nondurable goods manufacturing firms (Table 3-11), it is not surprising that they were somewhat less likely to mention proximity to markets as the primary advantage of the establishment's present location. Access to transportation, not unexpectedly, was mentioned particularly frequently by establishments in the transportation and utilities

Table 3 - 10

Primary Advantage of Present Location, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Primary advantage	Total	Mining and construc- tion	Manufac- turing -- durable	Manufac- turing -- non- durable	Transpor- tation and utilities	Trade	Finance, insurance, and real estate	Services	Govern- ment
All establishments									
Number ^a	301	25	56	61	27	45	25	35	27
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proximity to markets	37.6	36.0	39.2	47.4	40.8	49.0	44.0	22.9	3.7
Advantages relating to land, space for expansion, etc.	6.6	--	5.4	11.5	3.7	6.7	8.0	2.9	11.1
Proximity to materials	4.7	8.0	3.6	11.5	--	4.4	--	--	3.7
Desirable site re immediate neighborhood	8.3	8.0	8.9	3.3	3.7	4.4	24.0	17.1	3.7
Good quality labor	5.3	--	14.3	4.9	--	--	--	5.7	11.1
Access to transportation	8.6	12.0	--	11.5	22.2	15.6	4.0	5.7	--
Reasonably priced land	1.3	4.0	--	--	3.7	2.2	--	2.9	--
Proximity to education/ research institutions	3.0	--	8.9	--	--	--	--	5.7	7.4
Other	18.6	8.0	5.4	4.9	25.9	13.3	20.0	28.5	55.6
No advantages	6.0	24.0	14.3	4.9	--	4.4	--	8.6	3.7

^aTotal excludes establishments not reporting a specific primary advantage.

Table 3 - 11

Area Accounting for 75 Per Cent or More of Establishment's Market, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Area accounting for 75 per cent or more of market								
	Total								
	Number	Per cent	City of location	Bay Area	California	Western region	Continental United States	Pacific Area or Worldwide	
All establishments ^a	305	100.0	13.8	36.0	17.4	12.8	14.1	5.9	
Mining and construction	26	100.0	7.7	50.0	30.8	--	3.8	7.7	
Manufacturing	56	100.0	1.8	8.9	16.1	26.8	39.3	7.1	
Durable	62	100.0	4.8	29.0	19.4	27.4	19.4	--	
Nondurable	27	100.0	22.2	29.7	14.8	3.7	3.7	25.9	
Transportation and utilities									
Trade	13	100.0	--	69.2*	15.4*	7.7*	--	7.7*	
Wholesale									
Retail	33	100.0	18.2	78.8	3.0	--	--	--	
Finance, insurance, and real estate	25	100.0	16.0	32.0	32.0	16.0	4.0	--	
Services	36	100.0	22.2	41.6	16.7	2.8	13.9	2.8	
Government	27	100.0	44.5	29.6	11.1	--	3.7	11.1	

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments not reporting area accounting for 75 per cent or more of establishment's market.

industry group, while availability of good quality labor was mentioned with somewhat greater frequency by durable goods manufacturing establishments than by those in other major industry groups. One seemingly curious result is that proximity to markets was mentioned with relative infrequency by establishments in service industries. However, it must be kept in mind that service industries are a heterogeneous group and that some establishments in this category provide services well beyond the local market (Table 3-11).

Geographical variations in the relative frequency with which particular primary locational advantages were mentioned were not especially pronounced, although proximity to markets was mentioned with relative frequency by establishments in Southern Alameda County, and access to transportation by establishments in the Oakland-Berkeley area, while desirability of the site in relation to the immediate neighborhood and proximity to educational or research institutions were mentioned relatively frequently by establishments in Santa Clara County (Appendix Table C-).

When asked to indicate any disadvantages of the establishment's present location, in order of relative importance, nearly a fifth of the respondents indicated that there were none (Table 3-12). Among the primary disadvantages mentioned, lack of space for expansion or lack of reasonably priced land, high wage rates, lack of access to transportation, undesirability of the site in relation to the immediate neighborhood, and high taxes, in that order, were the factors most frequently mentioned. When all the responses were cumulated, these were again the leading disadvantages mentioned, although high taxes moved up from fifth to fourth place in rank order.

There were rather pronounced differences among the major industry groups

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Table 3 - 12

Disadvantages of Present Location --
Bay Area Employer Policy Survey, 1967

Nature of disadvantage	Disadvantages mentioned in order of importance				All responses
	First	Second	Third	Fourth	
All establishments (or all responses)					
Number	309	309	309	309	466
Per cent	100.0	100.0	100.0	100.0	100.0
Lack of space for physical expansion, lack of reasonably priced land, or age of plant	19.0	6.2	2.2		18.3
High wage rates	12.0	6.1	0.3		12.2
Lack of access to transportation	9.7	6.6	1.3	0.3	11.8
Undesirable site re immediate neighborhood	9.1	2.9	1.6		9.0
Miscellaneous environmental factors	4.8	2.5	1.6	0.3	6.2
Lack of proximity to markets	3.6	1.0	1.0	0.3	4.3
Lack of proximity to materials	2.9	2.6		0.3	3.9
High taxes	6.8	4.5	3.6	1.0	10.5
High rent	1.3	0.3			1.1
Lack of centrality	1.9	0.6			1.7
Traffic congestion	2.3	1.3			2.4
Labor relations problems	1.6	0.3	0.3		1.5
All other	3.0	3.3	1.7		4.7
No disadvantages	18.8				12.4
Information not available, or no second, third, or fourth disadvantage mentioned	3.2	61.8	86.4	97.8	

in the relative frequency with which various primary disadvantages were mentioned, with the transportation and utilities group, trade, and services mentioning lack of space for expansion or lack of reasonably priced land with particularly frequency (Table 3-13). Trade establishments and those in finance, insurance, and real estate were especially likely to mention undesirability of the site in relation to the immediate neighborhood, while service and government establishments were particularly likely to mention lack of access to transportation. High wage rates were the factor most frequently mentioned by establishments in durable goods manufacturing industries, and the percentage of these establishments singling out this factor was well above that for any other major industry group. Since these are the establishments most likely to be producing for a nationwide or worldwide market, it seems likely that it was the high wage rates prevailing in the Bay Area, as compared with wages in other parts of the country, rather than intra-area wage differences, that most of these respondents had in mind.¹⁰

In some cases, however, our respondents had ^{intra-}~~inter-~~area wage differentials in mind at least to some extent in pointing to high wage rates as a disadvantage. A food processing manufacturer in the East Bay complained that his labor costs were being pushed up because of the competition for labor from the rapidly expanding Peninsula electronics firms, while an insurance company executive in San Francisco commented that high government pay standards contributed to high wages for white-collar workers in the "City" and that, were his establishment in a position to consider moving, it could "tap" a cheaper white-collar labor market on the Peninsula or in Marin County. One of our interviewees in the electronics industry in the

Table 3 - 13

Primary Disadvantage of Present Location, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Primary disadvantage	Total	Mining and construc- tion	Manufac- turing -- durable	Manufac- turing -- non- durable	Transpor- tation and utilities	Finance, insurance, and real estate	Services	Govern- ment
All establishments Number ^a Per cent	285 100.0	24 100.0	54 100.0	59 100.0	27 100.0	22 100.0	32 100.0	27 100.0
Lack of space for expansion, lack of reasonably priced land, or age of plant	20.6	12.5	11.1	16.7	37.1	18.2	31.4	18.5
Poor site re immediate neighborhood	9.8	--	5.6	8.5	3.7	18.2	6.2	11.1
Lack of proximity to markets	3.9	--	5.6	10.2	3.7	--	--	--
Lack of proximity to materials	3.2	4.2	7.4	5.1	--	--	--	--
Lack of access to transpor- tation	10.5	12.5	3.7	3.4	7.4	13.6	34.4	22.2
High wage rates	13.0	--	37.0	15.3	3.7	9.1	3.1	7.4
High taxes	7.4	4.2	11.1	13.6	--	4.5	3.1	--
Other	11.2	20.8	3.7	13.6	11.1	18.2	6.2	11.1
No disadvantages	20.4	45.8	14.8	13.6	33.3	18.2	15.6	29.7

^aTotal excludes establishments not mentioning a specific primary disadvantage. This accounts for minor differences in percentages shown in the first column of this table, as compared with the first column of Table 3-12.

San Jose area indicated that his establishment was considering expanding through the location of a branch in a neighboring and more outlying county in an attempt to get access to a cheaper labor market.

Not at all unexpectedly, there was a tendency for establishments in San Francisco and the Oakland-Berkeley area to mention lack of space for expansion, age of physical plant, or lack of reasonably priced land as a primary disadvantage with relative frequency (Table 3-14). And it will come as a surprise to some that high taxes were not mentioned with any greater frequency by establishments in these central city areas than by all establishments. It was in the Contra Costa-Marin area and in Santa Clara County that high wage rates were mentioned with particular frequency as a primary disadvantage, while there was also some tendency for establishments in the Oakland-Berkeley area to mention this factor fairly frequently. It was chiefly manufacturing establishments in these areas that mentioned this factor, and it was primarily, though not invariably, the high wage rates in the Bay Area as a whole rather than intra-area differences that they had in mind.

A closer examination of comments made by our interviewees sheds additional light on the relative advantages and disadvantages of central city locations versus suburban locations. Several of our interviewees, for example, mentioned "security" problems, vandalism, and the like as disadvantages of locations in some of the older sections of central cities:

"Our location is presenting increased security problems and cannot be adequately guarded." (Food processing manufacturer, Oakland)

"The deterioration of the neighborhood is giving us some security problems." (moving company, San Francisco)

"Our physical plant is old, there has been some deterioration of the area, the economic mix of the population is

Table 3 - 14
Primary Disadvantage of Present Location, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Primary disadvantage	Total	San Fran- cisco County	Oakland- Berkeley Area	Southern Alameda County ^b	Northern San Mateo County	Southern San Mateo County	Santa Clara County	Contra Costa and Marin counties
All establishments								
Number ^a	285	108	57	35	16	22	20	27
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lack of space for expansion, lack of reasonably priced land, or age of physical plant	20.6	27.9	24.6	14.3	12.6	18.2	20.0	--
High wage rates	13.0	6.5	17.5	14.3	--	9.1	25.0	29.7
Lack of access to transportation	10.5	12.0	8.8	11.4	12.5	13.6	5.0	7.4
Poor site re immediate neighborhood	9.8	14.8	10.5	--	--	9.1	10.0	7.4
High taxes	7.4	6.5	7.0	11.4	--	13.6	10.0	3.7
Lack of proximity to markets	3.9	3.7	5.3	--	--	--	5.0	11.1
Lack of proximity to materials	3.2	0.9	1.8	2.9	12.5	9.1	--	7.4
Other	11.2	12.0	14.0	14.3	12.5	4.6	10.0	3.7
No disadvantage	20.4	15.7	10.5	31.4	49.9	22.7	15.0	29.6

^aTotal excludes establishments not providing information on a specific primary disadvantage.

^bFor definitions of these areas, see footnotes to Table 3-3.

changing for the worse, and there are not enough specialty stores in Oakland to draw trade downtown." (retail store, Oakland)

"Our neighborhood discourages clerical applicants, and there have been several instances of assaults." (laundry service, Oakland)

"Our location has just about every disadvantage -- the worst labor market you can imagine, a bad neighborhood (almost impossible to get anyone to work the night shift, and no residential area to draw from. We are thinking about moving -- maybe to San Leandro." (business services, San Francisco)

In other instances, central city establishments indicated that their locations were becoming less advantageous because business clients or consumers were moving to more outlying areas:

"Oakland and its immediate environs have become a poor market; business is good, however, in outlying areas." (food processing, Oakland)

"Our customers are moving out of Oakland to locations in Southern Alameda County." (paper manufacturer, Oakland)

"An advantage of our present location is its proximity to the downtown area, but we are too far from our 'markets' which are outside the central city." (moving company, San Francisco)

Interestingly, also, some of our interviewees indicated that appropriate housing for certain groups of workers was becoming increasingly less available in some of the central city locations:

"Some types of workers must commute farther and farther because of the lack of middle class housing nearby." (nondurable goods manufacturer, Berkeley)

"Our top officers and student employees live in town, but middle management personnel have many problems, since most of them commute." (bank, San Francisco)

On the other hand, there were powerful forces tending to hold some of our establishments in central city locations, particularly downtown San

Francisco. Employers in a wide variety of industries, including a few branches of manufacturing, found a location in the downtown section of San Francisco, and in some cases of Oakland, distinctly advantageous in relation to dealing with city, areawide, or worldwide clients:

"An advantage of our location is the prestige of having our headquarters in downtown San Francisco; we are part of the city's history." (construction, San Francisco)

"This is the center of the financial community of the West, and financing is the most important element in construction." (construction, San Francisco)

"We are centralized for the servicing of contract jobs." (construction, Oakland)

"Our central location is distinctly advantageous." (printing and publishing, San Francisco)

"Proximity to a major market is a prime advantage; many of the firms with which we do business have their headquarters here." (printing and publishing, San Francisco)

"Nearness to the central financial community is an advantage of our location." (transportation and utilities, San Francisco)

"Proximity to the population center of Northern California is an advantage of our location." (transportation and utilities, San Francisco)

"This is the geographical center of our market." (automobile dealer, San Francisco)

"San Francisco is the center of gravity of West Coast business operations -- the city has status value." (insurance company, San Francisco)

"We are at the financial hub of the West. Moreover, there is a heavy concentration of labor in San Francisco, including students, many of whom work for us on part-time shifts." (bank, San Francisco)

As some of our interviewees in headquarters establishments in San Francisco pointed out, moreover, the expansion of the company's business tended to be accompanied by expansion of the headquarters operations, with

an associated increase in demand for headquarters employees. As suggested earlier, however, this was one of the developments tending to increase the demand for white-collar, rather than blue-collar, workers in San Francisco.

Moreover, there has been a great deal of office building in downtown San Francisco in recent years, as well as a major urban redevelopment project just east of the financial district, which have been factors in maintaining the vitality of the downtown shopping area and preventing its deterioration in relation to suburban shopping centers. Some of the comments of department store executives in our sample indicated that they continued to consider a downtown San Francisco location highly advantageous.

Although proximity to educational and/or research institutions was mentioned as a primary locational advantage by only 3 per cent of our establishments, this was clearly a very important factor in the aerospace industries and in certain types of private business service and government establishments engaged in research and development activities:

"Proximity to major institutions of learning; excellent facilities nearby for technical studies." (aerospace, San Jose area)

"Advantages of our location are proximity to colleges and universities; there is lots going on -- exchange of ideas which attracts the kinds of employees we want." (aerospace, San Jose area)

"We originally started here because we believed proximity to Cal and Stanford would mean a good supply of engineers." (aerospace, San Jose area)

"Advantages of our location are nearness to universities and the quality of engineering personnel in the area." (aerospace, Southern San Mateo County)

"An advantage of our location is proximity to a large government research laboratory." (business services, Southern Alameda County)

"The first and most important consideration is proximity to Stanford University." (research installation, Southern San Mateo County)

"Nearness to such installations as Radiation Lab and Livermore." (research installation, Oakland-Berkeley area)

The availability of high quality labor, and particularly the supply of engineers, as well as the attractions of the residential area for employees of this type, figured prominently in the advantages mentioned by establishments in the aerospace industry on the Peninsula and in the San Jose area:

"There is high quality labor available, and the good residential areas nearby are attractive to our employees." (aerospace, Southern San Mateo County)

"The labor market provides a supply of good quality labor, including professional and technical personnel." (aerospace, Southern San Mateo County)

Interviewees were also asked what they considered to be the most important factors, in rank order of importance, in determining the optimal location of an establishment. Their answers tended to be very carefully thought out, with respondents drawing a clear distinction between optimal location and any advantages or disadvantages associated with the establishment's present location. However, the results did not differ greatly from those relating to advantages of the establishment's present location, except for the fact that proximity to markets figured somewhat more prominently as the most important factor, while availability of good quality labor assumed greater relative importance in the responses of establishments in durable goods manufacturing industries (Table 3-15). More detailed tables relating to these responses are included in the appendix (Appendix Tables C-7 to C-9).

Table 3-15

Summary of Most Important Factors in Determination of Optimal Location,
for Durable Goods Manufacturing, Nondurable Goods Manufacturing,
and All Establishments --
Bay Area Employer Policy Survey, 1967

Industry and factor	Most important factor	Second most important factor	Third most important factor	Total -- three most important factors
Manufacturing -- durable				
Total number ^a	54	53	47	154 ^b
Per cent	100.0	100.0	100.0	100.0
Proximity to markets	48.1	13.2	4.3	22.7
Availability of labor	22.2	15.1	19.1	18.8
Wage rates	7.4	17.0	19.1	14.3
Access to transportation	5.6	26.4	14.9	15.6
Space for expansion	--	1.9	17.0	5.8
All other	16.7	26.4	25.6	22.8
Manufacturing -- nondurable				
Total number ^a	61	57	52	170 ^b
Per cent	100.0	100.0	100.0	100.0
Proximity to markets	49.2	12.3	9.6	24.7
Proximity to materials	23.0	21.1	1.9	15.9
Availability of labor	4.9	10.5	19.2	11.2
Access to transportation	8.2	21.1	36.5	21.2
Space for expansion	6.6	19.3	5.8	10.6
All other	8.1	15.7	27.0	16.4
All establishments^a				
Total number	297	259	211	767 ^b
Per cent	100.0	100.0	100.0	100.0
Proximity to markets	50.2	13.5	5.2	25.4
Availability of labor	11.1	14.7	17.1	13.9
Wage rates	2.7	6.2	9.5	5.7
Access to transportation	7.4	22.0	26.5	17.6
Space for expansion	4.4	12.0	20.9	11.5
Reasonably priced land	2.4	11.6	8.1	7.0
All other	21.8	20.0	12.7	18.9

^aTotals exclude establishments not mentioning first, second, or third most important factor.

^bTotal refers to all factors mentioned, rather than to establishments.

Finally, the establishments that had moved in the last five years were asked about their reasons for moving. The need for more space, other reasons relating to the physical plant, and availability of reasonably priced land accounted for almost all of the first reasons mentioned and for the great majority of responses when the first and second most important reasons were cumulated (Table 3-16).

However, labor factors and tax considerations also figured in some instances, as did availability of appropriate housing for employees:

"We have recently moved from _____ to a location in Southern Alameda County. Our lease was running out and we needed larger facilities. We also operated under a restrictive union contract in _____.
(durable goods manufacturer, Southern Alameda County--
in its new location the establishment was not covered
by a collective bargaining agreement)

"We moved from _____ in Northern San Mateo County to _____ in Santa Clara County three years ago; our reasons were better facilities and proximity to employees' residential area." (wholesale trade, Santa Clara County--
the former location of the establishment was in a community of predominantly upper middle class homes, whereas the new location was in a rapidly expanding community with a good many relatively low-priced tract developments)

"We moved our headquarters from Oakland to a location in Southern Alameda County very recently. We moved because our warehouse was condemned by the Bay Area Rapid Transit District and because local taxes in our new location were two dollars less per \$100 of assessed valuation than in Oakland." (Southern Alameda County)

"About ten years ago it was decided to pull the administrative office out of the downtown San Francisco office where the day-to-day operations were carried on. A location down the Peninsula was chosen because it allowed space for expansion, land was reasonably priced, and the labor supply was considered as good as anywhere." (finance, insurance, and real estate, Southern San Mateo County)

Moreover, the same considerations which had led some of our employers to move out of congested central city areas -- chiefly the need for more space

Table 3 - 16

Most Important Reasons for Moving, for Firms
That Have Moved in Last Five Years --
Bay Area Employer Policy Survey, 1967

Reason	First most important	Second most important	Total first and second most important
All establishments that moved (or all reasons) ^a			
Number	35	10	45
Per cent	100.0	100.0	100.0
Need for more space	59.9	--	46.8
Modernization of plant	8.6	20.0*	11.1
Other reasons relating to physical plant	14.3	10.6*	13.3
Reasons relating to environmental factors	2.9	10.0*	4.4
Availability of types of labor required	--	20.0*	4.4
Reasons relating to trans- portation requirements	--	20.0*	4.4
Availability of land at reasonable price or other economic factor	8.6	10.0*	8.9
Other	5.7	10.0*	6.7

*Percentages based on fewer than 15 cases.

^aTotal excludes establishments that moved but did not report a reason for moving.

and congested traffic conditions -- also figured prominently in the comments of three or four interviewees who indicated that their establishments were considering moving from central city locations to suburban locations.

One of the more interesting aspects of our data is the indication that forces leading manufacturing establishments to locate out of central cities were also influential in a number of other industry groups -- transportation and utilities, wholesale trade, and others.

Geographical Variations in Labor Factors

For the most part, our data suggest that physical factors such as the availability of large parcels of relatively low-priced land and access to freeways and airports have played a considerably more important role in influencing industrial decentralization in the Bay Area than labor factors. Only a few of our respondents in central city areas mentioned such factors as "tough unions" as locational disadvantages, while wage or labor factors were mentioned only infrequently among reasons for moving from central city to suburban locations.

Nevertheless, there are indications, largely from other sections of our interview schedule, that labor factors have probably played a role in relation to industrial decentralization, although it is difficult to assess the comparative importance of their role in relation to the physical factors that figured so prominently in the comments of our respondents on locational advantages and disadvantages.

For one thing, we found that establishments in Southern San Mateo and Santa Clara counties were less likely to be covered by collective

bargaining agreements than establishments in other parts of the Bay Area (Table 3-17). In part, this reflects the fact that the electronics firms on the Peninsula are less likely to be unionized than manufacturing establishments in the Bay Area in general. This is suggested by Table 5-1 and also by data gathered in another study associated with our labor market research project, concerned with wage relationships in the electronics industry on the Peninsula.¹¹ The relatively weak unionization of the electronics industry may well be explained in large part by the predominance of nonproduction workers in these establishments, as well as, in some cases, the relative importance of women employed as electronic assemblers. Whether it may also reflect greater weakness of blue-collar unions in this part of the Bay Area is not entirely clear. To some degree, also, the relatively low proportion of establishments covered by collective bargaining in Santa Clara and Southern San Mateo counties reflects the fact that, in our sample, and among establishments with 100 or more employees in this area in general, there are relatively few employers in heavy manufacturing industries and in such substantially unionized sectors as transportation and utilities and wholesale trade.

However, in addition to the evidence of less pervasive unionization of establishments in Southern San Mateo and Santa Clara counties, we also found quite clear evidence (see Section VI) of weaker union influence outside the central city areas -- San Francisco and the Oakland-Berkeley area -- in the form of substantially less frequent requirements that employers hire through unions, except in the construction industry.

Moreover, wage rates in selected blue-collar occupations, as indicated by our Part II wage data in Section X, tend to be somewhat lower in

Table 3 - 17

Per Cent of Establishments Covered
by Collective Bargaining Agreements,
by Main Address of Establishment

Main address of establishment	Number of establishments	Per cent covered
All establishments	<u>309</u>	<u>76.4</u>
San Francisco County	112	75.9
Oakland-Berkeley Area ^a	63	84.1
Southern Alameda County ^a	38	78.9
Northern San Mateo County ^a	21	76.2
Southern San Mateo County ^a	22	59.1
Santa Clara County	25	64.0
Contra Costa and Marin counties	28	82.1

^aFor definitions of these areas, see footnotes to Table 3-3.

the Peninsula-San Jose area than in other parts of the Bay Area. This finding is supported by BLS wage data, which indicate a tendency for wage rates for blue-collar workers to be somewhat lower in the San Jose Area than in the San Francisco-Oakland Metropolitan Area as a whole.¹²

Finally, there are indications, to be discussed further in Section VI and in other parts of the report, that differences in the characteristics of residential areas in various parts of the Bay Area are playing a role in influencing industrial location. We have found evidence in this section that engineers and other nonproduction workers who represent a relatively large part of the work force in the aerospace industries find the upper middle-class residential areas of Southern San Mateo County and adjacent portions of Santa Clara County attractive places in which to live. On the other hand, suburban development in Southern Alameda County has consisted to a much greater extent of lower middle-class tract housing developments, as is also the case in parts of Santa Clara County. The industrial centers of Contra Costa County -- Richmond, Pittsburg, Antioch, and Martinez -- have long had sizable working-class residential areas and, as some of the comments of our interviewees suggested, are not, for the most part, the types of communities that would attract professional workers. Thus we find that, according to the 1960 Census, the proportion of blue-collar workers among male employed persons residing in Southern Alameda and Contra Costa counties was considerably higher than in other parts of the Bay Area (Appendix Table C-10). There is little question, also, that communities in the northern part of San Mateo County, such as Daly City and South San Francisco, are considerably more likely to include substantial proportions of blue-collar workers in their resident populations than communities like

Atherton and Menlo Park in the southern part of the county.

Here, of course, we are confronted with a chicken-and-egg type of problem. Did Southern Alameda County attract its high proportion of heavy durable goods industries because a large supply of blue-collar workers was already living there, or did blue-collar workers move out to suburban areas in Southern Alameda County because job opportunities were opening up in expanding heavy manufacturing industries there? Undoubtedly both processes have been at work in the last two decades, but it is also true that, even before World War II, when Southern Alameda County was much less industrialized, the general character of communities like San Leandro and Hayward was not too different from what it is today. Communities like Palo Alto, Menlo Park, and Atherton, on the other hand, have had an upper middle-class character -- preserved through zoning regulations -- dating from the early part of the present century when well-to-do San Francisco executives found they could "escape the fog" by moving that far down the Peninsula and commuting to their San Francisco offices on the Southern Pacific Railroad. Thus, we would argue that the pattern of residential development, largely set many years ago, has played a role in determining the types of industries that would be attracted to these areas. On the other hand, there is considerable evidence that it is becoming increasingly difficult for blue-collar workers to find satisfactory housing in communities like San Francisco and Berkeley, and in Section VI we shall find this factor reflected in responses to questions on difficulties in recruiting.

Concluding Remarks

The results of our survey, along with other data which have been

examined, suggest that industrial decentralization within the Bay Area has been influenced somewhat more by such physical factors as the availability of land and access to the newer modes of transportation than by labor factors. Yet it seems clear that differences in the characteristics of labor supply available in various parts of the Bay Area and geographical wage differentials have also played a role, though it is not easy to assess the relative importance of that role.

When one considers that most of the expansion in manufacturing employment has been in the relatively new electronics sector of the electrical machinery industry and in an industry (ordnance) which was virtually nonexistent in the Bay Area in 1950, and that some of the assembly operations in these industries require large amounts of floor space, it is easy to understand why companies establishing new plants would be attracted by an outlying area where agricultural land (much of it planted in orchards) was available at relatively reasonable prices, compared with prices for industrial land in central cities. Moreover, since the products of these expanding industries were not, for the most part, bulky, access to a port so that products could be shipped by ocean transportation was not important. With the growth of the air freight industry, products could be shipped to the East or abroad by air freight and to other parts of the West Coast, by truck, air, or rail. And, to the extent that railway transportation was still used, San Jose had good rail connections.

Several factors apparently favored Southern San Mateo County and the San Jose Area over Southern Alameda County. One was proximity to Stanford University and other educational and research institutions, and it should be pointed out that Stanford University has made the most of this

advantage by developing the attractive Stanford Industrial Park and encouraging the development of the Stanford Research Institute. Another factor was proximity to the San Francisco Airport, which at least until quite recently, has had considerably more extensive facilities than the Oakland Airport. As places for company executives and salaried employees to live, moreover, the Peninsula communities clearly had greater appeal than the heavily blue-collar communities of Southern Alameda County and were more oriented to cosmopolitan San Francisco than to less sophisticated Oakland.

Another important aspect of our findings is the evidence that actual movement of establishments out of the central city areas has not been the primary factor in industrial decentralization in the Bay Area, although it has played a role. While a significant proportion of our establishments had moved in recent years, the great majority of these moves had occurred within one of the eight areas which we identified in this analysis, and less than a third of the moves had been from a central city area to a more outlying area. In interpreting this finding, it is important to recognize that a "move" was defined as a change in the location of the main address of the establishment within the Bay Area and does not take account of changes that may have occurred, for example, in the location of branches of our headquarters establishments.

On the other hand, our evidence strongly suggests that industrial decentralization within the area has taken the form primarily of the location of new establishments or the expansion of existing establishments outside the older central city areas. There was a distinct tendency for the establishments in the rapidly expanding outlying areas to be younger

and, in the case of the manufacturing establishments, to be more likely to have experienced substantial expansion in employment in the 1960-1967 period.

Finally, our data on Negro employment -- though based on reports from only a little more than a third of all our establishments -- suggest that Negroes represented a considerably smaller proportion of total employment in both manufacturing and nonmanufacturing establishments in the outer ring than in the central city areas as we have defined them (San Francisco and the Oakland-Berkeley area). In view of the fact that employment opportunities are expanding much more rapidly in the outer ring, continuation of this situation will enhance the difficulties of opening doors to jobs for Negroes, who are concentrated residentially in the central city areas.¹³

Footnotes to Section III

1. Dorothy K. Newman, "The Decentralization of Jobs," Monthly Labor Review, LXXXX (May, 1967), 7-13.
2. County and City Data Book: 1967, U.S. Bureau of the Census (Washington, D.C.: U.S. Government Printing Office, 1967), Tables 2 and 4.
3. Computed from data in California Employment and Payrolls: 1950, California Department of Employment, Report 127, No. 13 (Sacramento: 1952), Tables 4, 21, and 22; and ibid., October-December 1966, Supplement, Report 127, 29d (Sacramento: 1967), Tables 20 and 21. 1950 data for Solano County, which was included in the San Francisco-Oakland Metropolitan Area at that time, have been deducted. There were no appreciable changes in unemployment insurance coverage affecting private employment, which might have impaired the comparability of the data, during this period. Coverage applied throughout to firms with one or more employees and to almost all types of private employment except for agricultural and domestic workers and the self-employed.
4. East Bay Manpower Survey, California Department of Employment (San Francisco: 1967), pp. 7 and 66.
5. Alameda County Population, 1965, Bureau of Chronic Diseases, California State Department of Public Health (Berkeley: 1966), p. 37. The data relating to Berkeley are based on an unpublished tabulation from the same survey, which was designed primarily to obtain data on the health status of the population of Alameda County.
6. Estimate prepared by the California Department of Public Health.
7. For a discussion of this tendency, see Robert J. Flanagan, Manufacturing Employment and Industrial Location in San Francisco, Center

for Labor Research and Education, Institute of Industrial Relations, University of California, Berkeley (mimeographed report, 1967).

8. Our choice of the five-year period was, at least in part, based on the expectation that our interviewees would be in a position to speak more authoritatively about the reasons for moves that had occurred within a very recent period.

9. The most important locational factors, ranked in order of relative importance, mentioned by respondents in the East Bay survey were:

(a) nearness of freeway, (b) nearness to market, (c) nearness to established labor supply, and (d) ability to expand. Development Research Associates, Land Utilization, Marketability Study, West Berkeley Industrial Park Project (Los Angeles: 1966), p. 26.

10. In the area wage surveys conducted periodically by the U.S. Bureau of Labor Statistics in some 60 to 70 of the largest metropolitan areas, wages in the San Francisco-Oakland Metropolitan Area are usually found to be the highest, or nearly the highest, in the country for the occupation groups included in the surveys. There are particularly high for unskilled plant workers, and indeed relatively high wages for unskilled workers have been the historical pattern in the area. See, for example, "Metropolitan Area Pay Levels and Trends," Monthly Labor Review, XCI (April, 1968), 44-49.

11. Sidney Ingerman, doctoral thesis in preparation relating to wage differentials in the electronics industry.

12. Area Wage Survey, The San Jose, California Metropolitan Area, September 1967, Bulletin No. 1575-15, U.S. Bureau of Labor Statistics, and ibid., The San Francisco-Oakland Metropolitan Area, January 1968, Bulletin

No. 1575-37, U.S. Bureau of Labor Statistics (Washington, D.C.: U.S. Government Printing Office, 1968).

13. For similar findings relating to the Chicago and Detroit areas, see John F. Kain, "Housing Segregation, Negro Employment, and Metropolitan Decentralization," Quarterly Journal of Economics, LXXXII (May, 1968), 175-197. A more recent study concludes that "although the geographic separation of the ghetto Negro from the burgeoning job areas in the fringe areas reduces to some extent his employment opportunities, aggregate demand conditions, characterized by the unemployment rate in a particular SMSA, play a more important role." See Joseph D. Mooney, "Housing Segregation, Negro Employment, and Metropolitan Decentralization: An Alternative Perspective," ibid., LXXXIII (May, 1969), 299-311. It would seem that the findings of the two studies are not in conflict, but that in all probability the prospects for success in opening doors to jobs for Negroes in the suburban areas are most favorable in periods of relatively full employment.

IV. TECHNOLOGICAL CHANGE

The development of automated processes, along with the fear that the resulting new technology would result in large-scale displacement of men by machines, has given rise to a vast and growing literature on the impact of technological change. We found in Section II that changes in the volume of employment in the establishments in our sample in the Bay Area, in the period of economic expansion from 1960 to 1967, had been in large part attributed by our respondents to changes in demand rather than to technological changes. On the other hand, shifts in the occupational composition of employment were more likely to be attributed to technological change. In the present chapter, the extent and nature of technological change in our sample of establishments, as well as its impact on employment, will be examined more directly.

Types of Technological Change

Each respondent was asked whether one or more of seven kinds of actions relating to modernization or technological change had been taken by the establishment in the 1960-1966 period: (1) built new plant, (2) remodeled plant, (3) installed new equipment, (4) modernized equipment, (5) significantly changed internal operating procedures, (6) eliminated inefficient working arrangements, and (7) changed materials used in the production process.

The first series of tables to be presented relate to the number -- from zero through seven -- of these types of technological changes reported by each establishment. In interpreting these tables, it is most important

to recognize that they do not provide precise data on the total number of these types of changes undertaken. A firm might have built several new plants or undertaken several significant installations of new equipment, but the answers to our question shed light only on whether the establishment had or had not built a new plant or undertaken any of the other types of changes. On the other hand, a response to the effect that the establishment had not undertaken any of these types of changes clearly had a precise meaning. Thus the row in each of our tables indicating "none" of these types of changes has a more exact meaning than the other rows.

Less than a sixth of the establishments indicated that they had undertaken none of the changes, but there was wide variation among major industry groups in this respect (Table 4-1). More than two-fifths of the employers in retail trade, about a fourth in finance, insurance, and real estate, and more than a fifth in services reported no types of technological change. However, especially small proportions of the employers in durable goods manufacturing, transportation and utilities, and wholesale trade were in this category.

On the other hand, nearly a half of the establishments reported three or more types of changes, with government agencies leading the field in this respect and construction and retail trade employers lagging.

Size of firm was clearly an important determinant of technological change activity (Table 4-2). Whether we consider the proportions reporting no changes, those reporting less than three, or those indicating three or more, the smallest size group lagged and the largest size group led, but variations among the middle three size groups did not follow a consistent pattern.

Somewhat surprisingly, there was very little tendency for the

Table 4 - 1

Number of Types of Technological Changes in Establishments, 1960-1966, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Number of types	Total	Construc- tion	Manufacturing		Trans- portation and utilities	Trade		Finance group	Services	Government
			Durable	Non- durable		Whole- sale	Retail			
All establishments ^a										
Number	296	22	54	61	26	13	33	24	35	28
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than three	<u>51.7</u>	<u>68.2</u>	<u>40.8</u>	<u>47.6</u>	<u>61.6</u>	<u>46.2</u>	<u>66.7</u>	<u>58.4</u>	<u>54.3</u>	<u>35.7</u>
None	15.5	13.6	5.6	11.5	7.7	7.7	42.5	25.0	22.9	7.1
One	16.9	31.8	16.7	13.1	19.2	30.8	12.1	16.7	14.3	14.3
Two	19.3	22.8	18.5	23.0	34.7	7.7	12.1	16.7	17.1	14.3
Three or more	<u>48.3</u>	<u>31.8</u>	<u>59.2</u>	<u>52.4</u>	<u>38.4</u>	<u>53.8</u>	<u>33.3</u>	<u>41.6</u>	<u>45.7</u>	<u>64.3</u>
Three	15.2	13.6	18.5	11.5	11.5	15.4	12.1	20.7	17.1	17.9
Four	14.2	9.1	16.6	9.8	19.2	30.7	9.1	8.3	20.0	14.3
Five	10.8	9.1	13.0	16.3	--	7.7	12.1	4.2	5.7	17.8
Six	6.4	--	7.4	11.5	7.7	--	--	4.2	2.9	14.3
Seven	1.7	--	3.7	3.3	--	--	--	4.2	--	--

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^aTotal excludes establishments not reporting types of technological change.

Table 4 - 2

Number of Types of Technological Changes in Establishments,
1960-1966, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of types	Total	Less than 250	250 to 499	500 to 999	1,000 to 1,999	2,000 and over
All establishments ^a						
Number	296	125	72	46	28	25
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Less than three	<u>51.7</u>	<u>62.4</u>	<u>48.6</u>	<u>39.1</u>	<u>53.5</u>	<u>28.0</u>
None	15.5	24.8	12.5	8.7	10.7	4.0
One	16.9	19.2	16.7	13.0	14.3	8.0
Two	19.3	18.4	19.4	17.4	28.5	16.0
Three or more	<u>48.3</u>	<u>36.8</u>	<u>51.4</u>	<u>60.9</u>	<u>46.5</u>	<u>72.0</u>
Three	15.2	11.2	20.8	10.9	25.0	16.0
Four	14.2	13.6	12.5	21.8	3.6	20.0
Five	10.8	6.4	12.5	13.0	14.3	20.0
Six	6.4	5.6	5.6	13.0	3.6	4.0
Seven	1.7	0.8	--	2.2	--	12.0

^aTotal excludes establishments not reporting types of technological change.

single-unit establishments to lag behind those that were parts of larger organizations with respect to number of types of technological change reported (Table 4-3). However, a more detailed breakdown (not shown) indicates that, among establishments with less than 250 employees but not among the larger groups of establishments, single-unit establishments were considerably less likely to have been involved in varied types of technological change than branch or headquarters units.

About 28 per cent of the establishments reported having built a new plant or facility (Table 4-4). As we shall find at a later point, however, some of these establishments were parts of organizations that had built several new plants, or in some cases, many -- throughout the United States and in other parts of the world.

On the basis of this measure, as well as with respect to numbers of types of technological change, government agencies ranked well above other major industry groups. In this connection, it is well to remember that some of our governmental units were local school districts in rapidly growing communities, where the need for construction of new schools was acute.

Other major industry groups that ranked high in the proportion having built a new plant or facility were transportation and utilities and retail trade. Thus, although retail trade lagged with respect to numbers of types of changes -- and with respect to all other types of changes represented in Table 4-4 -- there had clearly been considerable activity in building new outlets. This is scarcely surprising, in view of the fact that some of the establishments in the sample operated chain food stores, while others were large department stores which had been establishing new branches in rapidly growing suburban communities.

Table 4 - 3

Number of Types of Technological Changes in Establishments,
1960-1966, by Type of Organization --
Bay Area Employer Policy Survey, 1967

Number of types	Total	Single unit	Branch unit	Head- quarters unit	Regional head- quarters ^b
All establishments^a					
Number	296	67	95	101	33
Per cent	100.0	100.0	100.0	100.0	100.0
Less than three	<u>51.7</u>	<u>56.7</u>	<u>48.4</u>	<u>50.4</u>	<u>54.6</u>
None	15.5	19.4	11.6	16.8	15.2
One	16.9	17.9	16.8	14.9	21.2
Two	19.3	19.4	20.0	18.7	18.2
Three or more	<u>48.3</u>	<u>43.3</u>	<u>51.6</u>	<u>49.6</u>	<u>45.4</u>
Three	15.2	16.4	17.8	12.9	12.1
Four	14.2	10.4	9.5	17.8	24.2
Five	10.8	9.0	15.8	10.9	--
Six	6.4	6.0	7.4	5.0	9.1
Seven	1.7	1.5	1.1	3.0	--

^aTotal excludes establishments not reporting types of technological change.

^bIncludes area, regional, or divisional headquarters or unit, with principal headquarters elsewhere, and other types.

Table 4 - 4

Per Cent of Survey Establishments that Took Actions Relating to Modernization or Technological Change,
1960-1966, by Major Industry Group -- Bay Area Employer Policy Survey, 1967

Major industry group	Actions relating to modernization or technological change						
	Built new plant	Remodeled plant	Installed new equipment	Modernized equipment	Significantly changed internal operating procedures	Eliminated inefficient working arrangements	Changed materials used in production process
All establishments ^a	28.2	34.0	74.8	53.7	41.2	16.3	14.3
Mining and construction	18.2	13.6	59.1	45.5	50.0	4.5	9.1
Manufacturing							
Durable	24.1	42.6	88.9	61.1	42.6	24.1	27.8
Nondurable	30.5	44.1	84.7	64.4	33.9	25.4	30.5
Transportation and utilities	38.5	23.1	80.8	61.5	30.8	7.7	3.8
Trade							
Wholesale	7.7 [*]	38.5 [*]	92.3 [*]	61.5 [*]	38.5 [*]	7.7 [*]	7.7 [*]
Retail	36.4	24.2	39.4	33.3	33.3	6.1	3.0
Finance, insurance, and real estate	16.7	16.7	70.8	37.5	54.2	16.7	8.3
Services	22.9	37.1	71.4	54.3	34.3	5.7	--
Government	46.4	42.9	75.0	50.0	64.3	28.6	7.1

^{*}Percentages based on fewer than 15 cases.

^aEstablishments not providing information on types of technological change have been excluded in computing the percentages.

Surprisingly, employers in finance, insurance, and real estate ranked relatively low in the proportion reporting building new outlets -- despite the very obvious extensive building of new branch banks throughout the Bay Area. However, it must be kept in mind that many of the establishments in this group were insurance or real estate companies and that some of the financial institutions were investment companies rather than banks.

Remodeling of physical structures was undertaken by 34 per cent of the establishments which responded. Nondurable goods manufacturing led in this activity, with about 44 per cent remodeling, while 43 per cent of the governmental units and durable goods manufacturing establishments had been altered. Relatively low proportions in construction and in finance, insurance, and real estate reported remodeling activity.

Among the various types of changes reported by these establishments, by far the most frequent was the installation of new equipment. Three-fourths of the interviewees indicated that new equipment had been installed, and the proportions were considerably higher than this in manufacturing, wholesale trade, and transportation and utilities. On the other hand, the proportion of retail trade establishments reporting this type of change was comparatively small.

Modernization of equipment had also played a very important role, with more than half of the establishments reporting this type of change. Variations by major industry group were somewhat similar to those that appeared in connection with installation of new equipment, except for the fact that the proportion reporting modernization of equipment was comparatively small in finance, insurance, and real estate. One suspects that the

explanation may lie in the tendency for financial institutions to have been involved to such an extent in the introduction of new equipment involving computerization that older equipment was being completely replaced rather than modernized.

A substantial proportion of establishments -- more than two-fifths -- had been involved in effecting significant changes in internal operating procedures, with government and the finance group leading in this type of activity. Considerably less important, relatively, was the elimination of inefficient working arrangements, although the proportions reporting this type of change were appreciably larger in government and in manufacturing than the overall 16 per cent for the sample as a whole. Changes in materials used in the production process were also reported relatively infrequently, but in part this reflects the fact that this type of change would not be expected to play a very significant role outside of manufacturing and construction. In fact, about three-tenths of the nondurable manufacturing establishments did report this type of change, along with nearly as large a proportion of durable goods manufacturers, but the proportion reporting changes in materials used was quite small in construction.

Whether Plant and Equipment Are Modern

Responses to another type of question shedding light on technological change were also of considerable interest: "For the most part, is the establishment using the most modern plant, operating equipment, and operating procedures utilized in your industry?"

Although responses to this type of question must be regarded as

somewhat subjective, it seems reasonable to assume that most of our interviewees were well informed about technological developments in their own industries. In any case, nearly two-thirds indicated that their establishments were using the most modern plant, equipment, and operating procedures in the industry (Table 4-5).

That transportation and utilities should lead in this respect comes as no surprise, but the fact that construction establishments should rank very high in the proportion responding affirmatively to this question does come as something of a surprise, in view of other evidence suggesting a comparatively slow rate of technological change in construction. However, there are two very important considerations that must be kept in mind in interpreting this result. In the first place, as we have commented in other connections, our sample of construction firms included very few that were engaged in residential construction, since relatively few firms in the homebuilding industry have 100 or more employees. Thus, our results relate to large-scale commercial and industrial construction, road-building firms, large engineering construction contractors, and the like. That these types of construction firms should be using the most modern plant and equipment is not particularly surprising, whereas it is very apparent that most residential contractors are not using the most modern methods, especially if we consider the relatively limited extent to which prefabricated units are being used, in relation to their potential use. Secondly -- referring again to Table 4-4 -- construction establishments lagged particularly with respect to building and remodeling plants -- but there is, of course, no reason for most construction firms to build new outlets for their own activities, since only their office operations are carried on in the firm's headquarters or branches,

Table 4-5

Whether Establishment is Using Most Modern Plant, Equipment, and
Procedures, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Establishment is using most modern plant, etc.	
	Number	Per cent	Yes	No
All establishments ^a	296	100.0	64.2	35.8
Mining and construction	25	100.0	80.0	20.0
Manufacturing				
Durable	54	100.0	57.4	42.6
Nondurable	62	100.0	59.7	40.3
Transportation and utilities	26	100.0	84.6	15.4
Trade				
Wholesale	13	100.0	61.5	38.5
Retail	30	100.0	70.0	30.0
Finance, insurance, and real estate	23	100.0	56.5	43.5
Services	33	100.0	57.6	42.4
Government	30	100.0	63.3	36.7

^aTotal excludes establishments that did not provide information.

whereas field operations are conducted at the construction site.

Apart from construction and transportation and utilities, the proportions of establishments reporting using the most modern plant, equipment, etc., in the various major industry groups did not deviate very much from the general average. Retail trade, which lagged on the basis of some of our other measures, ranked relatively high in the proportion of establishments responding affirmatively to this question. Thus, it would appear, that, if relatively few retail establishments were, for example, installing or modernizing equipment, it was because there were few possibilities available to them, rather than that they were "making do" with outmoded equipment.

Although proportions reporting using the most modern plant and equipment tended to increase with number of employees, the variations were not, perhaps, as wide as might have been expected (Table 4-6). And, although single units tended to lag behind headquarters units, there was little difference between single and branch units in the proportions reporting use of the most modern plant and equipment (Table 4-7). However, a more detailed breakdown (not shown) reveals that, among branch units, the tendency for the proportion reporting use of the most modern plant and equipment to vary directly with number of employees was much more pronounced than among the other types of units.

Our respondents were also asked to indicate, if the establishment was not using the most modern plant and equipment, the principle reasons why this was the case. Although the replies to this question have not been analyzed statistically, it is very apparent -- on the basis of perusal of the interview schedules -- that the most frequently mentioned inhibiting factor was the high cost of modernization. Some of the more interesting comments were as follows:

"Tight control on capital expenditures at headquarters."

"(1) Requires large capital expenditures, and (2) not all the 'bugs' are out of the machines we want as yet."

Table 4 - 6

Whether Establishments is Using Most Modern Plant, Equipment, and
Procedures, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Establishment is using most modern plant, etc.	
	Number	Per cent	Yes	No
All establishments ^a	296	100.0	64.2	35.8
Less than 250	124	100.0	60.5	39.5
250 to 499	72	100.0	62.5	37.5
500 to 999	48	100.0	62.5	37.5
1,000 to 1,999	26	100.0	76.9	23.1
2,000 and over	26	100.0	76.9	23.1

^aTotal excludes establishments that did not provide information.

Table 4 - 7

Whether Establishment is Using Most Modern Plant, Equipment, and
Procedures, by Type of Organization --
Bay Area Employer Policy Survey, 1967

Type of organization	Total		Establishment is using most modern plant, etc.	
	Number	Per cent	Yes	No
All establishments ^a	296	100.0	64.2	35.8
Single unit	65	100.0	56.9	43.1
Branch unit	96	100.0	59.4	40.6
Headquarters unit	102	100.0	72.5	27.5
Regional head- quarters ^b	33	100.0	66.7	33.3

^aTotal excludes establishments that did not provide information.

^bIncludes area, regional, or divisional headquarters unit, with principal headquarters elsewhere, and other types.

"What we lack is not important enough to justify the capital expenditure."

"Very conservative management -- if the machines do the job, why change?"

"The plant is an old one, and there is a limit to its modernization."

"Not yet -- this entails tremendous capital outlay."

"Lack of space for new equipment."

"Lack of space and costs."

"Headquarters will not permit any large outlays here due to the labor situation."

Expectations for New Equipment in Next Ten Years

Perhaps even more "iffy," with respect to the possible reliability of responses, was the next question: "Are there new items of equipment and new operating procedures (with a significant potential for changing employment) now in the research and development stage, but not yet applied, that you will likely install within the next ten years?"

More than three-fourths of our respondents replied in the affirmative to this question, but, interestingly, the pattern of variations by major industry group differed somewhat from that which prevailed in responses to the previous question (Table 4-8). Construction, for example, ranked relatively low in the proportion of affirmative responses to this question, whereas it had ranked high in relation to the previous question. On the other hand, wholesale trade, the finance group, services, and government ranked high in affirmative responses to this question, but only average in relation to the previous question. The significance of this difference, particularly in relation to the finance group and government, seems fairly

Table 4 - 8

Whether There Are New Items of Equipment and New Operating
Procedures That Establishment is Likely to Install
Within Next Ten Years, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Likely to install new items, etc.	
	Number	Per cent	Yes	No
All establishments ^a	261	100.0	77.0	23.0
Mining and construction	23	100.0	52.2	47.8
Manufacturing				
Durable	47	100.0	68.1	31.9
Nondurable	52	100.0	78.9	21.1
Transportation and utilities	23	100.0	78.3	21.7
Trade				
Wholesale	11	100.0	100.0 [*]	--
Retail	26	100.0	73.1	26.9
Finance, insurance, and real estate	23	100.0	95.7	4.3
Services	31	100.0	80.6	19.4
Government	25	100.0	84.0	16.0

* Percentage based on fewer than 15 cases.

^aTotal excludes establishments that did not provide information.

clear. Computerization is the most significant type of technological change in both these industry groups, and undoubtedly many of the establishments in these groups will convert to larger-scale computers in the next ten years or install large-scale computers for the first time.

There was a clearcut and nearly consistent positive relationship between size of establishment and the proportion of affirmative responses to this question -- probably for two reasons (Table 4-9). The smaller establishments may not have considered that they had the financial capability to install new equipment which they knew about, and in some cases may not have had information about new developments that was available to representatives of the larger firms. Research and development activities, for example, tend to be confined to the very largest firms.

Interestingly, also, and probably for similar reasons, there was a clear relationship between type of organization and positive responses to this question, with the single unit establishments least likely to respond affirmatively and regional or divisional headquarters more likely to give a positive response (Table 4-10). Regional or divisional headquarters were most likely to be parts of very large national corporations.

At this point, it seems appropriate to consider the fact that many of our results suggest that the stepped-up rate of mergers and industrial consolidations to which we called attention in Section I has in all probability played an important role in helping to explain the generally high year-to-year rates of increase in output per manhour that have characterized the 1960's. There is little question that large national corporations are likely to be in a position to finance the building or remodeling of plants and the installation of new equipment more easily than locally owned single

Table 4 - 9

Whether There Are New Items of Equipment and New Operating
Procedures That Establishment is Likely to Install
Within Next Ten Years, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Likely to install new items, etc.	
	Number	Per cent	Yes	No
All establishments ^a	261	100.0	77.0	23.0
Less than 250	111	100.0	63.1	36.9
250 to 499	59	100.0	79.7	20.3
500 to 999	46	100.0	89.1	10.9
1,000 to 1,999	22	100.0	95.5	4.5
2,000 and over	23	100.0	91.3	8.7

^aTotal excludes establishments that did not provide information.

Table 4 - 10

Whether There Are New Items of Equipment and New Operating
Procedures That Establishment is Likely to Install
Within Next Ten Years, by Type of Organization --
Bay Area Employer Policy Survey, 1967

Type of organization	Total		Likely to install new items, etc.	
	Number	Per cent	Yes	No
All establishments ^a	261	100.0	77.0	23.0
Single unit	58	100.0	70.7	29.3
Branch unit	84	100.0	73.8	26.2
Headquarters unit	91	100.0	81.3	18.7
Regional head- quarters ^b	28	100.0	85.7	14.3

^aTotal excludes establishments that did not provide information.

^bIncludes area, regional, or divisional headquarters unit, with principal headquarters elsewhere, and other types.

unit establishments. And, as suggested above, they are much more likely to be engaged in research and development activities which lead to the production of improved products and the invention of new processes.

In fact, there is some direct evidence in our study -- in the form of comments volunteered by interviewees -- to the effect that establishments which were formerly locally owned had sold a controlling interest to a larger corporation with headquarters elsewhere in a number of cases, because this was the only way in which modernization could be financed.

In a different context, the enormous advantage of large American corporations in applying technical know-how, and the associated threat to European industry, is the theme of a recent book by the Frenchman, Servan-Schreiber.¹ One of the authors of this report also recalls vividly a conversation with a highly literate guide in Mexico City in the summer of 1968, in which the guide was commenting rather bitterly about his impression that large American corporations were "buying up" the entire Mexican food processing industry. He may have been exaggerating somewhat, but it will be recalled that the data we presented in Section I indicated that nearly nine-tenths of our Bay Area food processing establishments were parts of organizations with branches in other areas, and several of these, in response to a question to be considered later on in this section, indicated that their parent corporations had built branch plants in Mexico in the 1960-1966 period.

Among the interviewees who indicated that their establishments would be likely to install new equipment and procedures in the next ten years, most were prepared to make a prediction as to the effects on staffing. Of these, 41 per cent predicted that the new equipment or procedures would not

affect their total employment (Table 4-11). This may suggest that these respondents had not interpreted the preceding question (Tables 4-8 to 4-10) correctly, since it was intended to relate to the installation of new equipment or procedures which had a "significant potential for changing employment." However, this was not necessarily the case, since some of our respondents pointed out that, although the new equipment might tend to reduce employment, this effect would be offset by demand factors tending to increase employment.

Slightly more than a fifth of the respondents indicated that the new installations or procedures would be likely to increase employment, while slightly more than a third considered that employment would decline. Variations among major industry groups were wide, and not particularly easy to interpret, in the absence of intimate knowledge of the precise nature of technological developments in each industry group. Moreover, these variations may have been at least in part explained by size-of-firm variations, since only the largest size group of establishments included a proportion expecting increases in employment that was well above average, while there was a clear tendency for an inverse relationship between expectations of decreases in employment and number of employees (Table 4-12). However, there were no clearcut relationships between type of organization and anticipated changes in staffing (data not shown).

Major New Facilities

Finally, in this series of questions, respondents whose establishments were parts of larger organizations, were asked whether the organization had built major new facilities in the Bay Area or elsewhere in the

Table 4 - 11

Anticipated Effects on Staffing as Result of Installation of New Equipment
or Procedures in Next Ten Years, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Effects on staffing			
	Number	Per cent	Increase	Decrease	No change	No comment ^b
All establishments ^a	169	100.0	21.9	34.3	40.8	3.0
Mining and construction	9	100.0	55.6*	--	33.3*	11.1*
Manufacturing						
Durable	29	100.0	34.5	44.8	20.7	--
Nondurable	36	100.0	13.8	41.7	41.7	2.8
Transportation and utilities	13	100.0	23.1*	38.4*	23.1*	15.4*
Trade						
Wholesale	10	100.0	20.0*	40.0*	40.0*	--
Retail	16	100.0	12.5	43.7	37.5	6.3
Finance, insurance, and real estate	18	100.0	22.2	33.3	44.5	--
Services	21	100.0	9.5	19.1	71.4	--
Government	17	100.0	23.5	23.5	53.0	--

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments that did not provide information, and those reporting that the establishment was not likely to install new equipment or operating procedures in the next ten years.

^bNo comment on change in total employment, but on effect on skill level.

Table 4 - 12

Anticipated Effects on Staffing as Result of Installation of New Equipment
or Procedures in Next Ten Years, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Effects on staffing			
	Number	Per cent	Increase	Decrease	No change	No comment ^b
All establishments ^a	169	100.0	21.9	34.3	40.8	3.0
Less than 250	61	100.0	21.3	41.0	36.1	1.6
250 to 499	42	100.0	19.0	40.5	38.1	2.4
500 to 999	33	100.0	18.2	33.3	45.5	3.0
1,000 to 1,999	16	100.0	18.8	18.8	62.4	--
2,000 and over	16	100.0	43.7	12.5	37.5	6.3

^aTotal excludes establishments that did not provide information and those reporting that the establishment was not likely to install new equipment or operating procedures in the next ten years.

^bNo comment on change in total employment, but on effect on skill level.

1960-1966 period. More than half responded in the affirmative, with establishments in nondurable goods manufacturing and transportation and utilities leading, not only with respect to the proportion reporting any new facilities, but also -- except for retail trade -- with respect to the proportion reporting three or more (Table 4-13).

We also asked about the location of the new facilities. The responses to this question have thus far been examined carefully only with respect to nondurable goods manufacturing and, even for this industry group, somewhat impressionistically rather than statistically. In some cases, the new facilities were confined to the Bay Area, or to Northern California, but in a good many cases -- especially in the food processing industry -- new facilities had been built in various parts of the United States and abroad. In fact, this type of expansion was reported considerably more frequently by food processing establishments than by other nondurable establishments. Interviewees in the 25 food processing establishments which were parts of organizations with branches in other areas reported 43 new facilities, located as follows:

Bay Area	Other parts of California	United States, other than California	Abroad
3	18	17	5

In addition, there were several establishments that were parts of large nationwide organizations that reported new facilities throughout the United States and in other parts of the world, without specifying the details.

Table 4 - 13

Number of Locations in Which Organization Built New, Major Facilities,
1960-1966, for Establishments That Are Parts of
Larger Organizations, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Number of locations	Manufacturing		Trans- portation		Trade		Finance, insurance, and real estate		Services	Government
	Construc- tion	Durable	Non- durable	and utilities	Whole- sale	Retail				
Total	216	11	46	52	23	13	22	23	15	11
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than three	73.1	90.9*	76.1	73.0	61.0	76.9*	59.2	74.0	93.3	63.6*
None	43.9	81.8*	39.1	30.7	30.6	46.1*	41.1	56.6	73.3	54.5*
One	20.4	9.1	26.1	25.0	26.1	30.8	13.6	13.0	13.3	--*
Two	8.8	--	10.9	17.3	4.3	--	4.5	4.4	6.7	9.1
Three or more	22.7	9.1*	19.6	27.0	26.0	15.4*	36.3	13.0	6.7	18.2*
Three	9.7	9.1*	4.4	15.4	8.7	7.7*	18.2	--	--	--*
Four	4.6	--	6.5	2.0	4.3	7.7	9.1	--	--	18.2
Five	1.9	--	2.2	1.9	4.3	--	4.5	--	--	--
Six or more	6.5	--	6.5	7.7	8.7	--	4.5	13.0	6.7	--
Exact number un- clear -- many locations	4.2	--	4.3	--	13.0	7.7*	4.5	--	--	18.2*

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments that did not provide information.

Effects of Technological Change on Employment

In view of the many types of technological change that were occurring, any attempt to analyze their impact on employment had to be reduced to terms which would provide some type of meaningful measurement. For this reason, we asked each respondent what was the most important single action his establishment had taken, involving technological change, in the 1960-1966 period, and then proceeded to ask him about the impact of that action on employment connected with the changed process or procedure, both as to number and as to skill level. The resulting data, therefore, differ from the data on employment changes reported in Section II, since they relate only to changes directly associated with the specified action.

Among the establishments in our sample, about 18 per cent selected the building or remodeling of a plant as the most important single action involving technological change. Thus, referring back to Table 4-4, it is apparent that by no means all the establishments that had reported building or remodeling a plant regarded this as the most important single action.

The effects of building or remodeling a plant or outlet on employees in the affected unit differed quite sharply between manufacturing and non-manufacturing establishments, for reasons that are rather readily apparent (Table 4-14). In the case of nonmanufacturing industries, the effect was to increase employment in a large proportion of cases and to decrease it only rarely. This undoubtedly reflects the fact that, in many cases, e.g., in retail trade, new units were constructed to serve the needs of an expanding population.

In manufacturing establishments, the picture was much more mixed. In 44 per cent of the cases, employment was unaffected, while there was

Table 4 - 14

Effect of Building New Plant or Remodeling Plant, 1960-1966,
on Number of Employees in Affected Units or Departments,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Effect on employment		
	Number	Per cent	Increased	Remained the same	Decreased
All establishments ^a	57	100.0	52.6	29.9	17.5
Manufacturing	25	100.0	28.0	44.0	28.0
All other industries	32	100.0	71.8	18.8	9.4

^a

Total excludes employer that did not build new plant or remodel plant in the period 1960-1966 and employers that did not provide information.

an increase in 28 per cent of the instances reported and a decrease in 28 per cent. Undoubtedly the explanation lies in the fact that building or remodeling a plant in manufacturing is frequently undertaken for the purpose of achieving greater efficiency, although in some cases it may be undertaken in response to increased demand or, particularly in certain consumer goods industries, the desire to serve an outlying suburban population more effectively.

In fact, it must be recognized that building a new plant or outlet does not necessarily involve technological change, although it is probably true in most cases, both in manufacturing and nonmanufacturing industries, that the equipment installed in new plants or outlets is likely to embody improvements not found in older outlets.

In contrast with the effects of building or remodeling a plant or outlet, changes in equipment, procedures, or materials resulted in unchanged or reduced employment in most cases (Table 4-15). Since changes of these types are usually undertaken for the purpose of increasing productivity, this result is not surprising. It is particularly noteworthy that in government and in finance, insurance, and real estate, where the introducing of electronic data processing equipment has been extensive, the proportion of establishments reporting either unchanged or decreased employment was especially large, while in the latter industry group the percentage reporting a decrease exceeded that in any other sector. Although overall employment in the finance group has been increasing, largely in response to increases in demand, the results of the types of technological changes considered here have been to reduce employment in the majority of instances.

Table 4 - 15

Effects of Equipment, Procedural, and Materials Changes, 1960-1966,
on Number of Employees in Affected Units or Departments,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Effect on employment		
	Number	Per cent	Increased	Remained the same	Decreased
All establishments ^a	183	100.0	30.1	36.0	33.9
Mining and construction	183	100.0	15.4*	38.5*	46.1*
Manufacturing					
Durable	42	100.0	33.3	38.1	28.6
Nondurable	39	100.0	28.2	35.9	35.9
Transportation and utilities	20	100.0	35.0	50.0	15.0
Trade					
Wholesale	9	100.0	11.1*	44.4*	44.5*
Retail	12	100.0	16.7*	58.3*	25.0*
Finance, insurance, and real estate	16	100.0	25.0	18.7	56.3
Services	19	100.0	47.4	15.8	36.8
Government	13	100.0	15.4*	53.8*	30.8*

*Percentages based on fewer than 15 cases, or not computed because of the small number of cases.

^aTotal excludes employers that did not take such technological change actions in the period 1960-1966 and employers that did not provide information.

The relatively high percentage of firms in construction reporting decreases in employment probably reflects chiefly the use of new heavy equipment and of prefabricated components reducing the need for on-site construction workers.²

Effects of Technological Change on Skill Levels

The building or remodeling of a plant or outlet had no effect on skill levels in a distinct majority of the cases reported (Table 4-16). Where there was an effect, it was much more likely to involve upgrading than downgrading of skills.

However, upgrading of skills was somewhat more frequently the result of equipment, procedural, or materials changes (Table 4-17). About 47 per cent of the employers reporting the impact of these types of actions indicated that upgrading resulted, as compared with 36 per cent of the employers indicating the effects of building or remodeling plants or outlets. Moreover, in government and in finance, insurance, and real estate the proportions ran as high as three-quarters or more. Since these two sectors, as suggested above, were particularly likely to have installed EDP equipment, this finding suggests that such installations are especially likely to result in the upgrading of skills. This finding may appear to be somewhat at variance with those of some of the studies of "automation in the office" which have emphasized its effects in creating substantial numbers of dull, repetitive, factory-like jobs.³ Such effects may occur, to some degree, but our results suggest that they do not predominate.

It is also of interest to note that the proportion of construction

Table 4 - 16

Effect of Building New Plant or Remodeling Plant, 1960-1966, on
Skill Levels of Employees in Affected Units or Departments,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Effect on skill levels		
	Number	Per cent	Upgraded	Remained the same	Downgraded
All establishments ^a	56	100.0	35.7	60.7	3.6
Manufacturing	24	100.0	29.2	70.8	--
All other industries	32	100.0	40.6	53.1	6.3

^aTotal excludes employers that did not build new plants or remodel plant in the period 1960-1966 and employers that did not provide information.

Table 4 - 17

Effects of Equipment, Procedural, and Materials Changes, 1960-1966,
on Skill Levels of Employees in Affected Units or Departments,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Effect on skill levels		
	Number	Per cent	Upgraded	Remained the same	Downgraded
All establishments ^a	182	100.0	46.7	43.4	9.9
Mining and construction	14	100.0	57.2*	35.7*	7.1*
Manufacturing					
Durable	43	100.0	30.2	55.8	14.0
Nondurable	39	100.0	41.0	51.3	7.7
Transportation and utilities	18	100.0	33.3	66.7	--
Trade					
Wholesale	9	100.0	66.7*	11.1*	22.2*
Retail	12	100.0	41.6*	41.7*	1.7*
Finance, insurance and real estate	16	100.0	75.0	25.0	--
Services	17	100.0	47.0	41.2	11.8
Government	14	100.0	78.6*	7.1*	14.3*

* Percentages based on fewer than 15 cases, or not computed because of the small number of cases.

^aTotal excludes employers that did not change equipment, procedures, or materials in the period 1960-1966 and employers that did not provide information.

establishments reporting that skills were upgraded as the result of equipment, procedural, or materials changes was comparatively high.

Longer-Term Effects Resulting from Technological Change Upon the Number of New Hires

Employers were asked to assess the longer-term effects resulting from technological change upon the number of new hires (Table 4-18). It was apparent from the responses received for this question that the "longer term" could have a number of meanings, depending upon the point of time within the 1960-1966 period when the technological change action had been initiated and upon the length of time necessary to implement the change. Definitions of the "longer term" might also vary in terms of the organizational planning activities of establishments. It can be assumed, therefore, that in considering longer-term effects upon employment, the year 1966 does not necessarily establish the cut-off for measuring the effects for all responses. For some organizations, the longer-term effects only now may be becoming apparent.

The responses showed that the majority of the employers, 60 per cent, were finding that the effect was not a reduction in the number of new hires. Many replies were qualified by statements which indicated that the immediate reduction in the number of workers employed upon a process had been offset by greater output of the product or service which had been made possible through the change in technology. (The increases in output or service were considered also as leading to the need for additional employment in other parts of the establishment which were dependent upon the unit immediately affected by technological change.)

Table 4 - 18

Per Cent of Survey Establishments that Experienced
Longer-term Reductions in the Number of New Hires
As a Result of Technological Change, 1960-1966,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Per cent
All establishments ^a	40.4
Mining and construction	50.0
Manufacturing	
Durable	34.1
Nondurable	46.0
Transportation and utilities	25.0
Trade	
Wholesale	--*
Retail	33.3
Finance, insurance, and real estate	43.8
Services	38.1
Government	47.8

*Not computed because of the small number of cases.

^aTotal number of employers responding was 218. This total excludes employers that did not undertake technological change in the period 1960-1966 and employers that did not provide information.

The significance of the fact that 40 per cent of establishments stated that the longer-term effect was conducive to lessened hiring should not be overlooked. An industry-by-industry breakdown reveals that for one industry sector, construction, one-half of the establishments believe the longer-term effect of technological change in the affected units to be a reduction in employment.

These results are consistent with those of a recent study of the Bureau of Labor Statistics, which indicated that about a third of the industries included in the study anticipated decreased employment in the 1964-1970 period, attributable to a reduction in unit labor requirements, despite increasing demand.⁴

In addition, employers were asked more specifically about the longer-term effects of the "single most important action" on employment opportunities for inexperienced or less skilled workers. All in all, 39 per cent of the respondents indicated that such employment opportunities had been reduced, but there was wide variation among major industry groups in this respect, and, interestingly, an especially large proportion of governmental agencies (61 per cent) reported that they had been reduced (Table 4-19).

When these results are compared with those relating to the impact of equipment, procedural, and materials changes on employment and skill levels (Tables 4-15 and 4-17), they are found to be generally consistent. The major industry groups that were particularly likely to report reduced employment and increased skill levels as a result of such changes were also relatively likely to report reduced employment opportunities for inexperienced or skilled workers, although there were some exceptions.

The large proportion of governmental units reporting reduced employment

Table 4 - 19

Per Cent of Survey Establishments that Experienced
Reduced Employment Opportunities for Inexperienced
or Less Skilled Workers as a Result of Technological
Change, 1960-1966, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Per cent
All establishments ^a	39.1
Mining and construction	46.7
Manufacturing	
Durable	29.5
Nondurable	41.7
Transportation and utilities	25.0
Trade	
Wholesale	--*
Retail	46.7
Finance, insurance, and real estate	43.8
Services	23.8
Government	60.9

* Not computed because of the small number of cases.

^aTotal number of employers responding was 215. This total excludes employers that did not undertake technological change in the period 1960-1966 and employers that did not provide information.

opportunities for inexperienced or less skilled workers is of interest in connection with government policies designed to increase employment opportunities for minority groups, since there has been a tendency for government agencies to employ relatively large proportions of minority group workers in less skilled jobs. Moreover, as we shall find in Section VII, government agencies had been particularly active in taking steps to encourage the hiring of members of minority groups. In this connection, the attempts of government agencies to achieve efficiencies through installing labor-saving equipment tend to conflict with their efforts to "open doors to jobs" for disadvantaged jobseekers.

Adjustments to Changed or Reduced Employment

Employers who had experienced changes in the number or occupational characteristics of employees as a result of the "single most important action" involving technological change were asked to indicate the nature of the experience (i.e., adjustment) which followed. In recording the responses (Table 4-20), we eliminated those of 52 employers who indicated that increased employment had resulted, since we were interested primarily in the nature of adjustment to reduced employment requirements or changed occupational requirements.

Interestingly, layoffs resulted in only 26 per cent of these cases, while attrition and reassignments to other units within the establishment accounted for the great majority of the responses. In fact, the actual number of establishments involved in layoffs as a result of this single most important action was only 30, or less than 10 per cent of all our establishments. This finding, which provides dramatic evidence that, at

Table 4 - 20

Nature of Employment Adjustment Resulting from
Technological Change, 1960-1966, for Establishments
That Did Not Experience Increased Employment --
Bay Area Employer Policy Survey, 1967

Nature of employment experience	First answer	Second answer	Third answer	Total
All establishments ^a				
Number	116	116	116	116
Per cent	100.0	100.0	100.0	131.1 ^b
Attrition	41.4	0.9	0.8	43.1
Layoffs	14.7	10.3	0.8	25.9
Reassignments to other units within establishments	19.8	12.9	--	32.8
Other experiences ^c	24.1	1.7	0.8	29.3
No second or third response		74.1	97.4	

^aTotal excludes employers that did not undertake technological change in the period 1960-1966, that did not experience a change in employment, or experienced an increase in employment as a result of the most important action involving technological change, or that did not provide information.

^bTotal exceeds 100 per cent because some establishments gave more than one answer.

^cOther experiences include training, upgrading of skills, reduction in new hires, productivity increases, and miscellaneous adjustments.

least in a period of pronounced employment expansion, technological change does not typically result in actual labor displacement, is generally consistent with the findings of other studies of the impact of technological change on employment. It is true, of course, that layoffs could have occurred in some of our establishments for other reasons, or, indeed, as a result of technological changes other than the "single most important action." Thus, the data in Table 4-20 should not be interpreted as providing a measure of the proportion of establishments experiencing layoffs in the 1960-1966 period.

Attrition was particularly important, relatively, in durable goods manufacturing, a rapidly expanding sector, whereas layoffs were reported relatively frequently in nondurable goods manufacturing, in which as we saw in Section II, decreases in overall employment in our establishments in 1960-1967 were comparatively prevalent (Table 4-21). Although there were comparatively few government establishments for which this question was relevant, it is interesting to observe that reassignments and other types of adjustments were relatively important in the government agencies, whereas none of these respondents reported layoffs.

In all 30 establishments in which layoffs occurred, they were affected by provisions of the collective bargaining agreements. Nearly half of these employers indicated that the layoffs were governed by seniority and/or layoff provisions of the union contract, while the others reported various forms of consultation with the union.

Training and Retraining in Adjusting to Technological Change

Among the establishments responding to a question relating to whether

Table 4 - 21

Nature of Employment Experience Resulting from Technological Change,
for Establishments That Did Not Experience Increased Employment,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Attrition	Layoffs	Reassign- ments	Other ^b
	Number	Per cent				
All establishments ^a	116	100.0	41.3	14.7	19.8	24.2
Manufacturing						
Durable	21	100.0	61.9	--	23.8	14.3
Nondurable	32	100.0	34.3	31.3	21.9	12.5
Construction, transpor- tation and utilities, and wholesale trade	22	100.0	31.8	13.6	4.5	50.1
Retail trade, finance, insurance, and real estate, and services	28	100.0	42.9	14.3	21.4	21.4
Government	13	100.0	38.4 [*]	--	30.8 [*]	30.8 [*]

^{*} Percentage based on fewer than 15 cases.

^a Total excludes establishments that did not undertake technological change in the 1960-1966 period, that did not experience a change in employment or experienced an increase in employment, and those that did not provide information. Data are based on the first answer of the employer.

^b Includes upgrading, refraining from hiring and miscellaneous.

training or retraining was required in adjusting to the single most important action (71 per cent) the answer was in the affirmative. This result may seem at variance with the data reported in Table 4-20, but, in fact, there appears to be no real conflict, since establishments experiencing increased employment as a result of the change (excluded from Table 4-20), as well as those reporting that they adjusted through attrition, reassignments, or in other ways, could well have found it necessary to train or retrain employees whose occupational assignments were somewhat altered. Moreover, there was little variation among major industry groups in the proportion of affirmative responses to this question (data not shown).

The required training or retraining, however, tended to be neither elaborate nor prolonged. Informal on-the-job training was much the most frequently reported type (Table 4-22), while in more than a third of the cases the training required a month or less (Table 4-23). However, training period of six weeks to six months were not uncommon, and a good many employers could not give a clearcut response, because the training periods varied for different types of workers.

In those cases in which new or substantially changed jobs resulted from the "most important single action," employers were asked to indicate how the wage rates were set for those jobs. The most common method reported was on the basis of prevailing wage rates (38 per cent), but job evaluation was also relatively important (29 per cent), while "negotiations with the union" (15 per cent) or "in accordance with the terms of the collective bargaining agreement" (11 per cent) figured less prominently. In this connection, it is important to keep in mind the fact that in a good many of the cases, technological changes affected white-collar workers who

Table 4 - 22

Training Methods of Survey Establishments That Found Training or Retraining Necessary as a Consequence of Technological Change, 1960-1966, by Major Industry Group -- Bay Area Employer Policy Survey, 1967

Method of training	First answer	Second answer	Third answer	Total
All establishments ^a				
Number	151	151	151	151
Per cent	100.0	100.0	100.0	133.8 ^b
Informal on-the-job training	82.8	--	--	82.8
Formal on-the-job training	9.9	17.9	--	27.8
Out-service training	6.0	8.6	7.3	21.9
Other training methods	1.3	--	--	1.3
No second or third response		73.5	92.7	

^aTotal excludes employers that did not undertake technological change in the period 1960-1966 or that did not train or retrain workers as a consequence of technological change and employers that did not provide information.

^bTotal exceeds 100 per cent because some establishments gave more than one answer.

Table 4 - 23

The Length of the Training Period Required by Survey Establishments
That Trained or Retrained Workers to Handle New Equipment
or Procedures, 1960-1966, by Type of Training --
Bay Area Employer Policy Survey, 1967

Type of training	Total		Length of training period				
			1 month or less	6 weeks to 6 months	More than 6 months	Varied	Other
	Number	Per cent					
All types of training ^a	182	100.0	35.8	23.0	6.0	25.9	9.3
Informal on-the-job training	113	100.0	43.4	20.3	7.1	19.5	9.8
Formal on-the-job training	40	100.0	15.0	27.5	7.5	42.5	7.5
Out-service training	28	100.0	35.8	28.5	--	28.6	7.1
Other	1	100.0	--	--	--	--	100.0 [*]

* Percentage based on fewer than 15 cases.

^aThe number of employers responding approximated 151. Overlapping of methods and lengths of training periods precluded exact reporting. The total excludes employers that did not provide information.

were not covered by collective bargaining agreements.

Changes in Output Per Manhour, 1960-1966

Finally, in our sequence of questions relating to technological change, we asked whether, to the knowledge of the respondent, the establishment's output per manhour had risen, remained about the same, or fallen in the 1960-1966 period. Although output per manhour cannot be measured as readily in some industry groups as in others, only 18 per cent of our interviewees did not respond to this question. Most of those who did indicated that output per manhour had increased, while nearly a third indicated that it had remained the same, and very few reported that it had decreased (Table 4-24). In a very rough sort of way, although not entirely consistently, there was a tendency for the major industry groups that had reported relatively varied technological change activity (Table 4-1) to report increases in output per manhour in comparatively large proportions. Moreover, establishments that had installed or modernized equipment were more likely to report increases in output per manhour than those that had not, whereas having built or modernized a plant appeared to have had little or no relationship to whether or not changes in productivity occurred (Table 4-25). These results are, of course, consistent with those reported in Tables 4-14 and 4-15, indicating that installing or modernizing equipment was more likely to lead to reduced employment than building or modernizing a plant. Even so, it should be recognized that our responses merely recorded whether an increase, decrease, or no change in productivity had occurred. It is entirely possible, and indeed perhaps probable, that establishments that had built or remodeled a plant had experienced greater

Table 4 - 24
Changes in Output per Man-Hour, 1960-1966,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Output per man-hour		
	Number	Per cent	Increased	Remained the same	Decreased
All establishments ^a	254	100.0	65.0	31.5	3.5
Mining and construction	21	100.0	47.6	47.6	4.8
Manufacturing					
Durable	49	100.0	59.2	34.7	6.1
Nondurable	58	100.0	77.6	22.4	--
Transportation and utilities	23	100.0	69.6	26.1	4.3
Trade					
Wholesale	12	100.0	66.7 [*]	33.3 [*]	--
Retail	23	100.0	60.9	34.8	4.3
Finance, insurance, and real estate	20	100.0	75.0	20.0	5.0
Services	27	100.0	55.6	40.7	3.7
Government	21	100.0	61.9	33.3	4.8

* Percentages based on fewer than 15 cases.

^aTotal excludes employers that did not provide information.

Table 4 - 25

Changes in Output per Man-hour in Survey Establishments that Did or Did Not
Build New Plant, Remodel Plant, Install New Equipment, Modernize
Equipment, 1960-1966 --
Bay Area Employer Policy Survey, 1967

Technological change action	Total		Output per man-hour		
	Number	Per cent	Increased	Remained the same	Decreased
All establishments ^a	252	100.0	65.4	31.0	3.6
Built new plant					
Yes	79	100.0	65.8	29.1	5.1
No	173	100.0	65.3	31.8	2.9
Remodeled plant					
Yes	95	100.0	67.3	29.5	3.2
No	157	100.0	64.4	31.8	3.8
Installed new equipment					
Yes	203	100.0	69.5	26.6	3.9
No	49	100.0	49.0	49.0	2.0
Modernized equipment					
Yes	148	100.0	71.6	25.7	2.7
No	104	100.0	56.7	38.5	4.8

^aThe total excludes employers that did not provide information.

increases in output per manhour than those that had not.

Concluding Remarks

Probably the most interesting aspect of our findings relating to technological change is the indication that the accelerated pace of industrial mergers and consolidations in the 1960's has apparently played a significant role in helping to explain the generally high annual rates of increase in output per manhour that have characterized the 1960's. Although the relationships between size of firm, type of organization, and technological change have not been ignored in other studies, they have, so far as we know, not been analyzed as systematically, or on the base of as broad a sample of establishments, as in the present study.

In other respects our results are, on the whole, consistent with those of other studies of technological change and tend to support strongly the evidence from other sources that the most significant effects on employment are an increase in the relative importance of professional and technical jobs, a shift in the occupational content of clerical jobs, and a reduction in job opportunities for the unskilled. But clearly, under expanding employment conditions, such as those that have characterized the Bay Area in the 1960's, technological change tends to result in relatively minimal actual displacement of labor.

Finally, although a decided majority of the establishments that had been involved in technological change indicated that training or retraining had been required in adjusting to change, the types of training required were, for the most part, neither elaborate nor prolonged.

FOOTNOTES TO SECTION IV

1. J. J. Servan-Schreiber, The American Challenge (New York: Atheneum House, 1968).
2. Comments of our interviewees in construction were particularly likely to refer to the installation of heavy equipment.
3. See, for example, Ida Russakoff Hoos, "When the Computer Takes Over the Office," Harvard Business Review, July-August 1960, pp. 102-112.
4. Technological Trends in Major American Industries, U. S. Bureau of Labor Statistics, Bulletin No. 1474 (Washington, D.C.: U.S. Government Printing Office, 1966), pp. 32-38.

V. INDUSTRIAL RELATIONS STRUCTURE AND
PERSONNEL DEPARTMENTS

Collective Bargaining Coverage

The San Francisco Bay Area has long been one of the most strongly unionized metropolitan areas in the country. Historically, unions were able to gain strength largely as a result of the remoteness of the area. During periods of rapid expansion of the demand for labor, such as that which occurred in the early years of the present century, in-migration from other parts of the country and from abroad was stimulated, but increases in the influx of population tended to lag behind increases in demand, with the result that there was a tendency for labor shortages to develop.¹ Thus, it was particularly in such periods that unionism tended to gain strength.² Moreover, considerably earlier than in most other parts of the country, unions succeeded in organizing the unskilled and in penetrating the trade and service sectors of the economy.

More than three-quarters of the establishments included in our survey were covered by one or more collective bargaining agreements in 1967, and the proportions were above 90 per cent in mining and construction, nondurable goods manufacturing, transportation and utilities, and substantial sectors of durable goods manufacturing (Table 5-1). Only the government sector and finance, insurance, and real estate were relatively uncovered. And, related to the somewhat lower degree of coverage in Santa Clara and Southern San Mateo counties, which was discussed in Section III, was the fact that coverage was considerably less frequent in the combined electrical and nonelectrical machinery group than in other sectors of manufacturing.

Table 5 - 1

Per Cent of Establishments Covered by Collective Bargaining Agreements,
by Major Industry Group and Selected Manufacturing Industries --
Bay Area Employer Policy Survey, 1967

Major industry group and selected manufacturing industries	Number	Per Cent covered
All establishments	<u>309</u>	<u>76.4</u>
Mining and construction	26	96.2
Manufacturing		
Durable	57	86.0
Primary and fabricated metals industries	22	95.5
Machinery, electrical and nonelectrical	19	63.2
Other durable	16	100.0
Nondurable	62	95.2
Food and kindred products	28	96.4
Other nondurable	34	94.1
Transportation and utilities	27	96.3
Trade		
Wholesale	13	84.6*
Retail	33	87.9
Finance, insurance, and real estate	25	24.0
Services	36	75.0
Government	30	13.3

* Percentages based on fewer than 15 cases.

In nearly four-fifths of the covered establishments, 60 per cent or more of the employees were included in collective bargaining units, and in nearly a half the proportion of employees covered was 80 per cent or more (Table 5-2). Moreover, the proportion of establishments with 80 per cent or more of their employees covered was especially high in mining and construction and in transportation and utilities -- industry groups with relatively large proportions of blue-collar workers.

Although the smallest size group in our sample -- establishments with 100 to 249 employees -- were somewhat more likely to be covered by a collective bargaining agreement than larger establishments, variations in extent of coverage by size of firm followed no particular pattern among the larger size groups (Table 5-3). The relationship between size of firm and extent of collective bargaining coverage may appear to be somewhat contrary to the generally held impression that small firms are less likely to be covered than large firms, but such a relationship might still be found to hold if firms with fewer than 100 employees were included in the universe of firms sampled. Variations in per cent of employees covered, moreover, followed no particular pattern by size of establishment.

It seems probable that variations in size of establishment by major industry group are largely responsible for differences in extent of coverage by size of establishment. It will be recalled that the two major industry groups with the least unionization -- government and finance, insurance, and real estate -- included relatively fewer establishments in the smallest size class than some of the more heavily unionized industry groups. This was particularly true of the government sector.

In about three-fourths of the establishments covered by collective

Table 5 - 2

Per Cent of Establishment's Employment Covered by
Collective Bargaining Agreement, for Covered Establishments,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Per cent covered				
	Number	Per cent	Less than 20	20 to 40	40 to 60	60 to 80	80 or more
All establishments covered ^a	229	100.0	3.5	7.0	10.9	29.3	49.3
Mining and construction	23	100.0	--	8.7	--	17.4	73.9
Manufacturing							
Durable	49	100.0	--	8.2	12.2	44.9	34.7
Nondurable	59	100.0	--	1.7	15.3	37.3	45.7
Transportation and utilities	26	100.0	--	3.8	7.7	26.9	61.6
Trade							
Wholesale	11	100.0	--	27.3*	27.3*	--	45.4*
Retail	25	100.0	--	4.0	8.0	36.0	52.0
Finance, insurance, and real estate	6	100.0	100.0*	--	--	--	--
Services	27	100.0	7.4	14.8	7.4	11.1	59.3
Government	3	100.0	--	--	33.3*	--	66.7*

*Percentages based on fewer than 15 cases.

^aTotal excludes establishments for which per cent covered was not available.

Table 5 - 3

Per Cent of Establishments Covered by Collective Bargaining Agreements
and Per Cent of Employees Covered, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Per cent covered	Total	Number of employees				
		Less than 250	250 to 499	500 to 999	1,000 to 1,999	2,000 or more
All establishments						
Number	309	130	73	50	28	28
Per cent covered	76.4	85.4	68.5	74.0	64.3	71.4
Number covered ^a	229	108	49	35	18	19
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Less than 20 per cent	3.5	2.8	--	5.7	16.7	--
20 to 40 per cent	7.0	4.6	8.2	11.4	--	15.8
40 to 60 per cent	10.9	10.2	8.2	17.1	5.6	15.8
60 to 80 per cent	29.3	35.2	20.4	20.0	38.9	26.3
80 per cent or more	49.3	47.2	63.2	45.8	38.8	42.1

^aTotal excludes 7 establishments for which information on per cent of employees covered was not available. Thus, 236 establishments were covered by collective bargaining agreements.

bargaining agreements, union recognition had first been granted from 10 to 35 years ago, with nearly half of the covered establishments dating their first recognition of a union from 25 to 35 years ago, or sometime between the early New Deal years and the early years of World War II (Appendix Table D-1). The proportion of establishments in retail trade which dated union recognition from this period was particularly large, while in this industry group establishments with an even longer history of unionism constituted an appreciably smaller proportion than in mining and construction, nondurable goods manufacturing, and transportation and utilities. And, not surprisingly, there was a tendency for recognition of a union to have occurred somewhat more recently in the service industries than in most other major industry groups.

Nearly half of the establishments with some union representation -- and this included a small number of establishments which had not formally recognized a union -- mentioned only one union that represented their employees (data not shown). However, sizable proportions of the establishments mentioned two or three unions representing groups of employees, nearly a fourth reported as many as five, and there were small numbers of establishments that mentioned as many as eight, nine, or ten unions. And, in all, 89 different unions were mentioned.

Since each interviewee was asked to indicate approximately how many members were represented in his establishment in each union mentioned, it was possible to develop an estimate of the total membership of each union represented in our sample, on the basis of which the rank order presented in Appendix Table D-2 was determined. It should be emphasized that, because of the exclusion of establishments with fewer than 100 employees from our sample

and because the sample deviates in minor respects from accurate representativeness in terms of industrial distribution and other characteristics, the rank order of unions developed from the survey is likely to differ somewhat from the actual rank order for the six-county area.

Although the unions do not appear in the same order, our list includes most of the 20 unions on the most recent list (for 1966) of leading unions in the state compiled by the California Department of Industrial Relations.³

There is little question that inclusion of firms with fewer than 100 employees would change the rank order of unions in our list and quite possibly its composition to some degree. This is suggested by the data in Appendix Table D-3, in which unions are ranked on the basis of the percentage of all 309 establishments in which they were represented. On this basis the Teamsters outranked the Machinists by a considerable margin, while there was a tendency for the building trades unions, which are represented in large numbers of establishments, to rank somewhat higher than they did in the list which was compiled in terms of membership. On the other hand, neither the Steelworkers nor the Autoworkers, which ranked fairly high in terms of membership, came even close to "making" the list of the leading 15 in Table D-3, since their members tend to be concentrated in relatively few establishments. Thus, it is likely that, if smaller establishments were included, unions that are represented in many firms would receive greater weight.

Representation of Employees

Among the establishments not covered by a collective bargaining

agreement, there were 11, or 15.1 per cent of the uncovered establishments, which indicated that a union or unions represented some of their employees, without formal recognition. These establishments were all in the government sector, where it has become fairly common for unions such as the various locals of the State, County, and Municipal Employees to make recommendations to government agencies with respect to annual salary increases and other terms and conditions of employment. Among other unions which represented workers in these establishments was the American Federation of Teachers, the Building Service Employees Union, the Teamsters, the National Maritime Union, and the National Federation of Federal Employees.

We were also interested in determining to what extent employee associations other than unions might represent groups of employees in making wage or other demands in establishments that were not covered by collective bargaining agreements. In view of the growing importance of professional and other white-collar employment, we anticipated that such representation might have assumed considerable importance. However, only 14 establishments, or 19.2 per cent of the uncovered establishments, answered this question in the affirmative, and nearly all of these were in the government sector, with a few in educational services. The most frequently mentioned employee organization involved was the California State Employees Association, while other organizations mentioned in this context were local firemen's, policemen's, and teachers' associations, other associations of local government employees, and the California Teachers' Association.

In general, our data tend to confirm one's impression that unionism is relatively weak among white-collar workers in the Bay Area. There is

little evidence of unionism among professional groups, such as engineers. Nonexempt office employees -- those covered by the federal Fair Labor Standards Act's provisions relating to hours of work and pay -- were covered by collective bargaining agreements in only 17.5 per cent of our establishments. Among the establishments covered by any type of collective bargaining agreement, 23 per cent were covered by an agreement relating to nonexempt office employees. Rarely, if at all, was this the most important collective bargaining agreement affecting the establishment, since in nearly all cases the most important agreements in these establishments related to blue-collar workers. Among the establishments in which white-collar workers were covered by a collective bargaining agreement, the Office and Professional Employees International Union was the organization involved in nearly two-fifths of the cases, followed rather closely by the Teamsters, while in a minority of these establishments office workers were represented by a variety of other unions. Representation of office workers by the Teamsters was found chiefly in motor freight transportation and warehousing establishments, but there was also a scattering of Teamster agreements covering office workers in other industries.

Among other groups of white-collar workers, sales workers were, of course, unionized in a good many of the retail trade establishments, belonging chiefly either to the Retail, Wholesale, and Department Store Union or to the Retail Clerks International Association. Nurses have also developed an effective organization in the Bay Area and elsewhere in the state, as suggested by the fact that the California State Nurses Association is represented in Appendix Table D-2.

Since this section is concerned only with the structure of industrial relations, and not with its substance, the impact of unions on various

aspects of employer policies, such as wage policy, is discussed in other sections of the report.

Employer Associations

Just as unions gained strength at a relatively early date in the Bay Area, so employer associations have long played an important role in labor relations in the Bay Area. Multi-employer bargaining developed at a relatively early date in response to union activity. As Kerr and Fisher have put it:

The master agreement in San Francisco developed largely because union recognition had become an acknowledged necessity, and the organizational strength of the unions had surpassed that of the individual employers. The strategic position of the employers had deteriorated and the position of the unions improved. The organization of employers' associations was a rational act to prevent a further deterioration, and if possible achieve improvement in the bargaining position of employers.⁴

Although relevant recent data are not available, it is probably still true, as it was in the early 1950's, that multi-employer bargaining is more prevalent in California than it is in the country as a whole.

According to William H. Smith, now Executive Vice President of the Federated Employers of the Bay Area, and formerly its Research Director:

Marked variations existed in the extent of multiemployer bargaining practiced in various sections of the United States. Such bargaining predominates in California. In 1952, more than half of the 2,212 agreements on file with the California Department of Industrial Relations' Division of Labor Statistics and Research were multi-employer contracts. Of more than 1,200,000 employees covered by these agreements, about two-thirds worked under multi-employer arrangements.

The U.S. Bureau of Labor Statistics made a similar study in 1953 of collective bargaining agreements involving 8,410,000 workers. This study, "Collective Bargaining Structures--Employer Bargaining Unit," showed that one-third of the workers

covered were under contracts signed by groups of employers or associations.⁵

Among the establishments included in our survey, 57 per cent belonged to an employer association concerned with industrial relations activities (data not shown). Some of these, although a distinct minority, belonged to several employer associations, one or more of which was concerned with industrial relations. About 12 per cent of the establishments reported that they belonged only to one or more employer associations that were not concerned with industrial relations, while 31 per cent did not belong to any employer association.

There was a decided positive relationship between membership in an employer association and the percentage of an establishment's employment covered by a collective bargaining agreement (Table 5-4). The smaller the proportion of employees covered, the less likely the establishment was to belong.

Not unexpectedly, among the major industry groups, the largest percentage of establishments belonging to an employer association (85 per cent) was found in construction, in which multi-employer bargaining prevails. However, the proportion of establishments belonging was nearly as high in durable goods manufacturing, in which multi-employer bargaining was prevalent only in a few sub-sectors. Otherwise, variations in the proportion of establishments belonging to employer associations among the nongovernmental major industry groups were not particularly pronounced. Even in finance, insurance, and real estate, where few establishments were unionized, three-fifths of the establishments belonged to an employer association. Relatively few government establishments belonged to employer associations.

Among the private establishments, there was no consistent tendency

Table 5 - 4

Whether Establishment Belongs to Employer Association Concerned With
Industrial Relations, by Per Cent of Employees Covered
By Collective Bargaining Agreement --
Bay Area Employer Policy Survey, 1967

Per cent of employees covered	Belongs				
	Total		To association concerned with industrial relations	To association concerned with industrial rela- tions plus one or more others	Does not belong
	Number	Per cent			
All establish- ments ^a	210	100.0	54.3	18.6	27.1
Less than 40	20	100.0	35.0	20.0	45.0
40 to 60	23	100.0	52.2	17.4	30.4
60 to 80	59	100.0	47.5	25.4	27.1
80 or more	108	100.0	62.1	14.8	23.1

^aTotal excludes establishments not covered by a collective bargaining agreement, establishments belonging to an employer association not concerned with industrial relations, and a few establishments for which information on membership in an employer association was not available.

for the proportion belonging to employer associations to vary with number of employees. Nor were there geographical differences of any significance in the extent to which establishments belonged to employer associations, except for the fact that the percentage in the Contra Costa-Marín area was relatively low. However, this appeared to be explained by the substantial representation in this area of manufacturing industries in which nationwide or regionwide bargaining prevailed. As we shall see, in such industries there was a tendency for the headquarters office to negotiate collective bargaining agreements and for local branches to be relatively unlikely to belong to employer associations.

Among the many employer associations in the Bay Area, a few, such as the Federated Employers of the Bay Area and United Employers, Inc. (centered in Oakland) drew their membership quite widely from a number of industry groups, whereas most of the employer associations concerned with industrial relations represent employers in a particular industry. Thus, of the 65 employer associations mentioned by our respondents, 57 were confined to a particular industry, while the other 8 were more general. Some of these more general associations were confined to a particular part of the Bay Area, such as the Antioch-Pittsburg Industrial Relations Association and the Employers' Council of Santa Clara County.

It is probably because there are specialized employer associations in so many industries that the proportion of establishments belonging to any given employer association did not tend to be very large. Among the establishments in our sample, the largest number -- 12 per cent of the total -- belonged to the Federated Employers of the Bay Area (Appendix Table D-4). Most of the other associations that were mentioned with relative frequency

were confined to a particular industry group.

Because of the fact that a considerable number of establishments belonged to more than one employer association, it was difficult to obtain a complete picture of their relations with the associations of which they were members, but we did ask our interviewees to indicate what services or functions were performed by the first association mentioned in their replies -- presumably in most cases the one with which they felt most strongly identified.

Clearly, for most members, the negotiation of collective bargaining agreements was regarded as the most important function performed by the employer association, since about three-fourths of the relevant establishments mentioned this function first in responding to the question (Table 5-5). On the other hand, about 15 per cent indicated in their first response that the employer association provided information on wages or, in a few cases, on labor legislation. Most of these respondents were probably members of the Federated Employers, which does not negotiate collective bargaining agreements. Its functions are as follows:

1. To promote cordial and friendly employer-employee relations in the San Francisco Bay Area;
2. To cooperate with municipal, State, and Federal authorities and other public jurisdictions in matters relating to employer-employee relations;
3. To promote and facilitate meetings of employers in the San Francisco Bay Area and elsewhere for consultation and consideration of common problems in the field of labor relations;
4. To engage in research and to provide information to members relative to labor management problems and to exchange and disseminate such information;
5. To encourage San Francisco Bay Area employers to follow policies and practices which will stabilize labor conditions and rates of pay and promote good employee relations;

Table 5 - 5

Relations of Association to Establishment, for Establishments
Belonging to Employer Associations --
Bay Area Employer Policy Survey, 1967

Relations of association ^a	First answer	Second answer	Third answer	Fourth answer	Fifth answer	Total
All establishments belonging to employer association ^b						
Number	161	161	161	161	161	161
Per cent	100.0	100.0	100.0	100.0	100.0	224.2 ^c
Negotiates bargaining agreements	75.9	0.6	--	--	--	76.4
Negotiates grievances	--	58.4	--	--	--	58.4
Has some discretion over establishment's employment policy	1.8	0.6	11.2	--	--	13.7
May limit nonwage benefits establishment offers employees	--	1.9	5.6	6.2	--	13.7
Pays strike benefits	0.6	0.6	0.6	1.2	0.6	3.7
Conducts, coordinates, or otherwise participates in training programs	3.7	1.9	10.6	4.3	4.3	24.8
Provides information on wages, etc.	13.7	5.0	1.9			20.5
Provides information on labor legislation; lobbying activities	1.2	2.5	2.5			6.2
Other	3.1	1.2	1.2	0.6	0.6	6.8
No second or subsequent response		27.3	66.4	87.7	94.5	

^aAnswers relate only to the first association mentioned by respondents, if establishment belonged to more than one.

^bTotal excludes establishments not belonging to an employer association concerned with industrial relations and those for which information on relations of association to establishment was not available.

^cTotal exceeds 100 per cent, because many establishments gave more than one answer.

6. To encourage the organization of autonomous groups among employers where needed and to make available full counsel and aid in matters relating to labor relations.⁶

Some of the members of the Federated Employers also belong to the San Francisco Employers' Council, which does negotiate collective bargaining agreements. United Employers also negotiates bargaining agreements, and, in its most recent annual report, indicated that during the previous year it had participated in 113 negotiations covering a wide range of industries.⁷ The employer associations that are organized on an industry basis, as suggested by our data and by other sources of information, negotiate collective bargaining agreements in most cases.

The second function mentioned by a substantial proportion of establishments was the negotiation of grievances. When all the responses were cumulated, the four leading functions of employer associations appeared to be as follows, in order of relative frequency with which they were mentioned: (a) the negotiation of collective bargaining agreements, (b) the negotiation of grievances, (c) conducting or organizing training programs, and (d) providing information on wages, etc. Also of some importance, but mentioned with less frequency, were the exercising of some discretion over the establishment's employment policy and limiting nonwage benefits offered to employees.

Not surprisingly, the establishments with less than 250 employees were particularly likely to respond that the employer association to which they belonged negotiated their collective bargaining agreements (Appendix Table D-5). These smaller establishments, as will be indicated at a later point in this section, were less likely to have personnel departments than the larger establishments and probably in most cases did not have industrial relations

directors. Beyond this smallest size group, however, there was little variation by size of establishment in the proportion of responses indicating that the association negotiated bargaining agreements. However, it should also be kept in mind in this connection that establishments in our smallest size group were especially likely to be covered by a collective bargaining agreement. If we confine the analysis to private establishments covered by a collective bargaining agreement, we find that middle-size establishments were more likely to report that their collective bargaining agreements were negotiated by an employer association than either smaller or larger establishments (data not shown).

In the case of negotiation of grievances, there was a fairly consistent inverse relationship between size of establishment and the proportion of responses indicating that the association performed this function. Again, the relationship is scarcely surprising. Larger establishments are undoubtedly more likely to have an internal organizational structure for the negotiation of grievances. Moreover, bargaining strategy affecting the interests of an entire association is less likely to be involved in the negotiation of grievances.

With respect to the other functions of employer associations, there was little evidence of a consistent relationship between size of establishment and types of functions performed by the association. However, the data, though relating to responses rather than establishments, do suggest that the membership of the Federated Employers, which provides information, is more likely to be found among smaller and larger establishments than among the middle-sized establishments in our sample. This is doubtless explained by the fact, noted above, that the smaller and larger establishments were

less likely than the middle-sized establishments -- among those covered by a collective bargaining agreement -- to report that their collective bargaining agreements were negotiated by an employer association. The services of the Federated Employers were doubtless particularly likely to be valued by establishments that were not involved in multi-employer bargaining.

There were also some significant variations by major industry group in responses to this questions (Appendix Table D-6). For example, the responses of the establishments in wholesale and retail trade indicated an above-average proportion of cases in which associations negotiated collective bargaining agreements, whereas this function was relatively unlikely to be performed by the associations to which establishments belonged in largely unorganized finance, insurance, and real estate. In durable goods manufacturing, also, there appeared to be a less pronounced pattern of negotiation of collective bargaining agreements by associations. This may well be due to the possibility that headquarters establishments set wage rates for branch establishments in durable goods manufacturing to a greater extent than in other major industry groups -- data on the extent to which headquarters set wage rates are presented in Appendix Table D-7, but not by major industry group. However, as we shall find in Section X, a number of durable goods manufacturing establishments are in industries in which uniform nationwide wage rates are established under collective bargaining agreements.

The data in Table D-6 suggest that there is some tendency for the associations that negotiate agreements also to be involved in the negotiation of grievances, although the relationship is considerably closer in some major industry groups than in others. It will be recalled that most of the associations were confined to specific industries, and thus the

functions they perform are more likely to be influenced by the characteristics and structure of the industry than by any other factor. Among the other functions that varied by major industry group, training functions were apparently more likely to be performed by associations in construction, durable goods manufacturing, and finance, insurance, and real estate than in other industry groups. In the case of construction and durable goods manufacturing, this probably reflects in large part the representation of employer associations on joint apprenticeship boards, since, as will be indicated in Section XI, apprenticeship programs in the building trades and metal trades predominate in the apprenticeship field, as is true throughout the country. The involvement of employer associations in finance, insurance, and real estate in training activities undoubtedly reflects the needs of the three industries in this group for quite specialized types of training.

Moreover, the data on providing information in Table D-6 suggest that establishments in durable goods manufacturing and in finance, insurance, and real estate were particularly likely to belong to the Federated Employers of the Bay Area. However, these data must be interpreted with caution, since they do not provide any information on firms with fewer than 100 employees, not included in the sample, and since the data relate to the first association mentioned by the employer. Some of the establishments which belong to more specialized industry associations may also belong to the Federated Employers but may not have mentioned the latter organization in its first response on membership.

If we confine the analysis to private establishments covered by collective bargaining agreements, we find that 73 per cent belonged to

employer associations and that 50 per cent belonged to employer associations which negotiated their collective bargaining agreements (Appendix Table D-7). Employers were especially likely to report that their collective bargaining agreements were negotiated by employer associations in construction and in retail trade, but half or more of the unionized establishments indicated that their collective bargaining agreements were negotiated by employer associations in transportation and utilities, wholesale trade, and services.

Variations among our major industry groups in the extent to which agreements were negotiated by associations seemed quite clearly to be explained by differences in the prevalence of multi-employer bargaining within sub-sectors of the major industry groups. Although there were not enough establishments in our sample within these sub-sectors to provide reliable statistical evidence of differences in practices, our data suggest that multi-employer bargaining was the predominant practice in the following industries:

- Construction
- Food processing
- Motor freight transportation and warehousing
- Water transportation
- Retail food establishments
- Eating and drinking places
- Miscellaneous retail stores
- Hotels
- Personal services

A more mixed pattern, with, very roughly, about half of the establishments in the sample reporting that their agreements were negotiated by associations, was found in the following industries:

- Paper and allied products
- Printing and publishing
- Fabricated metal products
- Nonelectrical machinery
- Retail specialty stores
- Medical and other health services

It should be kept in mind that the number of establishments in our sample in some of these sub-sectors was quite small. Nevertheless, our data appear to be generally consistent with other evidence relating to the prevalence of multi-employer bargaining. Whether and to what extent these apparent patterns would have been modified had our sample included establishments with fewer than 100 employees is not entirely clear, but it seems likely that in some sectors, such as retail food establishments and miscellaneous retail stores, the relative extent of involvement of employers in multi-employer bargaining might have been reduced had very small establishments been included.

The Relation of Headquarters to Branches in Industrial Relations Functions

Establishments which were parts of larger organizations were also asked about industrial relations services furnished to branches, subsidiaries, or regional or divisional headquarters. Most of the 92 establishments indicating that the headquarters office furnished industrial relations services were branches or regional headquarters, but in some cases respondents in headquarters establishments indicated the types of industrial relations services furnished to their branches (Table 5-6). About half of these employers indicated that headquarters negotiated their collective bargaining agreements, while nearly as large a proportion indicated that headquarters interpreted collective bargaining agreements. Since the mention of interpreting agreements came as a second answer in most cases, it would appear that there were a good many cases in which headquarters both negotiated and interpreted agreements. Other functions of headquarters which were mentioned by substantial proportions of these firms were prescribing

Table 5 - 6

**Types of Industrial Relations Services Provided by Headquarters,
for Establishments in Which Headquarters
Provides Such Services --
Bay Area Employer Policy Survey, 1967**

Types of services	First answer	Second answer	Third answer	Fourth answer	Fifth answer	Total
All establishments^a						
Number	92	92	92	92	92	92
Per cent	100.0	100.0	100.0	100.0	100.0	294.5 ^b
Negotiates bargaining agreements	51.1	--	--	--	--	51.1
Interprets agreements	7.6	41.3	--	--	--	48.9
Sets wage rates	12.0	3.3	23.9	--	--	39.1
Sets hiring standards	5.4	6.5	5.4	18.5	--	35.9
Prescribes fringe benefits, including pensions	4.3	13.0	10.9	5.4	7.6	41.3
Controls or determines local work practices	2.2	--	2.2	3.3	2.2	9.8
Determines seniority districts	--	--	--	1.1	--	1.1
Participates in grievance procedures	1.1	6.5	6.5	10.9	15.2	40.2
Provides advisory and con- sultative services	8.7	2.2	2.2	1.1	--	14.1
Other	7.6	2.2	2.2	1.1	--	13.0
No second or subsequent answer		25.0	46.7	58.6	75.0	

^aTotal includes all establishments reporting that headquarters furnished industrial relations services.

^bTotal exceeds 100 per cent, because many establishments gave more than one answer.

fringe benefits, including pensions, participating in grievance procedures, setting wage rates, and setting hiring standards.

Branch or subsidiary establishments indicating that their collective bargaining agreements were negotiated by employer associations rarely indicated that headquarters was involved in the negotiation of their agreements. In fact, many of the employers reporting that their agreements were negotiated by headquarters were in industries in which nationwide collective bargaining agreements were prevalent or in which collective bargaining agreements covered establishments on a broad regional basis, extending well beyond the Bay Area. Although the number of establishments represented in these industries was too small to permit reliable statistical inferences, it is not surprising to find that industries in which agreements were predominantly negotiated by headquarters were stone, clay, and glass products; primary metals manufacturing; and transportation equipment manufacturing. Other manufacturing industries in which half or close to half of the respondents indicated that headquarters negotiated their agreements were paper and allied products and chemicals.

Personnel Departments

In view of the fact that our survey excluded firms with fewer than 100 employees, it is not surprising to find that a decided majority (64 per cent) had a personnel department (Table 5-7). Interestingly, the largest proportions of establishments with a personnel department were found in the least unionized sectors -- government and finance, insurance, and real estate -- while the smallest proportion was found in the heavily unionized construction group.

Table 5 - 7

Whether Establishment has Personnel Department, and Number of Employees
in Department, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total number	Per cent with personnel departments	Total departments		Number of Employees						
			Number	Per cent	Less than 5	5 to 9	10 to 19	20 to 29	30 or more		
All establishments	309	64.4%	196 ^a	100.0	61.2	19.4	6.6	3.1	9.7		
Mining and construction	26	19.2	5	100.0	60.0*	--	20.0*	20.0*	--		
Manufacturing	57	71.9	41	100.0	63.5	19.5	2.4	--	14.6		
Durable	62	64.5	40	100.0	70.0	20.0	5.0	--	5.0		
Nondurable											
Transportation and utilities	27	66.7	17 ^a	100.0	47.0	29.4	5.9	5.9	11.8		
Trade	46	58.7	27	100.0	66.7	14.8	11.1	--	7.4		
Finance, insurance, and real estate	25	92.0	23	100.0	52.3	21.7	4.3	4.3	17.4		
Services	36	50.0	18	100.0	72.2	16.7	--	11.1	--		
Government	30	86.7	24 ^a	100.0	50.0	20.8	12.5	4.2	12.5		

* Percentages based on fewer than 15 cases.

^a Total excludes establishments for which information on number of employees in personnel department was not available.

As would have been expected, differences in size of establishment helped to explain these variations. There was a clear tendency for the proportion of establishments with personnel departments to increase with increasing number of employees:

<u>Number of employees</u>	<u>Per cent of establishments with personnel department</u>
Less than 250	41%
250 to 499	61
500 to 999	89
1,000 to 1,999	93
2,000 and over	100

However, there was also a decided tendency for employers who were not required to hire through unions to be considerably more likely to have a personnel department than those that were required to hire through unions, and, although this difference was most apparent in the two smallest size classes, it showed up to some extent in the next two size classes:

<u>Number of employees</u>	<u>Per cent of establishments with personnel department⁸</u>	
	<u>Required to hire through union</u>	<u>Not required to hire through union</u>
Less than 250	23%	61%
250 to 499	45	74
500 to 999	78	97
1,000 to 1,999	78*	100
2,000 and over	100*	100

*Percentages based on fewer than 15 cases.

Whether the establishment was a single unit, branch unit, or headquarters unit also had some influence on whether or not it had a personnel department. This influence was interrelated with that of size of the establishment, and both of these factors combined helped to explain the variations by major industry group. Single units were least likely to have a personnel department, while branch units were especially likely to have one.

The majority of the personnel departments were quite small, with fewer than five employees, while about four-fifths of all the departments had less than ten employees (Table 5-7). On the other hand, about 10 per cent were quite sizable, with 30 or more employees, and these larger departments tended to be found in the major industry groups which included some very large establishments. Desirable as it would be to undertake a closer analysis of the relationship of the number of employees in the personnel department to the size of the establishment, clearcut results could not be obtained from such an analysis, since our data on number of employees refer to the number in the Bay Area, whereas some of the personnel departments served a much wider area.

The relationship of the existence of a personnel department to some of the personnel policies of our establishments is explored in other sections of the report.

Concluding Remarks

Although much of the material in the present section is familiar to experts on the industrial relations structure of the Bay Area, those who are less well acquainted with the situation will find the information

essential to an interpretation of many of the relationships explored in other sections of the report. Some of our findings, moreover, are perhaps less familiar.

For example, we found that the electrical and nonelectrical machinery group was less likely to be unionized than other branches of manufacturing. Our data indicate, also, that, although multi-employer bargaining prevails in many industries in the Bay Area, there are some industries in which individual establishments continue to conduct their own collective bargaining negotiations and others -- characterized by nationwide bargaining or bargaining on a broad regional basis -- in which headquarters establishments in other parts of the country negotiate collective bargaining agreements which cover local branches or subsidiaries.

Finally, we found that small and even moderately large establishments that were required to hire through unions were considerably less likely to have personnel departments than establishments in the same size classes that were not required to hire through unions. In other words, the union served as the screening organization for these employers. How satisfactorily or unsatisfactorily the unions performed this function, at least as viewed by employers, will be discussed in the next section.

Footnotes to Section V

1. See Margaret S. Gordon, Employment Expansion and Population Growth: The California Experience, 1900-1950 (Berkeley and Los Angeles: University of California Press, 1954) and Employment and Unemployment in California, background paper prepared for Governor's Conference on Employment, Monterey, California, September 30 to October 3, 1965 (unpublished report, Institute of Industrial Relations, University of California, Berkeley).
2. See Robert E. L. Knight, Industrial Relations in the San Francisco Bay Area, 1900-1918 (Berkeley and Los Angeles: University of California Press, 1960) and a second volume by the same author, continuing the history of industrial relations in the area through the general strike of 1934, now in the final revision stage.
3. Union Labor in California: 1966, California Department of Industrial Relations (San Francisco: 1967), p. 12.
4. Clark Kerr and Lloyd Fisher, "Multiple-Employer Bargaining: The San Francisco Experience," in Richard A. Lester and Joseph Shister, editors, Insights into Labor Issues (New York: Macmillan, 1948), p. 27.
5. William H. Smith, Local Employers' Associations (Berkeley: Institute of Industrial Relations, University of California, 1955), pp. 3-4.
6. Service Directory: 1967, Federated Employers of the Bay Area (San Francisco: 1967).
7. Annual Report: January 1968, United Employers, Inc. (Oakland: 1968).
8. For purposes of this tabulation, establishments that were required to hire through a union or unions but reported that they did so rarely were recorded as not being required to hire through unions.

VI. RECRUITMENT

Channels of Recruitment

Most studies of recruitment and jobseeking have indicated that informal recruitment channels are far more important, relatively, than formal channels. Employers get valuable tips from their own employees on available jobseekers and rely heavily on direct hiring (hiring "at the gate" in studies of factory recruitment). Jobseekers are more likely to find their jobs through friends and relatives or through direct application to firms they know about than through employment agencies or other formal channels.

Most employers have a strong preference for using informal information networks, for a variety of reasons. Employee referrals--the most important informal channel--usually provide good screening for employers who are satisfied with their present workforce. Present employees tend to refer people like themselves, and they may feel that their own reputation is affected by the quality of the referrals. Informal sources also tend to provide applicants from the neighborhood in which the establishment is located; this is particularly important for female employees in reducing turnover, absenteeism, and tardiness resulting from transportation difficulties. Moreover, informal channels are usually costless to the employer, though we have found a few cases in which bonuses are paid for employee referrals that result in hires. Of course, some formal channels such as the state employment service are also costless. The few employers who deliberately avoid informal sources are either those who are seeking to upgrade their work force or those who have had bad experience with nepotism or cliques.¹

However, few previous studies of employer recruitment practices have systematically gathered information from a broadly representative sample of employers on sources used in the recruitment of workers in all major occupation groups. Our data indicate clearly that, except in

the case of managerial workers, for those white-collar occupation groups in which specialized skills tend to be required, employers are more likely to designate formal channels of recruitment than informal channels as important sources (Tables 6-1 to 6-4). And, largely reflecting the important role played by unions in job referrals in the highly organized Bay Area labor market, a sizable majority of employers designated formal channels as important sources in the hiring of all blue-collar and service groups.

Of course, one may dispute the basis of classification of formal and informal channels used in our tables. We have defined a formal channel as any structured source of information (e.g., newspaper ads) or job referral agency outside the firm. But, in connection with informal channels, should "from within the establishment" be treated as a recruitment channel at all? In asking employers to indicate in rank order (first, second, third, etc.) their most important channels of recruitment, we provided a list of generally used channels which included "from within the establishment" as one of the possible choices. However, the question was open-ended since employers were invited to check "other" channels not included in our list. (Incidentally, Tables 6-1 to 6-6 are based on Part II data but are not so designated, since we obtained almost a 100 per cent return of Part II recruitment tables, largely as a result of requesting respondents to complete them at the time of the interview.)

If, however, recruitment is conceived as relating only to sources of new employees, it is not appropriate to include "from within" as a recruitment channel. And its inclusion distorts the relationships between skill levels and sources outside the firm, since it is largely confined to

Table 6 - 1

Most Important Recruitment Channel Used by Survey Establishments
for White-Collar Workers, by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Most important channel	Profes- sional	Managerial	Clerical	Sales
All establishments ^a				
Number	251	302	304	166
Per cent	100.0	100.0	100.0	100.0
Informal channels	35.9	82.3	22.3	59.7
Direct hiring	15.5	5.6	15.8	23.6
Recommendations of own employees or "word of mouth"	4.8	1.0	3.6	8.4
From within the establishment	10.0	72.4	1.6	21.7
Referrals from clients, suppliers, and associates	1.2	1.3	--	4.8
Headquarters or divisional employment office, transfers	4.4	2.0	1.3	1.2
Formal channels	58.1	15.0	77.0	37.3
Private employment agencies	20.7	5.6	40.5	13.3
California Department of Employment	--	--	15.5	4.2
School or college placement services	14.3	1.7	1.0	2.4
Unions	1.6	--	4.9	6.6
Newspaper advertising	12.3	2.7	11.8	10.8
Trade or professional journals	4.4	2.0	--	--
Professional or management associations	2.8	1.3	--	--
Civil service lists	4.0	1.7	3.3	--
Other	4.0	2.7	0.7	3.0

^aTotals exclude establishments not employing workers in a given occupation group and three establishments that did not complete the Part II recruitment table.

Table 6 - 2

Most Important Recruitment Channel Used by Survey Establishments
for Blue-Collar and Service Workers, by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Most important channel	Skilled	Semi- skilled	Un- skilled	Service
All establishments ^a				
Number	247	239	244	207
Per cent	100.0	100.0	100.0	100.0
Informal channels	27.8	34.7	30.8	37.7
Direct hiring	10.9	14.2	24.2	33.3
Recommendations of own employees	3.6	1.7	2.9	2.9
From within the establishment	11.3	13.4	--	--
Recalls	2.0	5.4	3.7	1.5
Formal channels	69.4	64.9	68.0	62.3
Private employment agencies	3.6	1.7	2.0	5.3
California Department of Employment	8.1	9.2	17.6	15.5
Unions	42.8	44.8	40.6	30.9
Newspaper advertising	11.7	7.1	4.9	7.7
Civil service lists	3.2	2.1	2.9	2.9
Other	2.8	0.4	1.2	--

^aTotals exclude establishments not employing workers in a given occupation group and three establishments that did not complete the Part II recruitment table.

Table 6 - 3

Most Important Recruitment Channels Used by Survey Establishments
for White-Collar Workers, by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Most important channels	All white- collar workers	Profes- sional	Managerial	Clerical	Sales
All responses ^a					
Number	2,166	560	563	725	318
Per cent	100.0	100.0	100.0	100.0	100.0
Informal channels	40.5	34.9	61.1	28.4	49.1
Direct hiring	14.4	14.6	8.9	14.7	19.8
Recommendations of own employees, etc.	5.5	7.9	4.3	9.0	9.7
From within the establish- ment	18.1	8.7	44.2	4.1	15.1
Referrals from clients, sup- pliers, and associates	0.8	1.6	1.4	--	2.5
Headquarters or divisional employment office and transfers	1.7	2.1	2.3	0.6	1.9
Formal channels	56.7	63.1	36.2	70.0	44.6
Private employment agencies	18.8	15.4	9.9	28.3	14.8
California Department of Employment	10.5	3.6	2.3	22.7	7.5
School or college placement services	6.8	14.5	5.2	2.7	3.5
Unions	1.1	0.7	--	3.0	5.3
Trade or professional journals	3.3	7.7	4.6	--	--
Newspaper advertising	14.1	16.8	11.2	13.0	13.5
Professional or management associations	1.1	2.3	1.8	--	--
Civil service lists	1.0	2.1	1.2	0.3	--
Other	2.8	2.0	2.7	1.6	6.3

^aTotal includes all responses of employers relating to the first, second, third, and fourth most important recruitment channels. Totals exclude establishments not employing workers in a given occupation group and three establishments that did not complete the Part II recruitment table.

Table 6 - 4

Most Important Recruitment Channels Used by Survey Establishments
for Blue-Collar and Service Workers, by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Most important channels	All blue-collar workers	Skilled	Semi- skilled	Un- skilled	Service
All responses ^a					
Number	1675	445	429	442	359
Per cent	100.0	100.0	100.0	100.0	100.0
Informal channels	39.7	35.5	43.6	38.3	41.4
Direct hiring	21.8	16.2	19.6	24.0	28.7
Recommendations of own employees, or "word of mouth"	9.4	8.1	8.4	10.9	9.7
From within the establishment	5.8	9.4	11.4	0.5	1.1
Referrals from clients, suppliers, and associates	--	--	--	--	--
Headquarters or divisional employment office and transfers	0.1	0.2	0.2	--	--
Recalls	2.6	1.6	4.0	2.9	1.9
Formal channels	59.2	63.6	55.7	60.1	56.7
Private employment agencies	4.2	5.4	3.5	2.7	5.3
California Department of Employment	17.9	13.9	15.9	21.7	20.5
School or college placement services	0.6	0.9	0.5	0.5	0.6
Unions	25.4	27.9	27.7	25.7	18.9
Newspaper advertising	9.0	12.6	6.5	7.5	9.5
Trade or professional journals	0.1	0.4	--	--	--
Professional or management associations	--	--	--	--	--
Civil service lists	2.0	2.5	1.6	2.0	1.9
Other	1.1	0.9	0.7	1.6	1.7

^aTotal includes all responses of employers relating to the first, second, third, and fourth most important recruitment channels. Totals exclude establishments not employing workers in a given occupation group and three establishments that did not complete the Part II recruitment table.

occupation groups above the unskilled and service level.

If we exclude "from within" from the distributions presented in Tables 6-3 and 6-4, and recompute the percentages of establishments designating informal channels, we find a set of relationships that differ in some respects from those thus far observed:

Per cent of establishments designating informal recruitment channels (other than "from within") as important sources

	Professional	Managerial	Clerical	Sales
For white-collar workers	29	26	25	37
	Skilled	Semiskilled	Unskilled	Service
For blue-collar and service workers	30	33	38	40

On this basis informal channels turn out to have been indicated relatively more frequently for sales workers than for any of the other white-collar groups and, among blue-collar and service groups, to have increased in relative importance quite consistently with decreasing skill level. These relationships strongly suggest that, for occupations calling for specialized skills or advanced education, employers tend to rely relatively more heavily on formal channels than in the case of those with less specialized requirements. And, given the direction of occupational changes, this means that formal channels are virtually certain to increase in relative importance in the future.

In interpreting our data on channels of recruitment, it is important to recognize that they clearly do not provide an accurate indication of the

relative importance of the various channels as sources of workers actually hired. Some employers may have tended to hire nearly all their employees through the most important channel, or the first and second most important channels, whereas others may have used all four channels mentioned, as well as some not included in our tables.

Other interesting relationships may also be observed in the tables -- some of them merely confirming results of earlier studies, while some are more novel. For example, there is a tendency for direct hiring to increase more or less steadily in relative importance with decreasing skill level in the case of white-collar groups and blue-collar and service groups, respectively. Private employment agencies play a considerably more important role, relatively, in the recruitment of white-collar workers than of blue-collar workers, whereas the reverse is true for the public employment service (the California Department of Employment), though with a less pronounced difference. The public employment service is rarely mentioned as an important source in the recruitment of professional and managerial workers, whereas private employment agencies figure fairly prominently for these groups. Both play an appreciable role in the recruitment of clerical workers, but with the private agencies mentioned considerably more frequently than public employment offices.

"Recommendations of own employees" was mentioned less frequently by our respondents than might have been expected on the basis of a number of other studies, e.g., the Chicago labor market study to which the above quotation by Albert Rees referred. However, the Chicago data were gathered in a somewhat different manner and related to the actual source from which employers had recruited individual workers included in the sample of workers

studied. Employee referrals would, of course, be expected to play a relatively more important role in a period of labor surplus than in a tight labor market, but the employment rate in the Bay Area in 1967 differed very little from the rate that prevailed in Chicago at the time the Chicago data were gathered a few years earlier.

Probably the most important difference between recruitment channels in the Bay Area and in most other areas in which labor market studies have been conducted is the considerably greater relative importance of unions as sources of workers in the Bay Area. This reflects the comparatively greater penetration of unions into the trade and service industries, but it also is probably attributable to a tradition of emphasis on collective bargaining contract provisions requiring the employer to hire through the union among some unions that have not followed such practices elsewhere.² However, our data indicate that unions are somewhat less important, relatively, as sources of service workers than of blue-collar workers and that they were mentioned only infrequently as important sources for either clerical or sales workers and very rarely as a source of professional and technical workers. This provides further evidence of the relative weakness of unions among white-collar workers, discussed in Section V.

School and college placement services were almost never mentioned as important sources of blue-collar or service workers and quite infrequently as important sources of clerical or sales workers. Only in the case of professional and technical workers were they mentioned fairly frequently, while in the case of managerial workers, school and college placement services figured fairly prominently as sources outside the firm. These results suggest that high schools and junior colleges in the Bay Area have tended, on the whole,

to place little emphasis on the development of placement services. This matter is now being intensively studied in the second phase of the Institute's labor market research program, a study of employment agencies and placement services in the Bay Area.

Variations among the major industry groups in the recruitment channel mentioned most frequently as the most important channel for white-collar workers do not appear to follow any particular pattern, although the appearance of civil service lists as the most important channel in the government sector was, of course, to be expected (Table 6-5). The results in the case of blue-collar workers (Table 6-6) are more interesting, revealing the pervasive tendency to mention unions as the most important source for both skilled and semiskilled workers among private employers. In the case of unskilled workers, direct hiring turned up as the most frequently mentioned leading source in durable goods manufacturing and the California Department of Employment in services, but unions were mentioned most frequently in all other private sectors. In the case of service workers, however, the various major industry groups were almost evenly divided among those mentioning unions, direct hiring, or the California Department of Employment as the most important source.

The more rare and specialized the skill and/or educational requirements of an occupation group, the more the employer is likely to conduct a search that is widespread geographically in his recruitment efforts, as a number of previous studies have shown. Thus, in the recruitment of professional and technical workers, whose specialized skills have been in particularly short supply in recent years, employers were specially likely to report that their recruitment efforts extended beyond the Bay Area to the

Table 6 - 5

Most Important Recruitment Channels Used by Survey Establishments for
White-Collar Workers, by Major Occupation and Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Professional	Man- gerial	Clerical	Sales
Mining and construction	Direct hiring	From within	Private agencies	Direct hiring
Manufacturing				
Durable	Private agencies	"	"	" "
Nondurable	School and college placement agencies	"	"	" "
Transportation and utilities	{ Private agencies From within	"	"	From within
Wholesale trade *	{ Newspaper ads From within	"	"	Recommendations of own employees
Retail trade	{ Direct hiring Private agencies	"	"	Direct hiring
Finance, insurance, and real estate	Private agencies	"	"	{ Newspaper advertising Direct hiring
Services	Direct hiring	"	"	Direct hiring
Government	Civil service	"	Civil service	Not applicable

* Data used on fewer than 15 cases.

Table 6 - 6

Most Important Recruitment Channels Used by Survey Establishments
for Blue-Collar and Service Workers,
by Major Occupation and Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Skilled	Semiskilled	Unskilled	Service
Mining and construction	Unions	Unions	Unions	Unions
Manufacturing				
Durable	{ Unions From within	"	Direct hiring	CDE ^a
Nondurable	Unions	"	Unions	{ Unions CDE ^a
Transportation and utilities	"	"	"	Direct hiring
Trade				
Wholesale*	"	"	"	Unions
Retail	"	"	"	{ Direct hiring CDE ^a
Services	"	"	CDE ^a	Unions
Government	Civil service	Newspaper advertising	Civil service	CDE ^a

*Data based on fewer than 15 cases.

^aCalifornia Department of Employment.

state as a whole, the Western States, the nation as a whole, and even outside the boundaries of the United States (Table 6-7). This was slightly less true for managerial workers, probably because the demand for managerial workers has not been increasing with anything like the rapidity that has been the case for professional workers, and there is less evidence that they have been in particularly short supply. It should be noted that Table 6-7 is based on Part II data and is so designated, since the number of employers completing this Part II table was much smaller than in the case of the table relating to channels of recruitment.

In the case of sales workers, the proportion of employers who reported recruiting beyond the Bay Area was surprisingly large, though not as large as in the case of either professional or managerial workers. This is not as unexpected as it may seem, if one stops to reflect that sales workers are actually quite a heterogeneous group. The sales worker who applies for an entry-level job in a retail store does not require a very advanced level of education or degree of skill beyond that which can be acquired in a short-term training course, but sales workers who are employed by large construction firms, manufacturing firms with highly specialized products, or, say, insurance companies, require a considerable degree of specialized knowledge -- in some cases calling for a degree in engineering or one of the physical sciences.

In the case of blue-collar and service workers, most employers customarily confined recruitment to the Bay Area, with minor exceptions in connection with skilled and service workers. Service workers who were recruited beyond the Bay Area tended to be in certain specialized categories, such as policeman or, say, a French chef. Blue-collar workers recruited abroad reflected largely the efforts of construction companies to hire foreign nationals for offshore jobs or to recruit workers from projects abroad which were nearing completion.

Table 6 - 7

Area in Which Survey Employers
Customarily Recruit Workers
by Major Occupational Group --
Bay Area Employer Policy Survey, 1967
Part II Data

Area	Profes- sional and tech- nical	Mana- gerial	Cleri- cal	Sales	Skilled	Semi- skilled	Un- skilled	Service
All establishments ^a								
Number	126	140	156	77	119	99	106	85
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
City where located	3.2	17.1	27.6	15.6	30.3	32.3	40.6	38.8
Recruitment extended to:								
Bay Area	37.3	35.0	69.2	55.8	60.5	65.7	57.6	55.3
California	11.9	13.7	1.9	6.5	5.0	1.0	--	3.5
Western States	21.4	17.1	--	16.9	1.7	--	--	2.4
United States	23.0	15.0	1.3	5.2	1.7	--	--	--
Beyond United States	3.2	2.1	--	--	.8	2.0	1.8	--

^aAll establishments exclude employers under each major occupational group not employing such workers and employers not providing information. The number of establishments corresponds directly to the number reporting for each occupational group.

Clearly the larger firms, with their sizable personnel departments, found it more feasible to recruit beyond the Bay Area than the smaller firms, as Table 6-8, which relates only to recruitment of professional workers, indicates. A similar situation prevails in the recruitment of managerial workers (data not shown). But in view of the fact that the professional and technical occupation group -- and certain specialized types of workers in other occupation groups -- are the most rapidly expanding sector of the labor force, it is clear that nationwide recruiting is likely to expand in relative importance in the future.

The Public Employment Service

The indications that the California Department of Employment, which operates the public employment service in the state, plays a relatively minor role as a recruitment channel to which employers turn, especially for white-collar workers other than the clerical group, are consistent with the results of many other studies in various parts of the country. And the reasons, in general, for this situation are well known. As the agency which also administers the unemployment insurance system, it must serve unemployment insurance beneficiaries, who are required to register for placement with the public employment service when they apply for unemployment insurance. And, since the least skilled workers are the most likely to become unemployed, it follows that the public employment service is faced with the job of trying to place many relatively unskilled applicants for employment. Its resources for accomplishing this difficult task have always been limited, and the situation has become more difficult in recent years with the increased responsibilities placed on the public employment agencies for playing a role

Table 6 - 8

Area in Which Survey Employers Customarily Recruit Professional
Workers, by Number of Employees --
Bay Area Employer Policy Survey, 1967,
Part II Data

Area	Total	100 to 249	250 to 499	500 to 999	1,000 to 1,999	2,000 and over
All establishments ^a						
Number	265	97	66	48	26	28
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Question inapplicable	52.5	53.6	51.5	64.6	50.0	32.1
City where located	1.5	1.0	--	6.2	--	--
Recruitment extended to:						
Bay Area	17.7	24.7	18.2	4.2	15.4	17.9
California	5.7	6.2	7.6	4.2	--	7.1
Western States	10.2	8.2	10.6	10.4	7.7	17.9
United States	10.9	5.2	10.6	8.3	23.1	25.0
Beyond United States	1.5	1.0	1.5	2.1	3.8	--

^aTotal excludes establishments not employing professional workers and those that did not provide information.

in the development of local manpower programs and screening and referring disadvantaged jobseekers to such programs.

Beyond providing a picture of the relative role of the CDE in the recruitment scene, our study shed a good deal of light on the types of employers that were likely to use the public employment service and their reasons for turning to it or avoiding it.

At this point, it should be noted that "use," for purposes of our survey, was defined as the listing of job openings. Respondents tended to be well informed as to the practice of the company in this respect, but we believe their responses would have been less well informed if our questions had related to the actual referral and placement experience that resulted from the listing of job openings. Nevertheless, it must be recognized that, judging from comments made by our respondents and other evidence, the policy of listing jobs "frequently" did not necessarily mean that workers were frequently referred following such a listing or, if they were, that such workers were frequently hired.

There was a consistent tendency for frequent use of the public employment service to vary directly with size of the establishment (Table 6-9). This may well reflect the fact that the public employment service, with its limited resources, manages to maintain more effective contact with the larger establishments in a community. There were also indications that some of the larger establishments considered it good public relations policy to place job orders with the Department.

However, there was clearly another important factor involved. As we found in Section V, larger establishments were more likely to be in non-unionized industry groups -- especially the finance group and government --

Table 6 - 9

Extent of Use of the California Department of Employment
by Survey Establishments by Number of Employees --
Bay Area Employer Policy Survey, 1967

Employment size	Total		Extent of use		
	Number	Per cent	Frequent	Infrequent	Nonuse
All establishments	309	100.0	55.3	34.3	10.4
Under 250	130	100.0	45.4	37.7	16.9
250 and under 500	73	100.0	53.4	38.4	8.2
500 and under 1,000	50	100.0	64.0	32.0	4.0
1,000 and under 2,000	28	100.0	75.0	21.4	3.6
2,000 or more	28	100.0	71.4	25.0	3.6

than smaller establishments. And there was clearly something of a tendency, though not an entirely consistent one, for frequency of use of the public employment service to vary inversely with the proportion of the establishment's employees covered by a collective bargaining agreement (Table 6-10). Moreover, the smaller establishments were more likely to be required to hire through unions than the larger establishments -- again reflecting the influence of industrial composition rather than size per se.

Variations in frequency of use of the CDE by major industry group were not particularly pronounced and appeared to reflect the influence of the factors already discussed (data not shown). We also found that establishments with personnel departments were more likely to report frequent use of the Department, but this doubtless was related to the relatively greater use of the Department by the larger establishments and by those that were not required to hire through unions.

It should be noted that more than half of our establishments reported frequent use of the CDE -- a proportion somewhat greater than that suggested by our earlier tables relating to most important channels of recruitment. This suggests that at least some of the employers more or less routinely registered job openings with the CDE without regarding it as an important source of recruitment. And, of course, our data do not tell us how many workers were actually hired through the public employer service. In this connection, it is interesting to observe that a recent survey of workers in one of our area's communities indicated that, although a decided majority indicated that applying at CDE offices was one of the methods they used in seeking work, less than 10 per cent had found their most recent jobs through the public employment service.³

Table 6 - 10

Extent of Use of California Department of Employment
by Survey Establishments, by Per Cent of Employees
Covered by Collective Bargaining Agreement --
Bay Area Employer Policy Survey, 1967

Per cent of employees covered	Total		Extent of use		
	Number	Per cent	Frequent	Infrequent	Nonuse
All establishments ^a	229	100.0	54.6	34.1	11.4
Less than 20	8	100.0	75.0 [*]	25.0 [*]	--
20 to 40	16	100.0	56.3	25.0	18.8
40 to 60	25	100.0	48.0	40.0	12.0
60 to 70	23	100.0	65.2	21.7	13.0
70 to 80	44	100.0	63.6	31.8	4.5
80 to 90	64	100.0	51.6	37.5	10.9
90 or more	49	100.0	44.9	38.8	16.3

* Percentages based on fewer than 15 cases.

^a Total excludes establishments not covered by collective bargaining agreements and those not providing information.

One of the most interesting of our findings, however, indicated that frequency of use of the Department tended to vary widely from one local office area to another -- from a low of 37 per cent of the employers reporting frequent use in what we have called Area 10 to a high of 83 per cent indicating frequent use in Area 1 (Table 6-11). Moreover, employers' comments about their experience in recruiting through the CDE tended to be more favorable in the areas in which the proportions reporting frequent use were high. In fact, these area variations were wider than variations related to any of the other factors we have considered and strongly suggest that there may be substantial differences in the quality of service rendered by local offices, which may, in turn, be to some degree related to differences in community labor markets and the characteristics of applicants.

It should be noted that, in order not to reveal the identity of the localities represented in Table 6-11, we have used a numerical area code and have refrained from revealing the total number of establishments in each area (which could provide a clue to the identity of the locality).

No easy generalizations emerge with respect to differences in the characteristics of the communities represented in Table 6-11. The variations in frequency of use from one locality to another were not related in any consistent way to size of the community, its industrial composition, or any other easily identifiable characteristic, although it is perhaps pertinent to observe that the three top-runners were all communities somewhat removed from the large central city areas.

All in all, however, the data do suggest that there may be differences in the quality of service rendered by local offices that are not entirely, or perhaps even to a large extent, explained by differences in community

Table 6 - 11

Extent of Use of the California Department of Employment
by Survey Establishments by Local Office
Area Serving Establishment --
Bay Area Employer Policy Survey, 1967

California Department of Employment local office area	Total		Extent of use		
	Number	Per cent	Frequent	Infrequent	Nonuse
All establishments ^a	309	100.0	55.3	34.3	10.4
Areas: 1		100.0	83.3	16.7	0.0
2		100.0	80.0	10.0	10.0
3		100.0	76.9	23.1	0.0
4		100.0	61.9	33.3	4.8
5		100.0	61.1	33.3	5.6
6		100.0	57.4	32.3	10.3
7		100.0	57.1	28.6	14.3
8		100.0	50.0	33.3	16.7
9		100.0	49.2	37.5	13.3
10		100.0	37.0	51.9	11.1

^aIn those cities served by more than one local office because employment services are offered on the basis of occupation, industry or type of worker, data unavoidably relate to the total complex of offices in the given city. For purposes of the above table, establishment addresses were coded in accordance with the order-holding local office providing services to the establishment.

characteristics. The second phase of our labor market study should shed additional light on this phenomenon.

In view of the critical comments that one tends to hear in employer circles, it is also interesting to observe that, among the reasons given by establishments for frequent use of the CDE, more than half were to the effect that the Department was a good source of workers (Table 6-12). From what has already been said, it is apparent that this type of response was more likely to come from the establishments in localities that ranked high in Table 6-11, although this is based on general impressions gained from the interviews rather than intensive statistical analysis of the relationship between location and favorable comments. Other reasons mentioned with some degree of frequency were "to obtain greater or maximum coverage" or "policy always to list" -- reasons which were noncommittal as to whether satisfactory results were expected or actually experienced. Finally, there were some establishments which indicated that they used the public service because of objections to the fees charged by private agencies or because they sometimes could not obtain workers through other sources.

Responses explaining infrequent or rare use (Table 6-13) were almost equally divided between critical comments with respect to the quality of workers referred by the CDE and explanations indicating that other sources were used or in some cases required to be used (e.g., unions or, in the case of a number of government agencies, civil service lists). In this connection, it should be pointed out that, although unemployed workers belonging to unions that operate union hiring halls are required to register with the CDE when they apply for unemployment insurance, they are not expected to report regularly to the Department while drawing unemployment benefits.

Table 6 - 12

Reasons for Frequent Use of California Department of Employment --
Bay Area Employer Policy Survey, 1967

Reasons for frequent use	All responses
All responses ^a	
Number	213
Per cent	100.0
Good source of workers	54.5
Good source in general -- no occupation specifically mentioned	25.8
White-collar workers, including clerical and sales	8.9
Blue-collar workers	6.6
Unskilled workers	6.6
Specialized personnel, including professional and technical	2.3
Has applicants available	2.8
Knows needs of employer	1.4
Reasons associated with nonuse of other channels	6.5
Objects to payment of fee (to private agency) by the applicant	4.2
Objects to such fee payment by the employer	2.3
Uses to obtain greater or maximum coverage	12.2
Policy of the employer always to list	3.8
Uses a tax-supported public service	3.8
Uses when other sources cannot supply workers	5.2
When civil service lists are not adequate	3.3
When union cannot supply workers	1.9
Uses as a source of minority group applicants	1.4
Other	12.7

^aTotal includes all responses by the 167 establishments reporting frequent use of the CDE; some establishments mentioned more than one reason.

Table 6 - 13

Reasons for Infrequent Use or Nonuse of California
Department of Employment --
Bay Area Employer Policy Survey, 1967

Reasons for infrequent use or nonuse	All responses
All responses ^a	
Number	154
Per cent	100.0
Unfavorable comments	35.4
Is not a good source in general; poor or unsatisfactory results	16.6
Inadequate screening of applicants; sends people without appropriate qualifications	13.0
Not a good source of well qualified or high calibre people	5.8
Uses other sources	32.3
Direct hiring	13.6
Unions	11.0
Advertising	3.2
Private agencies	2.6
Civil Service lists	1.9
No need	8.4
Favorable comments (explaining occasional use)	8.9
Good source of white-collar workers	3.2
Good results in general	1.9
Uses to obtain greater or maximum coverage	1.9
Uses as a source of minority group applicants	1.9
Other	15.0

^aTotal includes all responses of the 142 establishments reporting infrequent or rare use of the California Department of Employment; some establishments mentioned more than one reason.

All in all, the public employment service does not seem to have quite as unfavorable an image in the Bay Area as some comments heard in employer circles would suggest. And this appears to be particularly true in certain localities. The implications of some of our findings for the future of the public employment service will be considered more fully in the concluding section of the report.

Private Employment Agencies

In contrast with the situation prevailing for the public employment service, there was a tendency for frequent use of the private agencies to vary inversely with the size of the establishment (Table 6-14). This was clearly related to several factors: (a) larger establishments were more likely to have personnel departments capable of carefully screening job-seekers applying directly to the firm; and (b) whereas the smaller establishments were more likely to be unionized and to recruit their blue-collar workers through unions rather than the CDE, their white-collar workers were typically nonunionized and were likely to be recruited through private employment agencies.

Stigler has pointed out that low-wage employers are likely to be forced to use high-cost information channels, such as newspaper advertising and private employment agencies, whereas high-wage employers do not have to turn to these channels because they are likely to attract qualified applicants through direct hiring, and there is support for this hypothesis in Ullman's study of the labor market for typists and keypunch operators in Chicago.⁴ However, our study does not provide any clearcut evidence of a

Table 6 - 14

Extent of Use of Private Employment Agencies
by Survey Establishments by Employment Size --
Bay Area Employer Policy Survey, 1967

Employment size	Total		Extent of use		
	Number	Per cent	Frequent	Infrequent	Nonuse
All establishments	309	100.0	48.9	35.3	15.8
Less than 250	130	100.0	57.8	29.2	13.8
250 to 499	73	100.0	53.4	38.4	8.2
500 to 999	50	100.0	36.0	44.0	20.0
1,000 to 1,999	28	100.0	50.0	32.1	17.9
2,000 or over	28	100.0	21.4	42.9	35.7

tendency for the smaller employers in our sample to be low-wage employers of white-collar workers (see Section X). Had we included establishments with fewer than 100 employees, we might have found such a relationship. Rather, our findings suggest that it is probably more economical for the smaller employers in our sample to use such recruitment channels as private employment agencies and newspaper advertising than to maintain their own personnel departments. This would tend to be particularly true, for example, for the smaller construction firms which typically have very few white-collar workers and hire their blue-collar workers through unions.

Variations among major industry groups in the extent to which establishments reported frequent use of private employment agencies were extremely wide -- from 17 per cent in government to 92 per cent in finance, insurance, and real estate (Table 6-15). The small percentage of government establishments using private agencies reflects in large part the influence of statutory or administrative regulations against this type of recruitment. The high percentage of establishments frequently using private employment agencies in the finance group is quite clearly related to the great preponderance of white-collar workers in these establishments, but is somewhat inconsistent with the finding that larger employers are relatively unlikely to use private agencies, since a comparatively high proportion of the establishments in this industry group are quite large. However, finance and insurance establishments, operating in a very tight labor market, tend to use all channels to maximize the exposure of their job orders, particularly in San Francisco. Other variations among major industry groups in the extent of use of private employment agencies appear to reflect complex interactions of

Table 6 - 15

Extent of Use of Private Employment Agencies
by Survey Establishments by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Extent of use		
	Number	Per cent	Frequent	Infrequent	Nonuse
All establishments	309	100.0	48.9	35.3	15.8
Mining and construction	26	100.0	65.4	23.1	11.5
Durable goods	57	100.0	52.6	33.3	14.1
Nondurable goods	62	100.0	41.9	51.6	6.5
Transportation and utilities	27	100.0	40.8	29.6	29.6
Wholesale trade	13	100.0	53.8*	46.2*	
Retail trade	33	100.0	33.3	60.6	6.1
Finance, insurance, and real estate	25	100.0	92.0	8.0	
Services	36	100.0	58.3	30.6	11.1
Government	30	100.0	16.6	16.6	66.8

*Percentages based on fewer than 15 cases.

forces related to differences in size of establishment, extent of hiring through unions for blue-collar workers (which may be associated with relatively little need for a personnel department and a tendency to use private agencies for white-collar workers), and other factors.

Clearly the private employment agencies tended to be highly regarded by the establishments that made frequent use of them, for more than three-quarters of the reasons mentioned for frequent use indicated that they were good sources of workers in general, or of particular groups of workers, such as white-collar workers or professional and technical workers (Table 6-16). Conversely, unfavorable comments about the private agencies played a relatively minor role among reasons cited for infrequent use or nonuse, whereas the most frequently mentioned reason for infrequent use or nonuse was the tendency to use some other recruitment channel, such as direct hiring, unions, or other channels (Table 6-17).

Hiring Through Unions

Almost a half of the establishments in our sample had collective bargaining agreements that required hiring through unions (Table 6-18). However, only a little over a fourth hired exclusively through unions. Outside of the construction industry, longshoring, and establishments in which the Teamsters were represented (a sizable proportion of all establishments in our sample, as we found in Section V), in which collective bargaining agreements required hiring through unions with little or no qualification, establishments tended to be permitted to hire through other channels if the union could not supply workers. Since our survey was conducted in a labor market situation that was relatively tight for nearly

Table 6 - 16
Reasons for Frequent Use of Private Employment Agencies --
Bay Area Employer Policy Survey, 1967

Reasons for frequent use	All responses
All responses ^a	
Number	192
Per cent	100.0
Good source of workers	77.1
Good source in general; no particular occupation group mentioned	13.5
Good screening of applicants	20.8
White-collar workers, including clerical and sales	23.5
Specialized personnel, including professional and technical	9.4
Well qualified or high calibre people	2.6
Knows needs of establishment	4.7
Have applicants available	2.6
Uses to obtain greater or maximum coverage	7.8
Convenient	2.6
Uses when union cannot supply applicants	2.1
Other	10.4

^aTotal responses of the 151 establishments that reported frequent use of private employment agencies; some establishments mentioned more than one reason.

Table 6 - 17

Reasons for Infrequent Use or Nonuse of Private
Employment Agencies --
Bay Area Employer Policy Survey, 1967

Reasons for infrequent use or nonuse	All responses
All responses ^a	
Number	202
Per cent	100.0
Uses other sources	35.2
Direct hiring	12.8
Unions	9.4
Advertising	4.5
Department of Employment	3.5
Referrals of own employees	2.5
School placement agencies	2.5
Unfavorable comments	7.5
Not a good source in general	2.5
Inadequate screening of applicants	2.0
Not a good source of specialized personnel	1.5
Not a good source of white-collar workers	1.5
Objects to payment of fee	16.7
By applicants	9.8
By establishment	6.9
No need	9.4
Prevented by statute or administrative regulation (government agencies)	5.9
Not the policy of the establishment to list	1.5
Favorable comments (explaining occasional use)	14.9
Other	8.9

^aTotal responses of the 158 establishments reporting infrequent or rare use of private employment agencies; some establishments mentioned more than one reason.

Table 6 - 18

Extent of Hiring Through Unions in Survey Establishments,
Covered and Not Covered by Collective Bargaining
Agreements, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	CBA requires hiring through unions						CBA does not require hiring through unions	Not covered by collective bargaining agreement
	Total		Frequency of union hiring					
			Total	Exclu- sively	Fre- quently	Rarely		
	Num- ber	Per cent						
All establish- ments ^a	309	100.0	46.3	26.8	14.6	4.9	30.1	23.6
Mining and construction	26	100.0	88.5	88.5	--	--	7.7	3.8
Manufacturing Durable	57	100.0	33.3	7.0	17.5	8.8	52.7	14.0
Nondurable	62	100.0	53.3	32.3	12.9	8.1	41.9	4.8
Transportation and utilities	27	100.0	55.6	33.4	18.5	3.7	40.7	3.7
Trade								
Wholesale	13	100.0	61.5 [*]	38.4 [*]	23.1 [*]	--	23.1 [*]	15.4 [*]
Retail	33	100.0	63.7	39.4	18.2	6.1	24.2	12.1
Finance, in- surance, and real estate	25	100.0	20.0	16.0	--	4.0	4.0	76.0
Services	36	100.0	52.8	13.9	36.1	2.8	22.2	25.0
Government	30	100.0	--	--	--	--	13.3	86.7

all workers except those that were unskilled or inexperienced, this meant that establishments that were required to hire through unions were turning to other sources more than would be likely in a looser labor market -- to an extent that varied considerably from industry to industry. Outside of construction, the largest proportions of establishments hiring exclusively through unions were in nondurable goods manufacturing, transportation and utilities, and wholesale and retail trade. But within these broad categories, there were differences among more specific industry groups in the extent to which establishments hired through unions.

It is also important to recognize that, in many of the establishments in our survey, there were a number of different unions represented, as was indicated in Section V. In these situations, the provisions of collective bargaining agreements relating to hiring could well vary among the various collective bargaining units. However, if the respondent indicated that his establishment was required to hire through a union or unions, he usually was referring to the leading union or group of unions represented in the establishment.

Another important point to make in this connection is that white-collar workers were not often affected by these arrangements, although there were some cases in which union agreements affecting office workers required hiring through unions. For example, some of the Teamsters' agreements required hiring of office workers in trucking and warehousing establishments through the union. In some cases, also, sales workers, e.g., under contracts of the Retail Clerks International Union, were required to be hired through unions. However, in the predominantly white-collar finance group, for example, the few collective bargaining agreements requiring hiring

through unions applied to relatively small numbers of blue-collar workers employed in the establishments.

A particularly interesting aspect of our results is that establishments located in the central city areas -- San Francisco and the Oakland-Berkeley area -- were much more likely to be required to hire through unions than those in all other parts of the Bay Area combined. The sole exception was construction, in which requirements that the establishment hire through unions were almost universally reported, regardless of the employer's location within the Bay Area. Among the manufacturing establishments, 68 per cent of those located in the central cities reported that they were required to hire through unions, as contrasted with only 26 per cent of those in all other areas. Similarly, among nonmanufacturing establishments -- in all major industry groups except construction, as well as the finance group and government which were largely nonunionized -- 66 per cent of the central city establishments reported being required to hire through unions, as compared with 37 per cent of those located outside the two central city areas. Moreover, even among those establishments outside the central cities that were subject to provisions requiring them to hire through unions, respondents were more likely to indicate that the unions were rarely in a position to supply workers than were the central city employers. The differences in hiring requirements cut across all the unionized major industry groups, but we have combined the nonmanufacturing groups in reporting the results, since the number of establishments in some of the nonmanufacturing groups located outside the central cities was quite small.

This finding, perhaps more than any of our other findings, suggests

that unions were less strong outside the central city areas than within them. Demand and supply relationships undoubtedly helped to explain this difference in union hiring requirements -- as we found in Section II, establishments outside the central cities were considerably more likely to be experiencing rapid expansion of employment and, in some cases, were located in areas which were predominantly middle or upper middle class. It is also true that some of the industries in which union control of hiring has long prevailed -- e.g., longshoring and shipping -- are located practically exclusively in the two large port cities of San Francisco and Oakland. An additional factor may be the reluctance of younger union locals outside the central cities to "take on" the kinds of battles that were required to impose union control over hiring in San Francisco and the Oakland-Berkeley area.

Whatever the combination of factors involved, this result adds to the evidence discussed in Section III suggesting that labor factors have played something of a role in influencing industrial decentralization in the Bay Area. The relatively greater freedom enjoyed by employers outside the central cities to exercise their own control over hiring is almost certainly one of the aspects of a suburban location that appeals to employers, although it is an influence that may not be compelling in relation to the obviously important factors of availability of land and access to the newer forms of transportation.

When asked to comment on their experience in hiring through unions, 29 per cent of the employers hiring through unions indicated that it was generally favorable, while about 35 per cent of the respondents made generally unfavorable comments, and about 30 per cent replied "no comment." Although

we cannot be certain, it seems probable that in most cases in which the employer answered "no comment," his experience had not been particularly favorable but he was cautious about expressing an unfavorable attitude. Thus, it would appear that a majority of the establishments were generally dissatisfied with their experience in hiring through unions. However, in view of the fact that the requirement that an employer hire through a union hampers his freedom to choose his own channels of recruitment, perhaps the most significant aspect of our findings on this point is that as many as 30 per cent made favorable comments. Moreover, accompanying remarks in a number of instances tended to provide rather explicit reasons for satisfaction.

Interestingly, the prevalence of unfavorable comments tended to vary directly with the size of the establishment, whereas favorable comments or "no comment" were considerably more frequent among the smaller than the larger employers (data not shown).

Variations among major industry groups in the pattern of responses were wide, as Table 6-19 indicates, and there is little question that differences in the industrial composition of the size-of-firm groups in our sample -- differences which we have repeatedly had to consider in interpreting our results -- affected size-of-firm variations in responses. Favorable comments were most common in construction and services, relatively

Table 6 - 19

Experience of Survey Establishments in Hiring Through Unions, by
Major Industry Group -- Bay Area Employer Policy Survey, 1967

Nature of experience	Total	Mining and construc- tion	Manufacturing	
			Durable	Nondurable
All establishments ^a				
Number	145	24	18	35
Per cent	100.0	100.0	100.0	100.0
No comment	29.6	33.3	16.7	28.5
Generally favorable comments	29.0	37.5	27.9	34.3
No problems	6.2	12.5	5.6	8.6
Unions cooperative--provide workers promptly	10.4	16.6	16.7	14.2
Employer can reject unqua- lified workers	6.2	4.2	5.6	2.9
Unions provide qualified workers	6.2	4.2	--	8.6
Generally unfavorable comments	35.2	25.0	55.6	28.5
Unsatisfactory, or usually unsatisfactory	5.5	8.4	5.6	5.7
Unions cannot supply workers in sufficient quantity	6.2	--	11.1	5.7
Unions cannot supply re- quired level of skill	4.1	--	16.7	2.9
Unions cannot supply calibre of worker required	15.3	4.2	22.0	11.3
Unions do not screen referrals	4.1	12.4	--	2.9
Other comments	6.2	4.2	--	8.7

^aTotal excludes employers not hiring through unions.

Table 6 - 19 -- continued

Nature of experience	Transportation and utilities	Retail trade	Services	All other industries
All establishments ^a				
Number	15	21	19	13
Per cent	100.0	100.0	100.0	100.0
No comment	46.7	28.5	21.0	38.4*
Generally favorable comments	6.7	19.1	36.9	30.8*
No problems	--	--	--	15.4*
Unions cooperative -- provide workers promptly	--	--	10.5	7.7*
Employer can reject unqualified workers	6.7	4.8	15.9	7.7*
Unions provide qualified workers	--	14.3	10.5	--
Generally unfavorable comments	46.6	38.0	31.6	30.8*
Unsatisfactory, or usually unsatisfactory	13.3	--	5.3	--
Unions cannot supply workers in sufficient quantity	6.7	9.5	5.3	7.7*
Unions cannot supply required level of skill	--	9.5	--	--
Unions cannot supply calibre of worker required	28.6	14.3	21.0	15.4*
Unions do not screen referrals	--	4.8	--	7.7*
Other comments	--	14.3	10.5	--

* Percentages based on fewer than 15 cases.

^aTotal excludes employers not hiring through unions.

prevalent in manufacturing, relatively infrequent in retail trade, and least frequent in transportation and utilities. Positively unfavorable comments were especially prevalent in durable goods manufacturing and transportation and utilities. A study of the pattern of unfavorable responses in these last two groups, in particular, indicates that statements to the effect that the unions were an unsatisfactory source were considerably less frequent than comments to the effect that unions could not supply workers in sufficient quantity or the calibre of worker required. Since both durable goods manufacturing and transportation and utilities were rapidly expanding sectors, it is apparent that demand and supply relationships -- which also tend to affect the tightness of collective bargaining requirements -- played an important role in determining the pattern of responses to this line of questioning.

The comments of employers relating to their experiences in hiring through unions were particularly interesting, especially inasmuch as they did not seem to suggest any very consistent patterns within some of the individual industry groups:

"We have a pretty good relationship. We can hire for half a day, and, if it doesn't work out, we can discharge the man. We can also request individuals by name, and these will 'bump' those on the hiring list ahead of them."
(construction)

"Mainly you take what you can get, although we have good union relations and can request and get former employees."
(construction)

"The union doesn't always send the best qualified man, but rather the one who has been on the waiting list the longest. Very seldom can an employer get a good man by specific request who has worked out well on a previous job."
(construction)

"The worst defect in the hiring hall system in the construction

industry is the fact that men are not required to carry some evidence of physical fitness." (construction)

"We must take everybody sent, but then can lay off poor workers, although we lose a day's work in the process." (construction)

"The company's experience has generally been good except in the clerical area where the union does not always offer competent employees." (food processing)

"We always list jobs with the union, but, generally, the union cannot send a sufficient number to fill all orders." (food processing)

"We hire almost exclusively through the unions, but better workers are obtained from other sources." (food processing)

"For seasonal workers, the unions provide a good service since there is an industry-wide dispatching service. However, they never screen out any questionable people unless they have a surplus of applicants." (food processing)

"It is more and more difficult to get qualified skilled workers through the union." (furniture manufacturer)

"We hire exclusively through the _____. They are cooperative and try to satisfy." (paper manufacturer)

"There are some problems, as the union will send anyone available. The company must prove that it cannot use an inferior applicant, but we have managed." (printing and publishing)

"The unions are a good source of skills and we can use our own judgment in selection." (printing and publishing)

"We hire frequently through the _____ and _____ unions. They cooperate and send good people." (primary metals manufacturer)

"We notify the _____ (union) and others first when there is an opening and see their men, but we are not required to hire them. For electricians and mechinists, unions are the only source." (fabricated metal products)

"We are required to hire through the union if the people they send meet our specifications, but no one ever has, so we hire outside the union." (fabricated metal products)

"We are required only to list with the union. We control the hiring decision." (fabricated metal products)

"The union is usually satisfactory for production workers but not for journeymen--they can't supply the latter as a rule." (fabricated metal products)

"We are required to hire through the _____, but usually they cannot furnish workers." (nonelectrical machinery)

"The union is generally satisfactory as compared with direct hiring." (nonelectrical machinery)

"We are required to hire through the union, but do so rarely. They never have enough people listed to meet our needs." (electrical machinery)

"We encounter difficulties in securing adequate skilled craftsmen such as welders through the union." (transportation equipment)

"We are required to hire through the _____ but can go elsewhere if there are no qualified men available." (transportation and utilities)

"We are required to hire through the _____. Our experience is terrible. The union doesn't screen properly and sends out the unqualified (e.g., a dockman for a driver)." (transportation and utilities)

"We are required to hire through all four unions represented. We have been getting a lot of untrained people, particularly drivers." (transportation and utilities)

"We are required to hire exclusively through the _____. The union encourages discrimination in that they never send a colored person." (wholesale trade)

"We are required to hire through the _____. They rarely can supply an office person, but the dispatcher for the warehousemen is good and almost always sends someone." (wholesale trade)

"We are required to hire through unions and also list voluntarily with several unions who do not require it. Not too many are sent in shortage fields, but in the construction crafts they are glad to send workers as these are choice jobs--indoors and steady work." (retail trade)

"The unions are the best sources for certain skills, such as alteration people, tailors, and stationary engineers." (retail trade)

"Although we at one time hired exclusively through the unions, the practice has been stopped. There was too much of a tendency to take automatically whomever was sent." (retail trade)

"Our demand for food clerks is consistently and significantly heavier than can be supplied by the union, which is unfortunate as only the union can supply experienced people." (retail trade)

"We are required to hire through the _____. We usually can get satisfactory help from the union." (retail trade)

"We are required to hire through the union and generally hire watchmakers and jewelers through their unions, since they are highly specialized and those unions have apprenticeship training programs." (retail trade)

"All jobs covered by our collective bargaining agreements are listed, but if no one is available, we go outside. The _____ union is excellent in its cooperation, but the _____ does no screening." (services)

Difficulties in Recruiting Unskilled and Semi-skilled Workers

In addition to the questions on channels of recruitment, our interview schedule included a series of questions on difficulties in recruiting unskilled and semi-skilled workers. The main objectives of this line of questioning were (a) to determine the extent to which employers encountered difficulty in recruiting workers who required little special preparation for the labor market in a period of economic expansion and declining unemployment and (b) to examine the relative role of wage changes versus

other types of adjustments in employers' reactions to such recruitment difficulties. In interpreting the responses to these questions, it is important to keep in mind the wording of the key questions:

Have you ever found it difficult to recruit within a reasonable length of time the number of workers you wanted to hire?

- a. If yes, were any of these unskilled workers?
- b. If yes, were any of these semi-skilled workers?

Thus the responses were not necessarily related to the labor market conditions prevailing at the time of the interview, but it seems likely that in most cases employers interpreted "have you ever" to refer to their experiences within the last five to ten years.

The great majority of establishments reported that they had not experienced difficulty in hiring semi-skilled or unskilled workers (Table 6-20). This is not surprising in view of labor market conditions generally prevailing in the Bay Area in the 1960's, as described in Section II. And, as would be expected, there was a somewhat greater tendency to report difficulties in recruiting semi-skilled than unskilled workers.

Difficulties in recruiting the unskilled. Only in manufacturing was the proportion of establishments reporting difficulty in recruiting the unskilled above average. This difference was not related in any clear-cut way, as might have been expected, to variations in the proportion of establishments experiencing substantial employment expansion. Moreover, other relationships suggest that location and selection standards were more important than industry group in explaining such difficulties, while size of firm was not a significant influence.

Table 6 - 20
Per Cent of Survey Establishments Reporting
Experience With Difficulty in Recruiting
Semi-skilled and Unskilled Workers,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Unskilled		Semi-skilled	
	Number	Per cent reporting difficulty	Number	Per cent reporting difficulty
All establishments ^a	248	12.1	243	17.7
Mining and construction	25	8.0	25	12.0
Manufacturing				
Durable	53	18.9	55	20.0
Nondurable	60	21.7	61	23.0
Transportation and utilities	23	8.7	24	33.3
Trade	39	--	30	6.7
Services	19	5.3	19	10.5
Government	26	7.7	26	11.5

^aTotal excludes establishments not employing semi-skilled or unskilled workers, respectively. Finance, insurance, and real estate establishments are included in the total but are not shown separately, since very few employed these types of workers.

Undoubtedly the most interesting relationship that turned up in this connection had to do with educational requirements. As we shall find in Section VII, 17 per cent of the establishments employing unskilled workers indicated that they had no educational requirements for the unskilled. None of these establishments reported having encountered difficulty in recruiting the unskilled, as compared with 15 per cent of the establishments having educational requirements calling for less than four years of high school and 18 per cent of the respondents requiring completion of high school. Establishments using selection tests in screening the unskilled were also more likely to report difficulty in recruiting them, but the influence of selection tests was considerably less pronounced than that of educational requirements -- 17 per cent of the establishments using tests reported difficulties in recruiting, as compared with 11 per cent of those not using tests.

Location was also related in an interesting manner to difficulties in recruiting the unskilled. Establishments in Southern San Mateo County and in the Contra Costa-Marin area were considerably more likely than those elsewhere to report difficulties in recruiting the unskilled, whereas the proportions of employers in Northern San Mateo County, Santa Clara County, and Southern Alameda County reporting difficulties were well below average and the percentages of those in our central city areas -- San Francisco and the Oakland-Berkeley area -- were about average (data not shown). These differences appear to be related to variations in characteristics of residential areas, as discussed briefly in Section III. Southern San Mateo County is predominantly an area of middle and upper middle class residential areas, as are Marin County and parts of Contra Costa County. In

Southern Alameda County, Santa Clara County, and Northern San Mateo County, there are large tracts of relatively low-cost housing.

Difficulties in recruiting the semi-skilled. Establishments in transportation and utilities were considerably more likely to report difficulties in recruiting semi-skilled workers than those in other major industry groups, while, again, as in the case of the unskilled, there was some tendency for manufacturing establishments to report such difficulties in above average proportions. These, of course, were the two industry groups in which semi-skilled workers -- operatives in manufacturing and truck drivers in transportation -- were particularly likely to be employed in large numbers.

Again, variations in educational requirements appeared to play a significant role in relation to recruitment difficulties. Among the establishments with no educational requirements for semi-skilled workers, only 11 per cent reported having experienced recruitment difficulties, as compared with 16 per cent of those requiring less than four years of high school and 32 per cent of those requiring high school graduation. Selection tests also played a role, with 24 per cent of the establishments using selection tests in recruiting semi-skilled workers reporting difficulties, as compared with 16 per cent of those not using selection tests.

In general, there were minimal geographical variations in the proportions of establishments reporting recruitment difficulties, except for the fact that the percentage in the Oakland-Berkeley area (26 per cent) was well above average. Although Appendix Table C-9 indicates that the percentage of semi-skilled workers in the Oakland-Berkeley area was not very much smaller than in Southern Alameda County in 1960, there is a pronounced

difference between Berkeley-Albany and Oakland-Emeryville in this respect. The Alameda County Health Survey of 1965 indicated that only 10 per cent of employed male residents of Berkeley-Albany were semi-skilled, as compared with 17 per cent of Oakland-Emeryville employed male residents and 19 per cent of those in Southern Alameda County. There appears to be considerable evidence that skilled and semi-skilled blue-collar workers have been attracted by the types of new housing being built in the more modest-priced suburban tracts, as compared with the substantially older housing available in the central city areas.

Adjustments to recruitment difficulties. In responding to a question relating to how they adjusted to recruitment difficulties, employers were asked to indicate the occupation groups to which their responses related. It became very apparent, in connection with the replies to this question -- as would be expected on the basis of the employment data in Section II -- that the more specialized the educational or skill requirements of an occupation group, the more frequent were the responses indicating that there had been difficulty in recruiting such workers.

Other labor market studies have generally indicated that individual employers have tended to adjust to shortages of workers by intensifying recruitment efforts and lowering selection standards or job requirements rather than by raising wages, although under very tight labor market conditions wage adjustments by individual employers tended to become more common. Our results confirm this general finding but suggest certain patterns of differences in the ways employers react to shortages of various types of workers.

Wage increases, for example, were mentioned relatively more frequently

in connection with professional and clerical workers than in relation to other occupation groups -- undoubtedly for two reasons: (1) these were two occupation groups in which recruitment difficulties were particularly common and (2) employers were comparatively free to determine the timing of wage adjustments for these types of workers since their professional workers were rarely covered by collective bargaining agreements and clerical workers were infrequently covered (Tables 6-21 and 6-22).

Secondly, the lower the education or skill requirements of an occupation group, the more likely was the employer to indicate that he responded to shortages by relaxing selection standards or altering job content. The service occupation group appears to be something of an exception to this generalization, but it must be recognized, as suggested earlier, that this is a very heterogeneous group.

However, the most frequently reported type of adjustment, in the case of all major occupation groups except the unskilled was to intensify recruitment efforts in one way or another.

Severe Recruitment Difficulties

Employers were also asked whether they had ever experienced recruitment difficulties so severe that they were unable to expand production or services because of shortages of workers. Only 11 per cent of the establishments indicated that they had encountered such difficulties, and variations by major industry group in the relative prevalence of affirmative responses to this question appeared to be related to the types of occupations in which these severe shortages had occurred. Shortages of engineers and of skilled metal trades workers were most frequently mentioned, while, in the

Table 6 - 21

Types of Actions Taken by Survey Establishments to Meet
Difficulties in Recruiting White-Collar Workers,
by Major Occupational Group --
Bay Area Employer Policy Survey, 1967

Types of actions	Profes- sional	Mana- gerial	Cleri- cal	Sales
All responses ^a				
Number	248	72	154	33
Per cent	100.0	100.0	100.0	100.0
Relating to compensation	<u>19.0</u>	<u>11.1</u>	<u>20.7</u>	--
Raised wage on job offer	17.0	11.1	17.5	--
Offered attractive monetary fringe benefits	2.0	--	3.2	--
Relating to other conditions of employment	<u>7.6</u>	--	<u>9.0</u>	--
Made nonwage benefits more attractive	1.2	--	--	--
Offered training opportunities if job accepted	4.0	--	5.8	--
Offered part-time job opportunities	2.4	--	3.2	--
Relating to recruitment efforts	<u>55.4</u>	<u>56.9</u>	<u>41.9</u>	<u>45.6</u>
Increased number of channels used	26.7	30.5	24.8	21.3
Extended area of recruitment	25.1	26.4	11.0	24.3
Gave bonus to employees to bring in applicants	1.2	--	3.9	--
Intensified use of existing recruitment channels	2.4	--	2.2	--
Relating to selection standards or job content	<u>13.6</u>	<u>13.9</u>	<u>18.1</u>	<u>21.1</u>
Diluted job content and/or recruited at lesser skill level	4.8	--	7.1	9.0
Relaxed specifications not directly related to job performance	2.8	4.2	6.5	12.1
Lowered educational requirements	6.0	9.7	4.5	--
Relating to present employees				
Expanded training for present employees	--	--	--	--
Upgraded present employees	--	--	--	--
Other	<u>4.4</u>	<u>18.1</u>	<u>10.5</u>	<u>33.3</u>

^aTotal responses of employers mentioning shortages of workers in particular occupational groups. Establishments not employing workers in a given occupational group are excluded, as are those not providing information, but some employers mentioned more than one type of adjustment in the case of some of the occupational groups.

Table 6 - 22

Types of Actions Taken by Survey Establishments to
Meet Difficulties in Recruiting Blue-Collar
and Service Workers,
by Major Occupational Group --
Bay Area Employer Policy Survey, 1967

Types of actions	Skilled	Semi- skilled	Un- skilled	Service
All responses ^a				
Number	135	94	63	36
Per cent	100.0	100.0	100.0	100.0
Relating to compensation	<u>9.6</u>	<u>6.4</u>	<u>9.6</u>	<u>13.9</u>
Raised wage on job offer	7.4	3.2	4.8	13.9
Offered attractive monetary fringe benefits	2.2	3.2	4.8	--
Relating to other conditions of employment	<u>5.2</u>	<u>6.4</u>	<u>7.9</u>	--
Made nonwage benefits more attractive	--	--	--	--
Offered training opportunities if job accepted	5.2	6.4	7.9	--
Offered part-time job opportunities	3.0	--	--	--
Relating to recruitment efforts	<u>54.2</u>	<u>38.3</u>	<u>35.0</u>	<u>47.3</u>
Increased number of channels used	28.3	25.5	25.5	27.9
Extended area of recruitment	21.5	12.8	9.5	19.4
Gave bonus to employees to bring in applicants	2.2	--	--	--
Intensified use of existing recruitment channels	2.2	--	--	--
Relating to selection standards or job content	<u>14.0</u>	<u>31.9</u>	<u>38.0</u>	<u>19.4</u>
Diluted job content and/or recruited at lesser skill level	5.2	10.6	7.9	--
Relaxed specifications not directly related to job performance	4.4	11.7	19.0	11.1
Lowered educational requirements	4.4	9.6	11.1	8.3
Relating to present employees	<u>6.6</u>	--	--	--
Expanded training for present employees	4.4	--	--	--
Upgraded present employees	2.2	--	--	--
Other	<u>7.4</u>	<u>17.0</u>	<u>9.5</u>	<u>19.4</u>

^aTotal responses of employers mentioning shortages of workers in particular occupational groups. Establishments not employing workers in a given occupational group are excluded, as are those not providing information, but some employers mentioned more than one type of adjustment in the case of some of the occupational groups.

case of a few establishments each, medical therapists and technicians, policemen, skilled building trades workers, truck drivers, and draftsmen also figured in these responses. Thus, it is not surprising to find that government agencies, durable goods manufacturers, and construction establishments were likely to indicate in somewhat above-average proportions that they had experienced these difficulties.

In reacting to these shortages, employers frequently resorted to production and supply adjustments, such as delaying deliveries, subcontracting work, establishing priorities for preferred customers, and diverting orders to other units of the organization (Table 6-23). In fact, such adjustments accounted for about a third of the responses. However, attempts to save labor through reorganizing the work or investing in labor saving equipment were also mentioned fairly frequently. Somewhat less prevalent reactions were stepping up training programs, increasing wages in shortage occupations, and reorganizing the job duties so that they could be accomplished by less qualified workers.

Thus, these findings relating to recruitment difficulties, even those of a severe variety, tend to confirm those of other studies which have indicated that employers tend, on the whole, to resort to adjustments other than the raising of wages for the most part in responding to labor shortages.

Recruitment Success

In an attempt to develop information on factors influencing variations in recruitment success among firms, we also asked employers how they would characterize their recruitment efforts, for occupations other than

Table 6 - 23

Types of Actions Taken by Establishments to Resolve Recruitment Difficulties
so Intense That Production or Services Could Not Be Expanded --
Bay Area Employer Policy Survey, 1967

Types of actions taken

All responses^a

Number	104
Per cent	100.4
Production or supply adjustments	33.6
Delayed deliveries, rescheduled or turned away work	12.5
Subcontracted work	10.6
Gave priorities to preferred customers	6.7
Diverted orders to other units of organization	3.8
Labor saving adjustments	17.3
Reorganized work so that same volume of output could be achieved with fewer workers	9.6
Increased investment in labor saving equipment	7.7
Stepped up training program	14.5
Increased wages in shortage occupations	11.5
Reorganized duties of jobs and assigned simpler tasks	9.6
Increased use of part-time workers substantially	2.0
Other steps	10.6

^aTotal excludes employers that did not report severe recruitment difficulties and those that did not provide information. The number of responses substantially exceeds the number of employers reporting since several types of actions were usually taken by the 31 employers encountering difficulties of this intensity.

those chronically in short supply. In other words, here we were seeking to determine how, generally, the establishment viewed its success or lack of success in recruiting.

About three-fifths of our respondents indicated that customarily they experienced a "fair balance" between the number of qualified job applicants and the number of job vacancies. Only 15 per cent reported that they generally attracted far more qualified applicants than they needed for satisfactory selection, while approximately a fourth indicated that they customarily attracted fewer qualified applicants than would permit satisfactory selection (Table 6-24).

Interestingly, government establishments were most likely to indicate they generally attracted an excess of applicants. Although the reasons for this were not readily apparent, it may well be that the relative security of government jobs played a role. Certainly this seems to be true, for example, of laborers' jobs, as suggested in Section VII, and is probably influential, also, with respect to other types of jobs.

Employers in transportation and utilities and in finance, insurance, and real estate were especially likely to indicate that they attracted too few applicants. In the case of the former group, the fact that a very large proportion of establishments experienced substantial employment expansion between 1960 and 1967 probably played an important role in explaining this experience, whereas in the case of the finance group the chief explanation may have been their heavy needs for white-collar workers, who have tended to be in shorter supply than blue-collar workers.

Interestingly, there were no consistent variations by size of firm in the distribution of responses relating to recruitment success.

Table 6 - 24
Degree of Recruitment Success in Survey Establishments by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Success of recruitment		
	Number	Per cent	Attract far more qualified applicants than needed	Fair balance exists between applicants and vacancies	Fewer qualified applicants are attracted for selection
All establishments ^a	307	100.0	15.6	60.3	24.1
Mining and construction	25	100.0	16.0	72.0	12.0
Durable goods	56	100.0	14.3	60.7	25.0
Nondurable goods	62	100.0	8.1	64.5	27.4
Transportation and utilities	27	100.0	18.5	44.5	37.0
Wholesale trade	13	100.0	23.1*	69.2*	7.7*
Retail trade	33	100.0	18.2	54.5	27.3
Finance, insurance, and real estate	25	100.0	12.0	56.0	32.0
Services	36	100.0	11.1	72.2	16.7
Government	30	100.0	33.3	46.7	20.0

^aThe total excludes employers that did not provide information.

* Percentages based on fewer than 15 cases.

For some reason, the proportion of establishments indicating that they attracted far more qualified applicants than needed was relatively higher among those with 500 to 999 employees than among the smaller or larger employers (data not shown). Differences in industry mix between this size group and other size groups did not appear to provide an explanation.

However, there were other factors with which recruitment success was associated. There was some tendency for recruitment success to be reported with relative frequency by the enterprises that indicated they maintained relatively high qualification standards for entry level jobs and by those that had personnel departments. These relationships suggest that such firms were known as good places to work. There was also an association between recruitment success and a decrease in the establishment's employment between 1960 and 1967 -- a not unexpected relationship in view of the probability that establishments that did not have to recruit heavily might be expected to experience relative success.

Among the establishments that indicated they customarily attracted far more applicants than needed, the "good reputation" of the establishment and other reasons relating to the type of establishment were mentioned most frequently as an explanation for success (Table 6-25). This, then, is probably consistent with the suggestion mentioned above that the association between maintaining relatively high qualification standards and recruitment success may reflect the fact that establishments maintaining high qualification standards tend to be known as good places to work. The relationship could also run the other way -- establishments known as good places to work could afford to maintain high standards.

Reasons relating to the availability of labor in the Bay Area also figure relatively prominently in the explanations for recruitment success

Table 6 - 25

Reasons for Degree of Recruitment Success in
Survey Establishments Customarily Attracting
Far More Applicants Than Needed --
Bay Area Employer Policy Survey, 1967

Reasons

All establishments^a

Number	48
Per cent	100.0
Reasons relating to wages and/or fringe benefits	18.7
Establishment provides higher than prevailing wages and/or benefits	12.5
Establishment provides prevailing wages and/or fringe benefits	6.2
Reasons relating to types of establishment	37.6
Good reputation of establishment	25.1
Glamorous or interesting industry or activity	8.3
Other	4.2
Reasons relating to availability of labor	22.9
Good quality of labor or adequate supply because of attractiveness of Bay Area	16.7
Bay Area provides good sources of recruitment	6.2
Favorable environment of establishment	6.2
Good working conditions	8.3
Other	2.1

^aTotal includes all establishments giving reasons for customarily attracting far more applicants than needed. Each establishment gave only one reason.

among this group of firms, while reasons relating to wages and/or fringe benefits assumed third place in comparative importance.

Among the establishments that indicated they experienced a fair balance between job applicants and job vacancies, the distribution of reasons for their relative success was quite similar, except that the availability of labor, good working conditions, and the favorable environment of the establishment assumed somewhat greater relative importance, whereas the other factors were mentioned with somewhat less relative frequency (data not shown).

On the other hand, most of the establishments that were experiencing recruitment difficulties tended to blame their problems on the state of the labor market rather than on characteristics or policies of the establishments (Table 6-26). Much the most frequent response referred to the inadequate supply of workers of the calibre needed or in occupations in which job vacancies existed. In view of the evidence that recruitment difficulty was being experienced especially in industries experiencing rapid growth or needing large numbers of relatively scarce white-collar workers, this type of explanation is not surprising.

However, some of the employers in this group mentioned other factors -- the environment of the establishment, the type of establishment, the working conditions prevailing in the establishment, and union hiring restrictions, in that order of relative frequency.

Types of Labor Market Information Needed in Recruitment

Finally, in connection with recruitment, employers were asked about types of labor market information customarily needed in planning recruitment

Table 6 - 26

Reasons for Degree of Recruitment Success in Establishments Customarily
Attracting Fewer Applicants Than Needed for Proper Selection --
Bay Area Employer Policy Survey, 1967

Reasons	
All establishments ^a	
Number	74
Per cent	100.0
Reasons relating to inadequate supply of workers	64.7
Inadequate supply of workers of calibre needed	40.4
Inadequate supply of workers in occupations in which job vacancies exist	24.3
Reasons relating to environment of establishment	10.9
Undesirable neighborhood	4.1
Other	6.8
Reasons relating to type of establishment	8.1
Not a "glamorous" or interesting industry or activity	5.4
Other	2.7
Reasons relating to establishment's working conditions	6.8
Union hiring restrictions	5.4
Other reasons	2.7
Reasons not reported	1.4

^aTotal includes all establishments giving reasons for customarily
attracting fewer applicants than needed. Each establishment gave
only one reason.

efforts. This was a closed-end question in which five specific types of labor market information, as listed in Table 6-27, were mentioned in the interview schedule.

Of considerable interest is the fact that 35 per cent of the employers indicated they did not need any of these types of information, and the proportion responding in this manner varied inversely with number of employees -- from 45 per cent of those with less than 250 employees to 14 per cent of those with 2,000 and over (data not shown). What this suggests perhaps, more than anything else, is that the smaller employers do not tend to be involved in planning recruitment efforts. When one considers the fact that the smaller employers were most likely to be covered by collective bargaining agreements and to be required to hire through unions, this is not surprising. Moreover, as we have seen, in recruiting white-collar workers, the smaller employers tend to turn to private employment agencies, which to some degree perform their screening for them.

This type of interpretation is supported by the fact that the proportion of employers indicating no need for these types of labor market information was well above average in construction, transportation and utilities, and retail trade -- industry groups in which hiring through unions is particularly prevalent. On the other hand, only a tiny fraction of establishments in nonunionized finance, insurance, and real estate reported that they did not need any of these types of information.

Among the types of labor market information employers indicated they needed, data on current wage rates were most frequently mentioned

Table 6 - 27

Types of Labor Market Information Needed
in Planning Recruitment Efforts,
by Number of Employees --
Bay Area Employer Policy Survey, 1967
(Data are based on five responses of establishments)

Types of labor market information	Total	Less than 250	250 to 499	500 to 999	1,000 to 1,999	2,000 and over
All responses ^a						
Number	424	117	106	75	58	68
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Current wage rates	38.3	48.8	36.8	34.7	34.5	29.4
Labor demand/supply developments in spe- cific occupations	20.0	17.9	19.8	21.3	20.7	22.1
Information concerning comparative adequacy of labor in various geographic areas	16.7	14.5	15.1	17.3	22.4	17.6
General employment trends in the Bay Area and in the state	16.5	17.1	17.0	14.7	13.8	19.1
Modifications in qualifi- cation standards for specific occupations	8.5	1.7	11.3	12.0	8.6	11.8

^aTotal excludes establishments that indicated they did not require any of the designated types of labor market information; total exceeds the number of establishments reporting, since some employers mentioned more than one type of information.

(Table 6-27). Moreover, the relative frequency with which this type of information was mentioned varied inversely with size of firm, suggesting that the larger establishments, which are more likely to have personnel departments, have superior resources for gathering wage data and utilizing the sources of information that are available.

Among the other types of labor market information listed, employers mentioned the need for information on demand and supply developments in particular occupations, information relating to the comparative adequacy of labor in various geographic areas, and data on employment trends in the Bay Area and the state with roughly equal frequency. Least often mentioned in their responses was information relating to modifications in qualification standards for specific occupations, and this was particularly true for the smallest size group.

There were some rather pronounced variations by major industry group in the types of information mentioned most frequently (Table 6-28). Establishments in finance, insurance, and real estate and in retail trade were especially likely to mention data on current wage rates. Since employers in these two major industry groups employ large numbers of white-collar workers, and since our data in Section X indicate that white-collar wage rates tend to vary more than blue-collar wage rates within the area, this pattern of responses suggests that employers may find data on prevailing wage rates for white-collar workers less readily available and quite possibly less adequate than for blue-collar workers.

On the other hand, government agencies were especially likely to mention the need for information on the comparative adequacy of labor in various geographic areas. In view of the fact that government agencies have

Table 6 - 28

Types of Labor Market Information Needed in Planning
Recruitment Efforts, by Major Industry Group --
Bay Area Employer Policy Survey, 1967
(Data are based on five responses of establishments)

Types of labor market information needed	Total	Retail trade	Finance, insurance, and real estate	Government	All other industries ^b
All responses ^a					
Number	424	26	38	54	306
Per cent	100.0	100.0	100.0	100.0	100.0
Current wage rates	38.3	57.8	60.4	27.7	35.6
Labor demand/supply developments in specific occupations	20.0	11.5	15.9	24.1	20.6
Information concerning comparative adequacy of labor in various geographic areas	16.7	11.5	7.9	20.4	17.6
General employment trends in the Bay Area and the state	16.5	11.5	7.9	16.7	18.0
Modifications in qualification standards for specific occupations	8.5	7.7	7.9	11.1	8.2

^aTotal excludes establishments that indicated they did not require any of the designated types of labor market information; total exceeds the number of establishments reporting, since some employers mentioned more than one type of information.

^bThere was little variation in patterns of responses among the major industry groups included in this category.

been especially likely to be involved in recruiting certain types of workers, particularly in the health services, who are in short supply in the Bay Area and must be sought on a nationwide basis, this is not surprising.

When asked whether they found a need for other types of information not specifically mentioned in the closed-end question, only 16 per cent of the employers responded in the affirmative. Items mentioned by these interviewees, in order of relative frequency, were: information on geographic locations in which specific skills or labor surpluses might be found, information on the anticipated number and available supply of college graduates in various disciplines, advance information on impending layoffs or expansions in other establishments, more complete job descriptions for internal use, a better knowledge of the needs of the establishment for specific kinds of workers, and data on existing and planned curricula in colleges. Some of these responses, clearly, reflected the relatively complex problems faced by employers in recruiting professional and managerial workers, whereas others, e.g., information on impending layoffs or expansions in other establishments, indicated a desire for data which would facilitate planning general recruitment to take advantage of impending layoffs or guard against the possible disruptions associated with impending expansions.

As for sources of information found particularly useful, private sources -- particularly the informal or formal exchange of information -- were mentioned considerably more frequently than public agencies (Table 6-29). Among particular private organizations, the Federated Employers of the Bay Area was mentioned most often, while among the

Table 6 - 29

Sources of Labor Market Information Found Useful in Recruitment --
Bay Area Employer Policy Survey, 1967

Sources of labor market information	
-------------------------------------	--

All responses ^a	
Number	355
Per cent	100.0
Private sources	66.4
Informal or formal exchange of information within professional or trade associations	21.4
Federated Employers of the Bay Area	10.4
Informal exchange of information with managers and officials having related responsibilities in other organizations	9.3
Headquarters of the establishment	5.9
Information from own employees	4.8
Informal exchange of information with suppliers, retained advisors, customers, and/or clients	3.7
Private employment agencies	3.1
United Employers, California Metal Trades Association, and/or Western Electronics Manufacturers' Association	2.5
American Management Association	2.0
Internal research of the establishment, based on recruitment experience	1.4
Labor unions	1.1
Chambers of Commerce	0.8
Public sources	24.8
U. S. Department of Labor	11.3
California Department of Employment	11.0
California State Personnel Board	2.5
School and college placement offices	2.0
Other specific sources of information	6.8

^aTotal excludes establishments not providing information; the total number of responses exceeds the number of establishments reporting, since some employers mentioned more than one source of labor market information.

public sources, both the U.S. Department of Labor and the California Department of Employment were mentioned fairly frequently. The emphasis on the informal or formal exchange of information within associations or closely related groups of managers suggests that the types of information available from such sources was more specifically related to the particular problems faced by employers in individual industries than the more general data available from public agencies.

Concluding Remarks

The results of any sample survey of recruitment policies and practices are necessarily influenced by the state of the labor market at the time of the survey and by the manner in which the data are gathered. Patterns of recruitment indicated by our survey were those found in a labor market that was comparatively tight except at the least skilled levels. They also reflected the extent to which employers reported that they "used" various sources of recruitment and how they felt about their experience with those sources, rather than providing data either on the actual proportions of workers recruited from these sources or the proportions of jobseekers who found their jobs through these sources.

With these cautions in mind in interpreting the data, we would suggest that our most important finding in relation to recruitment was the indication that formal recruitment channels were relatively more important than most other surveys have suggested. In part, this result was influenced by the fact that hiring through unions tends to be quite widespread in the Bay Area -- and, to the best of our knowledge, more prevalent in trade and service industries than in most other labor market areas. But it is also

true that many other studies of employer recruitment practices have been focussed heavily on the recruitment of blue-collar workers and in a number of cases have been confined to manufacturing industries. Few employer surveys have gathered comparably comprehensive data on recruitment channels for all major occupation groups in all major industry groups.

In general, we found that, the more specialized the education or training required in a given major occupation group, the more likely formal channels of recruitment were to be used. Thus, in view of the direction of occupational trends, formal channels of recruitment are likely to become relatively more important in the future. Moreover, our data suggest that the chief beneficiaries of these changes are likely to be the school and college placement services and the private employment agencies, rather than the public employment agencies and the unions. And, also in view of the general direction of occupational changes, nationwide recruitment is likely to become relatively more important as time goes on.

Recruitment difficulties had been experienced only in the more specialized and skilled occupations in which labor shortages existed in the area. And, although our results confirm the findings of previous studies that employers tend to respond to recruitment difficulties by intensifying recruitment efforts and relaxing selection standards rather than by raising wages, we found that raising wages for the types of workers in question was fairly prevalent in responding to shortages of the predominantly nonunionized professional and clerical groups, as well as some types of service workers.

As for the more general recruitment experience of the employers -- outside of occupations that were in chronically short supply -- relative

success in recruitment tended to be associated with maintenance of comparatively high qualification standards for entry level jobs and to be attributed to such factors as the generally "good reputation" of the establishment as a place to work. Recruitment difficulties were likely to be found in industry groups that were rapidly expanding and/or particularly likely to employ white-collar workers and tended to be attributed to labor shortages.

Relatively few employers were experiencing difficulty in recruiting unskilled or semi-skilled workers, but, among those who were, some interesting patterns of variation emerged. Difficulties were considerably more likely to be experienced by employers imposing education standards in the selection of these groups, and, to some degree, also, by those requiring selection tests. These results may appear to be somewhat at variance with the indication that recruitment success was associated with high qualification standards for entry level jobs, but it may well be that the explanation lies in the fact that, in responding to our more general question relating to recruitment success in connection with occupations not in chronically short supply, most employers were not thinking primarily in terms of unskilled and semi-skilled workers.

Also of considerable interest was the indication that difficulties in recruiting unskilled and semi-skilled workers were found chiefly in areas which were partially or to a considerable extent unlikely to provide a suitable supply of housing for such workers. There are certain analogies between this finding and some of the patterns of geographical wage differentials within the area to be discussed in Section X.

Footnotes to Section VI

1. Albert Rees, "Information Networks in Labor Markets," Proceedings of the Seventy-eighth Annual Meeting of the American Economic Association (New York: December 28-30, 1965), p. 562.
2. An earlier study by the Institute of Industrial Relations of employer policies also provided evidence on the relative importance of unions as a recruitment channel. See F. Theodore Malm, "Recruiting Patterns and the Functioning of Labor Markets," Industrial and Labor Relations Review, VII (July, 1954), 507-525.
3. Jan Dizard, Patterns of Unemployment in Berkeley, California (Berkeley, California: Survey Research Center, University of California, 1968), Tables 4-8 and 4-11.
4. George J. Stigler, "Information in the Labor Market," Journal of Political Economy, LXX (October, 1962), 94-105, and Joseph C. Ullman, "Inter-firm Differences in the Cost of Search for White Collar Workers" (unpublished doctoral dissertation, Graduate School of Business, University of Chicago, 1965), cited in Rees, op. cit., p. 563.

VII. SELECTION PRACTICES

One of the most firmly established results of earlier employer policy and personnel studies has been the indication that selection practices tend to be considerably more formalized in large establishments with sizable personnel departments than in smaller establishments. Secondly, certain types of employer selection standards, such as educational requirements that may exceed those actually indicated by the nature of the job, especially at lower occupational levels, reduce selection costs by limiting the number of applicants to be subjected to other screening techniques. Thirdly, employer selection standards tend to be relaxed in a tight labor market and stiffened in a loose labor market. In fact, the individual employer -- sensitive to pressures exerted both by the external wage structure and the internal wage structure against wage adjustments initiated at the level of the single firm -- tends to prefer adjustments in selection standards to changes in his wage offers.

In recent years, however, employer selection standards have been subject to growing critical scrutiny on the ground that, especially at the lower occupational levels, education requirements and selection tests that are not clearly relevant to job requirements arbitrarily screen out minority group applicants and other jobseekers with low levels of education and lack of experience in taking aptitude tests.

Thus we were interested, not only in undertaking a careful analysis of the relationship of selection standards to job requirements, but also in obtaining data which would shed light on the manner in which employers had been responding to civil rights and other pressures directed toward modification

of selection standards.

Finally, a central problem in labor market theory has to do with the relationship between wage differentials and selection standards. Is there a tendency for certain firms to maintain both high wages and high selection standards as a means of "skimming the cream" of the available labor supply, whereas at the opposite end of the spectrum there is a group of low-wage employers who can attract only the least prepared and least reliable of jobseekers? Certain earlier studies have suggested that there is such a tendency but have not been based on large enough samples to determine whether size of firm is the chief determinant of an establishment's position in this type of spectrum or whether other characteristics, such as industry or degree of unionization, are also important.¹

Relative Standards for Entry Level Jobs

Before asking employers about specific types of selection standards, we asked a general question as to how they felt their qualification standards for entry level jobs compared with those of other employers in this area engaged in similar work. Not unexpectedly, the establishments in the smallest size group were somewhat less likely to regard their standards as relatively higher than larger establishments, but among the four larger size groups there was little variation in this respect (Table 7-1).

Major industry group variations were quite pronounced but did not follow a clearly identifiable pattern (Table 7-2). The strongly unionized wholesale trade and transportation and utilities sectors were well above average with respect to the proportions reporting relatively high qualification standards, but the manufacturing establishments, also strongly

Table 7 - 1

Qualification Standards for Entry Level Jobs of Survey Establishments
Compared with Standards of Other Bay Area Employers,
Engaged in Similar Work, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Qualification standards		
	Number	Per cent	Generally higher	About the same	Generally lower
All establishments ^a	297	100.0	34.7	63.6	1.7
Less than 250	123	100.0	28.5	69.1	2.4
250 to 499	72	100.0	38.9	59.7	1.4
500 to 999	49	100.0	40.8	59.2	--
1,000 to 1,999	27	100.0	37.0	59.3	3.7
2,000 or more	26	100.0	38.5	61.5	--

^aThe total excludes employers that did not provide information.

Table 7 - 2

Qualification Standards for Entry Level Jobs of Survey Establishments
Compared with Standards of Other Bay Area Employers,
Engaged in Similar Work, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Qualification standards		
	Number	Per cent	Generally higher	About the same	Generally lower
All establishments ^a	297	100.0	34.7	63.6	1.7
Mining and construction	24	100.0	29.2	70.8	--
Durable goods	55	100.0	21.8	70.9	7.3
Nondurable goods	59	100.0	22.0	78.0	--
Transportation, etc.	26	100.0	50.0	46.2	3.8
Wholesale trade	12	100.0	58.3*	41.7*	--
Retail trade	33	100.0	42.4	57.6	--
Finance, insurance, and real estate	24	100.0	41.7	58.3	--
Services	34	100.0	44.1	55.9	--
Government	30	100.0	40.0	60.0	--

* Percentages based on fewer than 15 cases.

^aThe total excludes employers that did not provide information.

unionized, were below average in this respect.

Location may well have been a more important determinant of variations in qualification standards for entry level jobs than either size of firm or major industry group (Table 7-3). Our central city areas -- San Francisco and the Oakland-Berkeley area -- were well above average with respect to the proportions of establishments reporting relatively high standards; San Mateo and Southern Alameda counties (adjacent to San Francisco and Oakland, respectively) occupied an intermediate position; and Santa Clara County and the Contra Costa-Marín area (parts of which are relatively distant from either of the central city areas) included relatively few establishments reporting high standards. These results suggest, as do some of our tables on recruitment difficulties in Section VI, that there was a relatively larger supply of applicants available for entry level jobs, in relation to demand, in the central city areas than in the more outlying areas. Moreover, as was suggested in discussing some of the recruitment tables, the particular characteristics of residential areas apparently played a role in this respect. These results bear a certain similarity to some of the findings of the Rees-Shultz study of the Chicago labor market.²

There was also a positive relationship between high qualification standards and high wage standards. Employers who indicated that their wage levels for white-collar workers tended to be higher than those paid by other Bay Area establishments engaged in similar activities were considerably more likely to report relatively high qualification standards for entry level jobs than other employers (Table 7-4). This is consistent with the hypothesis that some employers maintain policies designed to attract the

Table 7 - 3

Qualification Standards for Entry Level Jobs of
Survey Establishments Compared with Standards
of Other Bay Area Employers Engaged in Similar Work,
by Main Address of Establishment in Bay Area --
Bay Area Employer Policy Survey, 1967

Main address	Total		Qualification standards		
	Number	Per cent	Generally higher	About the same	Generally lower
All establishments ^a	297	100.0	34.7	63.6	1.7
San Francisco County	106	100.0	43.4	55.7	0.9
Oakland-Berkeley Area ^b	60	100.0	40.0	56.7	3.3
Southern Alameda County	37	100.0	29.7	67.6	2.7
San Mateo County	43	100.0	30.2	69.8	--
Santa Clara County	25	100.0	20.0	80.0	--
Contra Costa and Marin counties	26	100.0	15.4	80.8	3.8

^aThe total excludes establishments that did not provide information.

^bFor definitions of these areas, see Table 3-3.

Table 7 - 4

Comparisons of White-Collar Salary Levels in Survey Establishments
by Entry Level Qualifications Standards of Survey Establishments --
Bay Area Employer Policy Survey, 1967

(Comparison of respondent salary level with
other employer levels in similar activities)

White-collar salary levels	Total		Entry level qualification standards		
	Number	Per cent	Generally higher	About the same	Generally lower
All establishments ^a	284	100.0	33.8	64.8	1.4
Higher than other employers	86	100.0	45.3	54.7	--
About the same as other employers	186	100.0	29.0	68.8	2.2
Lower than other employers	12	100.0	25.0 *	75.0 *	--

* Percentages based on fewer than 15 cases.

^a The total excludes employers that did not provide information.

most qualified workers through both high wage levels and high qualification standards. Similarly, the proportion of employers having formal on-the-job training programs who reported relatively high qualification standards was considerably higher (41 per cent) than among employers not having formal on-the-job training programs (29 per cent).

When asked about the reasons for their relatively high qualification standards, nearly all those for whom the question was relevant indicated, in one way or another, that their purpose was to attract highly qualified workers, while a small proportion responded that the reason was the establishment's policy of paying higher than prevailing wages for comparable work.

Educational Requirements

Educational requirements, of course, varied widely with differences in the occupational levels of jobs to be filled. The proportion of establishments requiring at least a high school diploma varied from 81 per cent in the case of professional workers to 10 per cent in the case of service workers, and, for professional workers, the requirement was a college degree in more than three-fifths of the establishments (Table 7-5). Some of the establishments stated preferences rather than requirements, while the statement that an establishment had "no minimum or preferred requirements" generally meant that it was not the policy of the firm to state requirements for individual occupation groups. Such a policy tended to be meaningful chiefly in relation to lower-level jobs and was unlikely to signify the absence of educational requirements, in practice, for higher-level jobs. The proportion calling for some minimum educational level, but less than a high school diploma, varied from less than 1 per cent in the case of professional workers

Table 7 - 5

Minimum and Preferred Educational Requirements of Survey Establishments
in the Selection of Workers by Major Occupational Group --
Bay Area Employer Policy Survey, 1967

Minimum and preferred educational requirements	Major occupational group				
	Profes- sional	Tech- nical	Mana- gerial	Cleri- cal	Sales
All establishments ^a					
Number	240	233	288	306	174
Per cent	100.0	100.0	100.0	100.0	100.0
No minimum or preferred requirements ^b	8.4	9.9	18.1	14.4	16.1
Minimum requirements, but less than a high school diploma	0.8	3.8	9.4	14.4	16.1
Minimum requirements, calling for at least a high school diploma	81.2	79.1	63.5	61.8	59.1
High school diploma	3.7	12.9	13.5	61.8	27.0
Some college, or junior college diploma	5.8	22.8	11.1	--	14.9
Post high school technical or vocational training (including apprenticeship)	4.2	15.0	2.4	--	
College degree	62.5	28.4	34.1	--	17.2
Graduate degree	5.0	--	2.4	--	
Preferred standards	7.1	6.4	8.7	7.8	5.8
High school diploma	--	1.7	0.8	6.8	
Some college, or junior college diploma	--	1.7	1.0	--	2.9
Post high school technical or vocational training (including apprenticeship)	--	--	--	1.0	2.9
College degree	7.1	3.0	6.9		
Other educational requirements	2.5	0.8	0.3	1.6	2.9

(continued)

Table 7 - 5 (continued)

Minimum and Preferred Educational Requirements...

Minimum and preferred educational requirements	Major occupational group			
	Skilled	Semi-skilled	Unskilled	Service
All establishments ^a				
Number	245	237	244	206
Per cent	100.0	100.0	100.0	100.0
No minimum or preferred requirements ^b	18.8	18.1	17.6	17.0
Minimum requirements, but less than a high school diploma	42.9	57.4	65.2	69.4
Minimum requirements, calling for at least a high school diploma	32.6	20.3	13.9	10.2
High school diploma	23.6	20.3	13.9	10.2
Some college, or junior college diploma	--	--	--	--
Post high school technical or vocational training (including apprenticeship)	9.0	--	--	--
Preferred standards	5.7	3.4	2.5	1.9
High school diploma	4.5	3.4	2.5	1.9
Post high school technical or vocational training (including apprenticeship)	1.2	--	--	--
Other educational requirements	--	0.8	0.8	1.5

^aThe total excludes employers that do not employ some occupational groups and employers that did not provide information.

^bAs indicated in the text, "no minimum or preferred requirements" signified a policy of not stating requirements for individual occupation groups and did not necessarily imply the absence of requirements, in practice, for higher level jobs.

to 83 per cent in the case of unskilled workers.

One perhaps surprising result was that only 36.5 per cent of the establishments required a college degree or more in the case of managerial workers. Actually, many of the comments made in the interviews indicated that policies relating to managerial workers were deliberately designed to encourage promotion to the managerial hierarchy from lower-level jobs, as well as the recruitment of college graduates for executive positions. In fact, we were informed in a good many cases that formal management trainee programs included both of these types of workers.

Variations by major industry group and by size of firm were investigated only for clerical workers and unskilled workers. In the case of clerical workers major industry group variations were not found to be very significant, but there was a clear tendency for the proportion of establishments requiring at least a high school diploma to vary directly with size of firm (data not shown). As we found in the previous section, the smallest establishments were least likely to have personnel departments and more likely to recruit white-collar workers through private employment agencies, which to some extent did their screening for them, while the largest establishments, with their personnel departments, undoubtedly were more inclined toward formal selection standards.

In the case of unskilled workers, construction establishments and those in retail trade were somewhat less likely than those in other major

industry groups to have no minimum or preferred requirements. There was also a tendency for the proportion of firms with no minimum requirements to vary inversely -- though not quite consistently -- with number of employees (Table 7-6). Moreover, establishments in the smallest size group were much less likely to require a high school diploma than the larger establishments. Establishments with collective bargaining agreements -- often required to hire blue-collar workers through unions, as we found in Section VI -- were somewhat more likely to have no minimum or preferred educational requirements for unskilled workers (19 per cent) than those with no collective bargaining agreements (9 per cent). Thus the tendency for educational requirements to be more prevalent in the larger firms was related to the fact that they were less likely to be covered by collective bargaining agreements (Section V) and undoubtedly was also related to the fact that they were more likely to have personnel departments, which have a tendency to impose more formal selection standards.

Employers requiring a high school diploma for unskilled or service workers were asked about their reasons for this practice. The most frequently mentioned reason -- accounting for nearly a third of the responses -- was that high school graduation would tend to provide evidence of promotional potential. Other reasons, in order of frequency with which they were mentioned were that it would provide an indication of (1) ability to complete assignments, (2) ability to read and to understand orders and procedures, (3) motivation, (4) adaptability to training, and (5) character (data not shown).

Some of the comments volunteered by employers indicated interesting reasons for not requiring a high school diploma, for example, the following:

"We find that men who have not completed high school make better driver salesmen than those who have (probably because

Table 7 - 6

Minimum Educational Requirements for Unskilled Workers,
by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		No minimum or preferred requirements	Minimum requirements less than high school	High school graduation or other ^b
	Number	Per cent			
All establishments ^a	244	100.0	17.6	65.2	17.2
Less than 250	104	100.0	26.0	64.4	9.6
250 to 499	57	100.0	10.5	68.4	21.1
500 to 999	40	100.0	10.0	65.0	25.0
1,000 to 1,999	20	100.0	20.0	60.0	20.0
2,000 and over	23	100.0	8.7	65.2	26.1

^aTotal excludes establishments not employing unskilled workers and those that did not provide information.

^bIncludes requirements, in a few cases, for post high school technical or vocational training, and a few cases in which a high school diploma was preferred, but not required.

we get the less motivated high school graduates as salesmen). Moreover, answers to questions on the application form demanding a sort of 'blue sky' optimism about earnings expectations, etc., are highly predictive. But the absolutely critical question is, 'are you in need of a salary'? A yes answer on this indicates the good salesmen." (food processing)

In view of widespread interest in educational requirements for managerial workers, we also asked several questions relating to the particular types of college training preferred. Very few of our respondents indicated that they attempted to select, as potential managers, graduates from any particular colleges, business schools, or other institutions of higher education. There was, however, a decided tendency among the establishments requiring a college degree to prefer a degree in business administration or engineering over such majors as the natural sciences or humanities (Table 7-7). These results are generally consistent with those of a nationwide study conducted a decade ago,³ and it appears likely that technological developments of the last decade -- especially the increasing tendency to use computers to provide information and analysis relating to managerial decision-making -- may well have tended to strengthen preferences for degrees in business administration and engineering. In fact, the preferences for engineering and "bus ad" majors often expressed the employer's belief that the completion of these majors, more than others, was evidence of a commitment to the business community, an understanding of modern technology, or a demonstration of various work habits and other characteristics relevant to the selection decision.

The Use of Aptitude or Other Selection Tests

Nearly three-fifths of the establishments used aptitude or other tests in the selection of clerical workers, but their use was considerably

Table 7 - 7

Majors or Courses of Study Preferred by
Survey Establishments for Potential Managers --
Bay Area Employer Policy Survey, 1967

All establishments ^a	
Number	134
Per cent	100.0
Business administration	41.0
Engineering	30.6
Natural sciences	10.5
Humanities ^b	8.2
Major "providing background appropriate to the job"	6.0
Other majors or courses of study	3.7

^aThe total excludes employers not requiring a college degree for managers, and employers not providing information. The number of responses exceeds the number of establishments as some employers mentioned more than one preference.

^bHumanities include mathematics majors.

less common in the selection of workers in other occupation groups, ranging from about 22 per cent in the selection of managerial workers to about 38 per cent in the selection of sales workers (Table 7-8).

Size of firm was clearly an important determinant of the use of tests in the case of both clerical workers and unskilled workers (Table 7-9). The larger firms are more likely to have personnel departments, as we have seen, not only equipped to handle tests in many cases but also directed by personnel managers trained in the use of selection standards. The probable reasons for the less frequent use of tests in smaller establishments were undoubtedly similar to those we commented on in connection with educational requirements — smaller establishments were more likely to recruit their clerical workers through private employment agencies, which frequently administer clerical tests, while unskilled workers tended to be recruited through unions.

There were also wide variations by major industry group in the use of selection tests. Although the differences were related to some extent to variations in the size-of-establishment composition of the major industry groups, they were also influenced by differences in the extent to which hiring through unions was required. In construction, for example, in which hiring through unions was the prevailing practice, only 19 per cent of the establishments used selection tests in the case of clerical workers and none in the case of unskilled workers. Similarly, in retail trade, where hiring through unions was somewhat prevalent, only 39 per cent of the establishments used tests in selecting clerical workers and only 18 per cent in employing unskilled workers. In the case of clerical workers, as we have seen there were relatively few establishments that were required to hire through unions, but, if a large proportion of all employees were hired

Table 7 - 8

Extent of Use of Aptitude or Other Tests by Survey Establishments
in Selection of Workers by Major Occupational Group --
Bay Area Employer Policy Survey, 1967

Major occupational group	Total		Uses tests	Does not use tests
	Number	Per cent		
Professional and technical	258	100.0	31.8	68.2
Managerial	303	100.0	22.4	77.6
Clerical	305	100.0	59.0	41.0
Sales	177	100.0	38.4	61.6
Skilled	244	100.0	31.6	68.4
Semiskilled	238	100.0	29.8	70.2
Unskilled	244	100.0	27.0	73.0
Service	206	100.0	23.3	76.7

^aThe total for each occupational group excludes employers not employing such workers and employers not providing information.

Table 7 - 9
Per Cent of Survey Establishments Selecting
Clerical Workers and Unskilled Workers
by Use of Aptitude or Other Tests,
by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Clerical workers	Unskilled workers
All establishments ^a	59.0	27.0
Less than 250	43.4	19.4
250 to 499	59.7	25.9
500 to 999	73.5	37.5
1,000 to 1,999	81.5	36.8
2,000 and over	82.1	33.3

^aTotal excludes establishments not providing information.

through unions, as was predominantly the case in construction, the establishment was most unlikely to have a personnel department to handle the relatively minimal problem of selecting its white-collar workers, and, lacking a personnel department, an establishment would be most unlikely to be in a position to administer selection tests.

On the other hand, the proportion using selection tests for clerical workers was especially high in finance, insurance, and real estate (96 per cent), in which establishments not only tended to be large but also employed large numbers of clerical workers. Government agencies were also relatively likely to use tests in the selection of clerical workers (70 per cent). In the selection of unskilled workers, the proportion of establishments using tests was especially high (58 per cent) in government, about average in most of the other major industry groups, and relatively low in services, and, as we have seen, in construction and retail trade. Although there has been a good deal of civil rights pressure on government agencies to eliminate the use of tests in the selection of unskilled workers, where they seem especially unrelated to job requirements, it is also true that unskilled jobs in government agencies are much sought after, since they tend to be relatively secure, and to pay quite well, especially on an annual basis, as compared with the less steady unskilled jobs in a number of sectors of private employment. When the City of San Francisco advertised the availability of one laborer's job several years ago, a photograph appeared in a leading newspaper the following morning showing a hundred or more men lined up outside City Hall at six o'clock in the morning to apply for the job. Thus personnel directors in government agencies undoubtedly find selection tests a convenient means of screening the large numbers of applicants for

these jobs. Moreover, public agencies are especially vulnerable to charges of discrimination, and the use of selection tests does have the advantage of providing a seemingly objective basis for rejection. At the same time, there has been a tendency in at least some government agencies in recent years to modify their selection tests in an attempt to make them more free of "cultural bias."

We also found that single unit establishments were considerably less likely to use selection tests than branches or headquarters units of multi-unit firms. For example, in the case of clerical workers, only 45 per cent of the single unit establishments used selection tests, as compared with some 60 to 65 per cent among the other types of units. Moreover, a good many of the single unit establishments that used tests in the selection of clerical workers were either hospitals or government agencies. In the case of unskilled workers, it was the branch establishments that stood out as the group most likely to use tests, with 34 per cent reporting their use, as compared with only 16 per cent of the single unit establishments, 18 per cent of the headquarters units, and 23 per cent of the regional or divisional headquarters. Some of the comments of interviewees in branch establishments indicated that headquarters not only prescribed the use of tests but also specified cut-off points and tended to oppose any change in these practices.

Employers were also asked about their reasons for using or not using selection tests. Their responses were analyzed only for professional, clerical, and unskilled workers (data not shown). About a third of those using tests in the case of professional and technical workers indicated that they were designed to test suitability and/or aptitude for the job, while others

gave such reasons as "predictive of success" or "adds additional dimension to screening process." The most frequently mentioned reason for not using tests was "not considered practical or necessary," while other reasons mentioned, in order of frequency, were "employment agencies provide testing service," "civil service provides testing service," and "evaluation of previous work record and/or information from interview considered sufficient." It will be recalled that educational requirements were particularly prevalent in the case of professional workers, and undoubtedly many employers felt that records of educational performance and previous experience provided sufficient evidence of qualifications, along with personnel interviews, references, and other evidence.

The use of tests in the selection of clerical workers tends to be somewhat less controversial than for many of the other occupation groups, since typing and shorthand tests appear to be clearly related to job performance. In reporting their reasons for using tests, most employers gave the obvious response -- "to test shorthand and typing abilities" or simply to "test typing ability." On the other hand, in the light of what we have learned about the use of private employment agencies by smaller establishments in the recruitment of clerical workers, it is scarcely surprising to find that "employment agency tests for establishment" was the most frequently cited reason for not giving tests. Other reasons, in order of relative frequency, were "giving of tests not considered practical or necessary," "evaluation of previous work record and/or information from interview considered sufficient," "civil service provides testing service," and, in a few cases, "union tests for establishment."

In view of the controversy over the suitability of using tests in

the selection of unskilled workers, particular interest attaches to the reasons given by the employers that did use them. Most responses involved such reasons as "to test mechanical aptitude or skills," "to test suitability and/or aptitude for the job," "predictive of success," and the like. Well over a third of the reasons given for not using them were to the effect that "giving tests was not considered practical or necessary." However, the fact that some other agency provided a testing service -- employment agency(ies), union(s), or the Civil Service -- also accounted for well over a third of all the responses.

In response to a question as to how much weight was given to tests, the employers using tests were almost equally divided between those who indicated that the applicant must achieve at least the minimum passing score and those who responded that the test scores were evaluated along with all other information on the applicant from interviews, references, and so on. In some cases the responses suggested that in actual practice the test scores tended to receive very little weight. One of the most interesting of these responses was the following:

"We test only for clerical workers. The Personnel Manager gives the test results heavy weight, but individual supervisors have the final say and they don't give the test scores much weight."

Employers were also asked whether they had ever considered modifying or eliminating aptitude tests "to encourage the employment of persons whose limited or non-English speaking background hampers the test performance." Although only about 18 per cent of the employers responded in the affirmative to this question, this proportion compares quite favorably with the percentages of establishments actually using tests for most groups of workers.⁴ Only 27 per cent of the establishments were using tests, for

example, in the selection of unskilled workers and only 23 per cent in the case of service workers -- the two groups for which aptitude tests might seem to be least clearly related to job requirements. The employers indicating that they had considered modifying tests were well distributed among major industry groups, except for construction, in which very few employers used tests. And, although large establishments were disproportionately represented, we have found, of course, that large establishments were particularly likely to use tests.

The responses to this question did not indicate whether the establishment had actually modified its tests or was merely considering doing so, except insofar as comments volunteered by the respondents shed light on this question. Both with respect to the weight given tests and the question of modifying tests, the comments of interviewees were illuminating:

"We give tests only for managerial, clerical, and sales workers. They have been modified. We now give special tests for such groups." (food processing)

"We have considered modifying our tests, but rejected the idea, as the nature of the jobs requires ability to read, write, and do elementary calculations." (printing and publishing)

"We have considered modifying our tests. The Psychology Department at Corporation headquarters has been looking at our testing program. We are considering using the SRA non-verbal test for the above reason." (chemicals)

"We have considered modifying our tests, but the policy hasn't changed, since it is hard for the chemical industry with operations becoming more complex." (chemicals)

"The corporation has not considered modifying tests, but I would like to. The Wonderlic is given to four white-collar groups. The corporation IR people believe it shows ability to organize thoughts quickly, but I think it is very poor." (stone, clay, and glass)

"We give tests to all employees but haven't found them

very useful and very little weight is given to them. We have not considered modifying them, because it is division policy that they be given. The results can be ignored if there is a language problem." (primary metals)

"We give tests to skilled and semi-skilled--they are used primarily in upgrading. We have not considered modifying them but simply ignore the test in the case of non-English speaking people." (fabricated metals)

"We give tests to all applicants. The cut-off points set by headquarters are observed absolutely except in hard-to-fill jobs." (fabricated metals)

"Tests are given to all employees except managerial, but if a person is from a low economic area, that is taken into consideration." (electrical machinery)

"No Negroes have been barred through failure to pass tests--we have instructions out to get in touch with headquarters when Negroes fail, so that the matter can be re-evaluated." (transportation and utilities)

"We give tests to all employees. The Wonderlic test is given very little weight, but the drivers' road test is given heavy weight." (transportation and utilities)

"We are about to participate in a study which is to revalidate the test we use and try to determine if it is 'culture proof.' Thus, for a time we will be accepting applicants without knowing what their scores are." (retail trade)

"We have not considered modifying our tests. The Negroes take the tests just like everyone else but orders are to hire them whether they pass or not." (insurance company)

"We have not considered modifying our tests. The written word is too important in our work except perhaps in connection with janitors." (insurance company)

"We have considered modifying our tests. A non-verbal test is used to select for the aide and orderly program." (hospital)

"We have checked out our tests with the FEPC and have modified some." (special district)

Minimum and Maximum Ages

One of the sections of our survey that did not yield very illuminating results related to age requirements in selection. Employers were asked whether they had minimum and maximum age limits in connection with the selection of workers in the various major occupation groups. The responses to these questions were of limited value, because most of the answers were related to legal requirements in effect in California. The great majority of employers indicated that, for each of the major occupation groups, the minimum age was 18, and the reason given was "legal minimum." Work permits are required in the state for 16 and 17 year olds, and there are other provisions of the state labor code which restrict the employment of minors, such as a prohibition on their employment in proximity to moving machinery.

The problems involved in connection with this question did not appear during the pilot interviews, and we were too far along in our interviewing to introduce changes when we became aware of the deficient results.

There is little doubt that we would have obtained more meaningful results if we had asked employers whether they customarily avoided hiring persons below a given age and perhaps, also, what they regarded as the problems involved in employing teenagers. Certainly many comments made during the interviews tended to substantiate the widespread impression that there is a scarcity of career job opportunities for youth under 21 years of age. Employers in retail trade, as well as in other industries, sometimes commented that their former practice of hiring young people directly after high school graduation was no longer followed. Among the reasons given by our interviewees for this change in practice was the lack of sound

basic training (generally meaning arithmetic skills) and the lack of work motivation found to be characteristic of high school graduates without previous work experience. Others suggested that two years of post high school training of a vocational nature was definitely now required in an occupation for which a high school education was once sufficient. There were also employers who hesitated to hire young men for unskilled or semi-skilled work until some other employer had inculcated the work disciplines involved in a first job.

Some employers also expressed preferences for hiring older women whose clerical skills might be superior to those of young women entering the labor force and who, in any case, would be less likely to quit for reasons of domestic origin. This appears to represent something of a change in attitude as compared with the results of an Institute survey conducted in the middle 1950's when a substantial proportion of employers indicated that they followed a practice of avoiding hiring clerical workers above the age of 35 or thereabouts.⁵

There were also specialized legal obstacles to the hiring of youth under age 21 for certain types of jobs -- e.g., when a special driver's license was required, or when liquor would be served by the employee.

Our question about maximum age limits encountered a similar problem, in view of the fact that state legislation prohibiting age discrimination in hiring has been in effect in California since 1961. Although the legislation is weak, particularly with respect to its enforcement provisions, the mere fact of its existence tended to inhibit employers from mentioning an age lower than 65 as a definite upper age limit. Again, we would have obtained more meaningful results had we asked employers about the problems

involved in hiring older persons. Although some employers did mention an age lower than 65, the great majority either gave age 64 or 65 as the maximum age limit or indicated that they had no maximum limit because it was illegal. Because many of these employers may actually have avoided hiring workers above ages 45 or 50, our data with respect to the proportions mentioning ages lower than 64 or 65 are not presented, since they would be misleading.

Again, as in the case of minimum age limits, some of the comments were illuminating. For example, an upper age limit of 35 for professional and managerial workers was sometimes mentioned and tended to reflect the existence of a professional or managerial executive development program. Such a practice also was explained, in some instances, on the basis of the desire to recruit and select a constant flow of new degree-holders in certain fields in which curriculum content was changing at a rapid rate, as in some of the scientific and engineering specialities. On the other hand, some establishments indicated an entirely contrary practice of deliberately seeking physicists and other types of scientists with specific types of experience after they had reached the compulsory retirement age in effect in some other company but were still available for work.

Somewhat similar was the practice of some retail trade employers who hired superannuated personnel upon their retirement from other establishments, in the hope that they would bring their "following" of customers with them. In durable goods manufacturing, moreover, some employers reported a practice of hiring bench machinists who were in their late seventies but, nevertheless, possessed the requisite skills and were in sufficiently good physical condition to perform effectively on the job.

This finding is, of course, consistent with the results of many other studies which have indicated that aging workers with specialized skills that were in short supply were much less likely to encounter age discrimination in hiring than unskilled or semi-skilled blue-collar workers.

Moreover, in the case of blue-collar workers, some employers reported maximum age limits in the late sixties or at age 70, reflecting prohibitions against lower maximum age limits in some collective bargaining agreements. On the other hand, low maximum age limits were occasionally mentioned in relation to blue-collar occupations that were physically demanding or involved hazards. This, again, is consistent with the results of other studies of age discrimination in hiring.

Police Records

The arbitrary practice of refusing to hire anyone with a police record has increasingly been questioned in recent years, particularly in view of the frequency with which juveniles become involved in driving offenses and other minor offenses resulting in a police record. Thus we were interested in determining how rigidly employers banned the hiring of persons with any type of police record.

Interestingly, there was a good deal of evidence in the comments made in response to this line of questioning that many, if not most, of the employers in our sample had given their practices with respect to police records a recent and searching review -- sometimes in response to the appeals of concerned agencies, such as parole boards and civil rights organizations.

Since our questions were asked with respect to the various major

occupation groups, the results will be presented in that manner. However, there tended to be relatively little variation in the practices of employers with respect to occupation groups, as Table 7-10, which presents our results for four selected groups, suggests.

The most significant aspect of our results, clearly, is that only a small proportion of employers indicated that the existence of a police record precluded hiring, ranging from about 12 per cent in the case of unskilled workers to about 19 per cent in the case of professional workers. Some employers indicated that the existence of a record was not known, either because they did not inquire or because a union was the source of recruits. Others indicated that the recruit was evaluated by a bonding agent or security officer.

However, three-fifths or more of the respondents indicated that the existence of a police record did not necessarily preclude hiring, and most of these indicated that they would evaluate the record. There were some significant variations by major industry group with respect, for example, to professional and technical workers, which appeared to be related to the extent to which employees would be likely to be handling money or responsible for the administration of activities involving financial transactions (Table 7-11). An absolute ban on hiring professional and technical workers with police records, for example, was considerably more common in finance, insurance, and real estate than in other major industry groups, and was somewhat more common in trade and services than the overall average. It was also relatively common in government, but, on the other hand, there were no government agencies that reported that they did not inquire into the existence of a police record, while seven-tenths of the government

Table 7 - 10

Extent to Which Existence of Police Record Affects Hiring,
for Selected Occupation Groups --
Bay Area Employer Policy Survey, 1967

Extent police records affects hiring	Profes- sional workers	Clerical workers	Unskilled workers	Service workers
All establishments ^a				
Number	260	305	247	207
Per cent	100.0	100.0	100.0	100.0
Existence of record not known	10.4	11.8	16.6	14.0
Employer does not inquire	10.4	11.8	10.5	10.1
Existence of record not known, as union is source of recruits	--	--	6.1	3.9
Recruit is evaluated by bonding agent or security officer	8.1	7.9	3.6	4.8
Existence of record does not necessarily preclude hiring	60.4	61.4	63.9	63.4
Employer will evaluate record	40.0	41.0	44.5	41.1
Employer will consider nature of offense and age at which committed	14.6	15.1	15.4	18.4
Employer will evaluate record in relation to kind of job to be filled	4.6	4.3	4.0	3.9
Employer inquires, but affir- mative response does not necessarily affect hiring	1.2	1.0	--	--
Existence of a record pre- cludes hiring	18.8	14.4	11.7	17.9
Any record	9.2	8.5	4.9	8.2
Narcotics offense	3.1	2.6	2.8	3.9
Conviction for a felony	4.2	3.6	4.0	3.9
Theft	2.3	2.0	--	1.9
Other	1.9	1.3	4.0	2.4

^aThe total excludes establishments not providing information and those not employing professional workers, unskilled workers, or service workers, respectively. All establishments employed clerical workers.

Table 7 - 11

Extent to Which Existence of Police Record Affects Hiring of
Professional and Technical Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Extent police record affects hiring	Total	Construc- tion; manufac- turing	Transpor- tation and utilities	Trade and ser- vices	Finance, insur- ance, and real estate	Govern- ment
All establishments ^a						
Number	260	129	18	61	22	30
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Existence of record not known	10.4	16.3	5.6	6.6	4.5	--
Employer does not in- quire	10.4	16.3	5.6	6.6	4.5	--
Union is source of recruits	--	--	--	--	--	--
Recruit is evaluated by bonding agent or security officer	8.1	16.3	--	18.0	9.1	3.3
Existence of record does not necessarily preclude hiring	60.4	66.0	77.9	50.8	40.8	70.0
Employer will evaluate record	40.0	45.0	55.6	24.6	13.6	60.0
Employer will consider nature of offense and age at which committed	14.6	14.0	16.7	18.0	13.6	10.0
Employer will evaluate record in relation to requirements of job	4.6	4.7	5.6	3.3	13.6	--
Employer inquires, but record does not neces- sarily affect hiring	1.2	2.3	--	4.9	--	--
Existence of record pre- cludes hiring	18.8	18.7	16.7	29.6	45.3	26.6
Any record	9.2	5.4	5.6	16.4	22.7	6.7
Narcotics offense	3.1	0.8	--	6.6	--	10.0
Conviction for a felony	4.2	3.9	11.1	3.3	4.5	3.3
Theft	2.3	4.7	--	3.3	13.6	3.3
Other	1.9	3.9	--	--	4.5	3.3

^aThe total excludes establishments not providing information and those not employing professional and technical workers.

agencies -- a relatively high proportion -- indicated that they would evaluate the record. Local government agencies indicated that a police record would require exceptionally careful scrutiny in the case of law enforcement officers, while both public and private hospitals were particularly sensitive to narcotics offenses.

Variations were somewhat similar with respect to unskilled workers (Table 7-12), except for the fact that a relatively high proportion of construction employers indicated that the existence of a police record would not be known to them. This difference was largely explained by the fact that many of these employers reported that unions were the source of recruits.

Although Table 7-10 suggests that employers with relatively rigid practices in relation to a given major occupation group also follow the same practices with respect to other major occupation groups, Tables 7-11 and 7-12 yield a somewhat different impression. The pattern of major industry group variations with respect to professional workers was sufficiently different from that with respect to unskilled workers as to suggest that there is some tendency to relate policies to the requirements of various types of jobs. In any case, our results do seem to indicate that the predominant tendency has become one of refraining from arbitrary exclusion of any job applicant with a police record.

We also found a decided tendency for the largest establishments to follow the most flexible policies. In the case of unskilled workers, for example, in our largest size group -- with 2,000 or more employees -- 87 per cent of the respondents indicated that they would evaluate the record, whereas in all the smaller size groups, this proportion did not deviate

Table 7 - 12

Extent to Which Police Record Affects Hiring of
Unskilled Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Extent police record affects hiring	Total	Con- struc- tion	Manu- fac- turing	Transpor- tation and util- ities	Trade, finance, and services	Govern- ment
All establishments ^a						
Number	247	25	113	23	60	26
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Existence of record not known	16.6	48.0	16.9	17.4	10.0	--
Employer does not in- quire	10.5	16.0	14.2	8.7	6.7	--
Union is source of re- cruits	6.1	32.0	2.7	8.7	3.3	--
Recruit is evaluated by boding agent or security officer	3.6	4.0	0.9	--	11.7	--
Existence of record does not necessarily preclude hiring	64.1	40.0	71.6	65.3	56.7	69.3
Employer will evaluate record	44.7	32.0	49.5	43.6	35.1	57.8
Employer will consider nature of offense and age at which committed	15.4	--	17.7	17.4	18.3	11.5
Employer will evaluate record in relation to requirements of job	4.0	8.0	4.4	4.3	3.3	--
Employer inquires, but record does not neces- sarily affect hiring	--	--	--	--	--	--
Existence of record pre- cludes hiring	11.7	8.0	6.2	13.0	18.3	23.0
Any record	4.9	4.0	1.8	4.3	10.0	7.7
Narcotics offense	2.8	--	0.9	--	5.0	11.5
Conviction for a felony	4.0	4.0	3.5	8.7	3.3	3.8
Theft	--	--	--	--	--	--
Other	4.0	--	4.4	4.3	3.3	7.7

^aThe total excludes establishments not providing information and those not
employing unskilled workers.

very much from the overall average of 64 per cent (data not shown).

Some of the comments volunteered by respondents indicated that flexible policies were very much under scrutiny and might be subject to modification if they were found unsatisfactory. An example was the following:

"We try to evaluate a police record but get no help from either the San Francisco or Oakland police departments -- they won't give any information. Recently we had a very bad experience in the case of a man with a homicide record that had not been divulged by the police. Because of the nature of the work, we are considering tightening up."
(food processing)



Although employers were also asked to indicate their reasons for their policies with respect to police records, most of the responses related to the reasons why a police record would affect hiring adversely and tended to come from those employers that followed quite rigid policies. There appeared to be less reason to explain the more flexible practices. By far the most frequent explanation, especially in the case of professional and other white-collar workers, was that employees were required to be bonded (data not shown). Another fairly frequent response was that the job involved handling cash or financial records or provided easy access to cash. Thus employers' explanations of their policies appeared to be entirely consistent with the impressions gained from major industry variations -- that access to cash or responsibility for financial transactions were major factors in explaining rigid policies.

Influence of Outside Organizations or Agencies on Selection Practices

In a highly unionized area, and among establishments that were predominantly parts of larger organizations, it would be expected that employer selection practices would be influenced in many instances by outside organizations or agencies, and this proved to be the case. In response to a question relating to the influence of outside organizations on the establishment's selection practices, slightly less than a third of the respondents (32 per cent) indicated that their practices were not influenced by outside organizations. But there were pronounced differences among the major industry groups in this respect. Extent of unionization, differences in the distribution of types of organizations represented

in the various major industry groups, and other factors accounted for these variations. The proportion of employers reporting no outside influence was highest (60 per cent) in finance, insurance, and real estate and nearly as high in durable goods manufacturing (54 per cent). On the other hand, it was particularly low in construction (4 per cent), reflecting union requirements with respect to hiring practices, and in government (10 per cent), reflecting the influence of federal, state, and local government regulations.

About three-fifths of the establishments reporting that outside organizations did influence their selection practices mentioned the terms of collective bargaining agreements (Table 7-13). Almost half mentioned local or state regulations, including licensing, while nearly a fourth mentioned requirements of the headquarters office. The remaining types of outside influence were relatively much less important. Although all establishments were affected by federal and state fair employment practice provisions, the interviewees that responded "no outside influence" were evidently not explicitly thinking about the existence of those provisions.

Special Efforts to Select Minority Group Applicants

When our survey was being planned, we were advised by members of our employer advisory committee that there had recently been many investigations and surveys relating to civil rights matters and that our response rate might be seriously reduced if establishments gained the impression that this was just another survey of that type. For this reason the only

Table 7 - 13
Influence of Outside Organizations on Establishments'
Selection Practices --
Bay Area Employer Policy Survey, 1967

All establishments ^a		
Number		208
Per cent		157.8 ^b
Terms of collective bargaining agreement(s)		59.6
Local or state regulations, including licensing		47.1
Requirements of headquarters office		23.6
Standards of professional associations		8.2
Standards of employer associations		2.9
Federal requirements -- Civil Service		3.4
Federal requirements -- other		8.2
Other		4.8

^aTotal excludes establishments that reported no influence of outside organizations on selection procedures and those that did not provide information.

^bTotal adds to more than 100.0 per cent, since some establishments gave more than one response.

question in the interview schedule that related directly to the selection of minority group applicants -- in addition to the question on the modification of selection tests discussed above -- was designed to give the employer an opportunity to describe any positive steps he might have taken to encourage the selection of minority group applicants. Actually, the question was not confined to policies relating to minority groups but rather inquired whether the establishment had made particular efforts to select applicants from any such groups as youth, school dropouts, older workers, racial minorities, etc. However, practically all our responses to this question related to the special efforts the establishment had made to encourage the selection of minority group applicants, and about two-thirds of the establishments reported that they had made "special efforts."

Size of firm was clearly an important determinant of positive efforts of this type (Table 7-14). The proportion of establishments responding affirmatively to this question increased consistently with number of employees up to the 1,000 to 1,999 group, but there was little difference between the two largest size groups in this respect. These variations were, of course, influenced by differences in major industry composition, extent of unionization, and other factors among the various size groups. However, our results in relation to this question are entirely consistent with the results of other questions bearing directly or indirectly on the relative extent of involvement of the larger establishments in programs aimed at increasing employment opportunities for the hardcore unemployed -- e.g., involvement in MDTA training programs, discussed in Section XI -- and do rather solidly confirm one's general impressions that the larger firms have assumed leadership in recent years

Table 7 - 14

Whether Establishment Has Made Special Efforts to Select Applicants
from Particular Groups, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Whether establishment has made special efforts			
			Yes	No	No -- has many minority employees	No -- recruits through unions
	Number	Per cent				
All establishments ^a	308	100.0	67.6	25.6	5.2	1.6
Less than 250	130	100.0	50.7	38.5	8.5	2.3
250 to 499	72	100.0	69.4	25.0	4.2	1.4
500 to 999	50	100.0	78.0	18.0	2.0	2.0
1,000 to 1,999	28	100.0	96.4	--	3.6	--
2,000 and over	28	100.0	92.9	7.1	--	--

^aTotal excludes one establishment that did not provide information.

in these efforts.

Differences among major industry groups in the pattern of responses to this question were, for the most part, not very pronounced, although the percentage of favorable responses in construction was well below the average (42 per cent), while that in finance, insurance, and real estate was also comparatively low (56 per cent). However, the large banks in the Bay Area have been extensively involved in recent years in increasing their ratios of minority group employees, whereas investment firms and real estate organizations have been much less extensively involved. At the other end of the scale, we found the largest proportion of affirmative responses from government agencies (80 per cent). This is scarcely surprising, in view of the various kinds of pressures on government agencies to respond to the "urban crisis" and the longstanding pattern of relatively extensive minority group employment in some of the major military and naval installations in the Bay Area.

In view of the maladjustments between the residential concentration of Negroes in the central cities and the relatively rapid expansion of employment opportunities outside the central cities, we were interested in determining whether there were significant geographical differences in patterns of responses to this question. The answer is yes, but the differences were not as pronounced as might have been expected. To be sure, the proportions of affirmative responses in the San Francisco and Oakland-Berkeley areas were well above those in Southern Alameda County and Santa Clara County, but, on the other hand, the percentage of favorable responses was highest of all in the Contra Costa-Marin area (Table 7-15). A factor that may have influenced this last result is the preponderance of manufacturing

Table 7 - 15

Whether Establishment Has Made Special Efforts to Select Applicants
from Particular Groups, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Main address	Total		Whether establishment has made special efforts			
			Yes	No	No -- has many minority employees	No -- recruits through unions
	Number	Per cent				
All establishments ^a	308	100.0	67.6	25.6	5.2	1.6
San Francisco County	112	100.0	72.3	24.1	2.7	0.9
Oakland-Berkeley Area	62	100.0	69.3	19.4	8.1	3.2
Southern Alameda County	38	100.0	55.3	42.1	2.6	--
San Mateo County	43	100.0	60.5	30.2	7.0	2.3
Santa Clara County	25	100.0	56.0	32.0	8.0	4.0
Contra Costa and Marin counties	28	100.0	82.2	10.7	7.1	--

^aTotal excludes one establishment that did not provide information.

establishments, a good many of them branches of large national corporations.

Nearly three-fifths of the establishments reporting "special efforts" indicated that they worked with or contacted minority group organizations. About a half mentioned contacting or working with government agencies, such as the CDE, OEO, the State Department of Corrections, and others. Considerably less frequent were responses indicating that they had cooperated with employer groups or programs, educational institutions, or organizations for the handicapped. It seems likely that employer-sponsored programs would have been somewhat more frequently mentioned after the beginning of 1968, when the National Alliance of Businessmen program was initiated, for on both sides of the Bay the NAB program has been actively promoted by major employers who have cooperated.

In addition, a number of employers mentioned practices within the establishment aimed at encouraging the employment of disadvantaged groups, but in most cases these responses took the form of a comment to the effect that "we have a policy of hiring" Negroes or other specified minority groups, such as Spanish Americans. Relatively small proportions of employers indicated that they had lowered their selection standards to encourage the employment of minority groups or had cooperated in government training programs, while a very small percentage (about 3 per cent) made specific reference to having hired older workers.

A number of the employers made interesting comments on their experiences in hiring minority group workers, which shed light on some of the difficulties and problems involved as well as on some of the successes:

"We have not made special efforts. Referrals come from the

Table 7 - 16

Groups and Agencies with Which Establishments Have Worked
to Encourage Employment of Disadvantaged --
Bay Area Employer Policy Survey, 1967

All establishments ^a		
Number		208
Per cent		145.6 ^b
Civil rights groups		57.6
Urban League		22.6
Minority, civil rights, and special interest groups, unspecified		27.4
NAACP		3.8
Other		3.8
Government agencies concerned with programs for the disadvantaged		51.4
California Department of Employment		20.7
Office of Economic Opportunity, including Job Corps, etc.		17.3
State Department of Corrections, parole officers, etc.		10.1
Other		3.4
Employer groups or programs		11.1
Plans for Progress		4.8
"Job Fairs"		4.8
Other		1.4
Educational institutions		13.5
Schools		10.1
Colleges and universities		3.4
Organizations for the handicapped		2.4
Other		9.6

^aTotal excludes establishments reporting no "special efforts" and one establishment that did not provide information.

^bTotal adds to more than 100.0 per cent, since some establishments gave more than one response.

unions. We have tried Negro drivers on retail routes, but housewives have a negative reaction." (food processing)

"We notify the unions that we are an equal opportunity employer. The ____ cooperates, but the other unions say they do not have many colored members to send." (food processing)

"We have increased the number of Negroes artificially, i.e., have discriminated by hiring unqualified people if they were Negroes. We had to talk to the other workers and convince them before we did this. It hasn't been as disastrous as we expected, as the women have been good workers -- better than many of the white. The men usually are not so good and not stable." (food processing)

"We feel it inappropriate to answer 'yes' or 'no' to this question, since the firm has to make an effort in the reverse. Most of the applicants are from minority groups and these pre-dominate in total employment." (apparel manufacturer)

"We have made no special efforts. We are wide open to all of them but most won't work at the base rate of \$2.40." (lumber and wood products)

"We have made special efforts through the youth center. The results have been poor." (printing and publishing)

"We have hired Negroes on various occasions, with some successes and some failures. We attempted to hire a Negro high school athlete this summer, but the unions insisted he pay a \$50 initiation fee even though a temporary worker. We finally had to appeal to the area union agent." (printing and publishing)

"We have hired a 'minority group recruitment specialist' and have a Negro employment interviewer." (petroleum refining)

"A GSA representative was 'checking up' the other day in connection with our government contracts and was not pleased to find that we had only six Negro employees -- suggested that, since Oakland was 32 per cent Negro, we should do better than that. Actually, we would be happy to hire more if they would only show up. There are relatively few Negroes in this area. One of the six commutes from Richmond, two from Oakland, and two from San Jose. About 55 per cent of our employees are Mexican-American." (manufacturing -- Southern Alameda County)

"For the past few years we have made a positive effort to employ members of minority groups, especially Negroes, for several reasons, such as utilizing labor potential to the utmost, satisfying the terms of our occasional government contracts, public

relations, and social awareness, but without too much success. We can't find qualified people." (fabricated metals manufacturing)

"We make special efforts -- have made it a point to employ Negroes, and most of our applicants are Negroes. They are far superior in hot forging and hot socket work. The first Negro was hired some twenty years ago. He worked out as a good employee, and many more have been hired over the years." (fabricated metals manufacturer)

"We do not make special efforts. The California Metal Trades Association has tried for a long time to get Negroes into apprenticeship training, but with little success." (fabricated metals manufacturer)

"We hope to hire at least 12 people next month from minority groups. We offer on-the-job training and upgrade as soon as they demonstrate ability to progress." (electric machinery manufacturing)

"We have a fair number of minority group workers and have recently hired several from the Camp Parks Job Corps and Opportunities Industrialization Center West." (electrical machinery)

"We have recently established an 'apprentice draftsman' program, working with the Oakland adult minority center." (construction firm)

"After the Hunters Point riots, we told the Chamber of Commerce group that we would take 100 Negroes -- not a single one was referred. We estimate, however, that almost a third of our drivers are Negroes." (transportation company)

"We have worked with almost all the major groups and committees set up to deal with this problem. We believe retailing will be 100 per cent minority staffed some day, since it is becoming more and more a service function and the more affluent sections of our society don't want to wait on others. We feel, basically, that if you hire one minority group member and he respects you as an employer, he will bring more." (retail trade)

"We were told by an FEPC Commissioner that the only 'safe course'

was to have the employment structure of the firm match that of the community. Although everyone tells us the quota system of hiring is wrong, only the quota system achieves this end. In exchange for this 'cooperation,' we have been able to discharge Negro help with none of the repercussions experienced by some other employers. Also, we have found that some of our Negro employees are among the most productive people we have, and it will be possible to promote them on an equal basis with others. Generally, we relax specifications when we hire Negroes by not demanding experience, allowing a longer trial period, and giving more training." (retail trade)

"We have lowered employment standards, such as the use of a practice test for minority groups (14 out of 24 is passing)." (retail trade)

"We report quarterly to the retailers' community relations group on hiring minority workers." (retail trade)

"We have made no special efforts but feel we have a good mix." (retail trade)

"We have tried working with minority groups and continue to do so, but the results have been 'mixed'." (retail trade)

"We have informed our own employees that the company is interested in hiring minority groups and have contacted various civil rights organizations. We have just completed a Federal compliance review and felt very good about the response of our own minority group employees to the investigators' questions." (insurance company)

"We have an agreement with local minority group organizations to interview any minority person whether or not he is a member of the union and whether or not he is qualified." (hotel)

"We have not made special efforts -- we don't need to. In fact, we have had complaints from whites and Orientals that we discriminate in favor of Negroes, since almost all our production workers are Negro." (personal services)

"We are working through the San Francisco Hospital Conference to provide pre-employment training, particularly for Negroes, but we will not reduce our standards to give anyone a job." (hospital)

"We have a summer program directed to youth, school dropouts, and racial minorities. We have also lowered qualification standards to attract minorities." (Federal Government agency)

Reluctance to Hire Certain Groups

Our final question in connection with selection practices related to whether the employer had a marked reluctance to hire persons in certain frequently avoided groups, such as "job hoppers" and the long-term unemployed. More than two-thirds of the employers responded that they had a marked reluctance to hire job hoppers, while about two-fifths indicated reluctance to hire the long-term unemployed, but the proportions avoiding other specific groups tended to be rather small (Table 7-17). Of special interest was the very small percentage indicating a marked reluctance to hire employed job-seekers, suggesting that in a relatively tight labor market "pirating" is not regarded with serious disfavor.

The most important reasons mentioned for avoiding persons in these categories differed somewhat among the various groups, but fears that the employee would be unstable and that high turnover would be expected figured prominently in the case of many of the groups (Table 7-18).

Variations among major industry and size-of-firm groups in attitudes toward hiring these groups were not particularly pronounced, with several exceptions. Reluctance to hire the handicapped, for example, was relatively prevalent in manufacturing establishments and in the transportation and utilities group, in which the risk of industrial accidents tends to be relatively high and in which employers are particularly conscious of the workmen's compensation problems involved in second injuries. And, interestingly, reluctance to hire housewives with child care responsibilities varied inversely with size of firm, with none of the establishments in the largest size group indicating such reluctance. One can only speculate about the reasons for this relationship, but it seems likely that large establishments

Table 7 - 17

Specific Groups of Workers from Among Which Survey Establishments
Show a "Marked Reluctance to Hire" --
Bay Area Employer Policy Survey, 1967

Specific groups of workers	Total ^a		Attitudes	
			Marked reluctance to hire	No marked reluctance to hire
	Number	Per cent		
Job hoppers	303	100.0	70.6	29.4
Long-term unemployed	303	100.0	41.6	58.4
Persons living at a distance from the establishment	303	100.0	22.4	77.6
Physically handicapped	303	100.0	21.1	78.9
Employees of competitors	303	100.0	20.5	79.5
Housewives with child care responsibilities	303	100.0	17.5	82.5 ^b
Employed job seekers	303	100.0	3.3	96.7

^aThe total for each specific group of workers excludes employers that did not provide information.

^bIncludes 8.3 per cent with no marked reluctance to hire provided housewives had made arrangements for child care responsibilities.

Table 7 - 18

Leading Reasons for a "Marked Reluctance to Hire"
Specific Groups of Workers --
Bay Area Employer Policy Survey, 1967

Specific groups and reasons

Job hoppers

All responses ^a	
Number	219
Per cent	100.0
Unstable; high turnover rate; hires for the long term	50.6
Poor risk; not reliable	24.7
All other	24.7

Long-term unemployed

All responses ^a	
Number	123
Per cent	100.0
Background questionable; period of long-term unemployment raises questions as to why	24.3
Unstable; high turnover rate; hires for the long term	23.5
Poor risk; not reliable	22.2
All other	30.0

Persons living at a distance from the firm

All responses ^a	
Number	59
Per cent	100.0
Unstable; high turnover rate; hires for the long term	35.5
Need to be able to respond to emergencies	11.9
Poor risk; not reliable	10.2
All other	42.4

Physically handicapped

All responses ^a	
Number	62
Per cent	100.0
Safety reasons; dangerous kind of work; cannot fit into the operation	83.9
All other	16.1

(continued)

Table 7 - 18 (continued)

Leading Reasons for "Marked..."

Specific groups and reasons

Employees of competitors

All responses ^a	
Number	61
Per cent	100.0
"No raiding" pacts with competitors	73.8
Not considered an ethical practice	13.1
All other	13.1

Housewives with child care responsibilities

All responses ^a	
Number	56
Per cent	100.0
Absenteeism	33.9
Poor risk; not reliable	21.4
Unstable; high turnover rate; hires for the long term	16.1
Experience has not been satisfactory	10.7
All other	27.9

^aTotal excludes establishments that had no marked reluctance to hire the specific group and those that did not provide information. The total may exceed the number of establishments reporting, since some establishments reported more than one reason.

felt better prepared to cope with the special problems involved in employing housewives with child care responsibilities. Moreover, it should be pointed out that, although most employers did not express a marked reluctance to hire such applicants, virtually all indicated in accompanying comments that they would not hire them unless they had made adequate arrangements for child care.

Concluding Remarks

Clearly, there were distinctive patterns of differences between the larger and smaller establishments in our sample with respect to selection practices. The larger establishments, no doubt in part reflecting the fact that the great majority of them had personnel departments, were considerably more likely to impose formal selection standards, such as educational requirements in the case of both clerical workers and unskilled workers, and the use of selection tests. There was also some tendency for them to be more likely to indicate that their qualification standards for entry level jobs were generally higher than those of other Bay Area employers, but in this case it was only in the smallest size group that the proportion responding in this manner was comparatively low, whereas there was no appreciable difference among the other four size groups.

There were some indications that there was a group of "elite" firms that were leaders in personnel practices, maintaining wages for white-collar workers above those paid by other employers in the area engaged in similar activities, having relatively high qualification standards for entry level jobs, and providing formal on-the-job training programs, since high qualification standards tended to be associated both with relatively high wages for white-collar workers and with the provision of formal on-the-job training. However, it was not entirely clear that

these leaders were necessarily the largest establishments, for, as we have seen, there was no appreciable difference among the four larger size groups in the proportion reporting relatively high qualification standards, nor, as we shall find in Section X, did we find any very clear evidence of a tendency for wage rates -- either on the basis of employers' assessments or on the basis of actual Part II data -- to vary positively with size of firm. Only with respect to the provision of formal on-the-job training -- among the three policies considered here -- was there a clear positive relationship between prevalence of the practice and size of firm.

Moreover, there were a number of indications that factors other than sheer differences in number of employees played a role in influencing differences in selection practices between the larger and smaller establishments. The larger establishments were somewhat less likely to be unionized and less likely to be involved in hiring through unions than the smaller establishments, and we have found a clear tendency for smaller establishments that hired through unions to be less likely to have personnel departments than establishments in the same size class that were not required to hire through unions (Section V). In addition, the larger establishments were relatively unlikely to be single unit establishments but tended, rather, to be either headquarters or branch units, and there was some evidence, particularly with respect to the use of selection tests for unskilled workers, that branch units were likely to be held rather rigidly to selection standards imposed by headquarters.

Moreover, there were locational differences that cut across differences related to other factors. For example, establishments in the central city areas were more likely to report relatively high qualification standards for

entry level jobs than establishments in such outlying counties as Santa Clara and Contra Costa. These differences were related to industry group differences, for we found that manufacturing establishments -- particularly well represented in our sample in Santa Clara and Contra Costa counties -- were relatively unlikely to report high qualification standards, whereas transportation and utilities employers -- especially well represented in San Francisco -- were particularly likely to report high qualification standards.

Thus, although there may be a group of elite establishments that are leaders in personnel practices in the Bay Area, our data do not suggest that they can be identified by a single characteristic, such as size. The results of additional analysis of this question, relating to establishments that maintained both relatively high qualification standards for entry level jobs and high wages for white-collar workers, will be discussed in Section X.

If the larger firms were more likely to use formal selection practices, they also tended to be more flexible in certain of their selection practices than the smaller firms -- probably reflecting the greater feasibility of making special efforts to deal with the difficulties associated with "problem" types of applicants. We found, for example, that larger firms were less likely to impose an absolute ban on hiring persons with policy records than smaller firms. They also were less likely to indicate marked reluctance to hire housewives with child care responsibilities than the smaller firms.

Finally, and not at all unexpectedly, there was a tendency for the proportion of establishments indicating that they had made special efforts to select workers from minority groups to vary directly with size. Again,

the presence of personnel departments in the larger establishments may have been a positive influence here, although it is also clear that there has been a tendency for presidents of the largest corporations to display leadership in this type of effort. In some cases, this may reflect a relatively enlightened attitude; in others, it may be in large part a result of the fact that it is the most prominent business leaders who are likely to be approached to serve on national, state, or local committees concerned with these problems. What is perhaps most important is that a decided majority of the establishments in our sample indicated involvement in such efforts, although it was difficult to judge from many of their responses how much change in their employment patterns had resulted, and it was clear that their assessments suggested a mixture of successes and failures.

Footnotes to Section VII

1. See Richard A. Lester, "A Range Theory of Wage Differentials," Industrial and Labor Relations Review, V (July, 1952), 483-500; and Lloyd G. Reynolds, The Structure of Labor Markets (New York: Harper and Brothers, 1951).

2. Albert G. Rees, "Spatial Wage Differentials in a Large City Labor Market," Proceedings of the Twenty-First Annual Meeting of the Industrial Relations Research Association, 1968, pp. 237-247.

3. R. A. Gordon and J. E. Howell, Higher Education for Business (New York: Columbia University Press, 1959). It should be pointed out, however, that the authors found that, increasingly, the opinions of articulate leaders of the business community "have come to stress the values of a liberal education and the need for 'the range of interests and the mental disciplines that education in the liberal arts or humanities is peculiarly well fitted to give.'" (p. 125) Even so, they found that the executives who did the actual recruiting for most companies were much more inclined to prefer the practical values of a "bus ad" or engineering major to the values of a liberal arts education.

4. Margaret S. Gordon, "The Older Worker and Hiring Practices," Monthly Labor Review, LXXXII (November, 1959), 1198-1205.

5. Additional evidence that Bay Area employers were giving close attention to intensified recruitment and selection of minority group applicants may be found in a report on a study of employment testing in the area, initiated by the California Fair Employment Practice Commission. The author of the report found that employment practice in the area was characterized by "sincere fair employment policies and recent affirmative action," but

"moderately inadequate test administration facilities" and "almost total absence of local validity information for tests, interviews, or any other selection instrument or procedure." See Jay T. Rusmore, Psychological Tests and Fair Employment: A Study of Employment Testing in the San Francisco Bay Area, California Fair Employment Practice Commission (San Francisco: 1967), p. 7.

VIII. PROMOTION

Promotion Policies

A central objective of modern personnel policy is to develop a work force that will be spurred on to maximum effort and efficiency through the stimulus of opportunities for promotion within the firm. Careful selection is emphasized as a way of developing a work force with potentialities for promotion, while there is evidence that perhaps the single most important reason for age discrimination in hiring is the desire of management to keep promotion channels for younger workers unblocked. And studies of personnel policies have invariably indicated the emphasis placed on encouragement of promotion from within. Yet the literature is somewhat unclear as to the extent to which opportunities for promotion tend to be limited to workers whose jobs fit into a clear line of upward progression within the firm, as opposed to those holding jobs in which promotional opportunities are blocked either because they are highly specialized or because they are "blind alley" or "dead-end" jobs. One of our objectives was to shed light on this type of question. We were also interested in discovering whether and to what extent workers who are offered opportunities for promotion refuse to accept them, and for what reasons.

That a very large proportion of the employers in our sample had established promotion policies (91 per cent) came as no surprise, as did the finding that the proportion of employers with such policies varied directly with number of employees in the establishment (Table 8-1). Moreover, a policy of emphasizing promotion from within was by far the most

Table 8 - 1

Types of Promotion Policies, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Promotion from within	Other established promotion policy	No established promotion policy
	Number	Per cent			
All establishments ^a	307	100.0	86.0	3.3	10.7
Less than 250	129	100.0	80.6	3.9	15.5
250 to 499	73	100.0	87.7	2.7	9.6
500 to 999	50	100.0	90.0	4.0	6.0
1,000 to 1,999	27	100.0	92.6	--	7.4
2,000 and over	28	100.0	92.8	3.6	3.6

^aTotal excludes establishments not providing information.

common type of established promotion policy.

Although employers were asked the reasons for their emphasis on policies of promotion from within, their responses yielded little information that could be considered particularly new or enlightening. Such reasons as "established policy of the company," "good personnel policy," and "to promote morale and recognize ability" tended to predominate.

Of greater interest were their replies to a question relating to whether promotion policies were influenced by such factors as collective bargaining agreements, headquarter's office policy, and civil service regulations (Table 8-2). A study of the sequence of responses to this question indicates that promotion policies were affected by a combination of influences, with collective bargaining agreements playing a role in 43 per cent of the establishments, headquarter's policy in 37 per cent, and civil service regulations in a small minority, consisting, of course, of government agencies.

Except for construction, it was, as would be expected, the most strongly unionized major industry groups in which collective bargaining agreements were most likely to influence promotional policies, with nondurable goods manufacturing employers including an especially large proportion indicating that collective bargaining agreements called for preference to existing employees in promotions (Table 8-3). The relative absence of such provisions in construction, of course, represents the influence of short-term employment relationships in the building trades. The construction industry, along with others, such as the maritime and longshore industries, is an example of what Kerr has characterized as the "guild system," in which the labor force is stratified horizontally, with

Table 8 - 2

Types of Influence on Promotion Policies --
Bay Area Employer Policy Survey, 1967

Types of influence	1st response	2nd response	3rd response	All responses
All establishments ^a (or all responses)				
Number	272	272	272	272
Per cent	100.0	100.0	100.0	165.7 ^b
Civil service regulations	5.5	--	--	5.5
Headquarter's office policy	35.6	1.5	--	37.1
Collective bargaining agreement	23.2	19.5	0.4	43.0
Local establishment's policy	35.7	30.1	13.2	79.4
Other	--	0.4	--	0.7
No second or third response		48.5	86.4	

^aTotal excludes establishments with no established promotional policy and those not providing information.

^bTotal exceeds 100.0 per cent, since some establishments gave more than one response; total includes two fourth responses which are not shown separately.

Table 8 - 3

Nature of Influence of Collective Bargaining
Agreement(s) on Promotion Policy, by Major
Industry Group --
Bay Area Employer Survey 1967

Major industry group			Nature of influence of CBA		
	<u>Total</u>		Requires preference to employees	Does not require preference to employees	No influence or no CBA
	Num- ber	Per cent			
All establishments ^a	304	100.0	31.6	6.6	61.8
Construction	26	100.0	7.7	11.5	80.8
Manufacturing					
Durable	56	100.0	46.5	8.9	44.6
Nondurable	62	100.0	61.2	6.5	32.3
Transportation and utilities	27	100.0	40.7	7.4	51.9
Trade					
Wholesale	13	100.0	38.5*	15.4*	46.2*
Retail	30	100.0	13.3	13.3	73.4
Finance, insurance, and real estate	25	100.0	--	--	100.0
Services	35	100.0	20.0	--	80.0
Government	30	100.0	10.0	--	90.0

*Percentages based on fewer than 15 cases.

^aTotal excludes establishments not providing information.

the right of workers to move from job to job within the system protected through union control over the hiring hall. In manufacturing and many other industry groups, on the other hand, the "manorial system" prevails -- the industrial worker is attached to his place of work, and his job security and rights to promotion are protected through seniority provisions.¹

Where collective bargaining agreements provided that preference must be given to existing employees in promotions, seniority was the sole or primary criterion to be considered in nearly three-tenths of the establishments, while in most of the others it was considered along with ability to do the job, with somewhat varying emphasis being given to seniority in relation to ability (Table 8-4). In approximately 13 per cent of these establishments, ability alone was to be considered under the collective bargaining provisions. The fact that about two-thirds of these collective bargaining provisions were found in manufacturing establishments, and that it was in durable goods manufacturing and in food processing that seniority alone prevailed as a criterion in more than the average proportion of cases, indicates, not only that factory unions have placed considerable emphasis on these provisions, but also that they have succeeded in imposing seniority as the criterion for promotions to a greater extent than nonfactory unions.

Even in those situations in which seniority was reported as the sole criterion for promotion, however, the provision was sometimes qualified,² and in several cases it was the sole criterion only for promotions from unskilled to semi-skilled status, but not from semi-skilled to skilled classifications, as the following comments by interviewees indicate:

"Seniority is the criterion, but the individual has a 20-day trial period following promotion. If he doesn't make out in 20 days, he goes back to his old job." (stone, clay, and glass products)

Table 8-4

Relative Influence of Seniority and Ability as Criteria for Promotion Under Policies Set by Collective Bargaining Agreements, by Major Industry Group--

Bay Area Employer Policy Survey, 1967

Major industry group	Total Num- ber	Per cent	Seniority ability	Seniority primary; ability secondary	Seniority if ability equal	Seniority and ability	Ability primary; seniority secondary	Ability
All establishments ^a	93	100.0	22.6	6.5	14.0	36.5	7.5	12.9
Manufacturing								
Durable	22	100.0	31.8	--	18.2	36.3	9.1	4.5
Food and kindred products	20	100.0	30.0	15.0	10.0	30.0	--	15.0
Other non- durable	19	100.0	10.5	5.3	26.3	42.1	5.3	10.5
Transportation and utilities	11	100.0	18.2*	18.2*	--	27.3*	27.2*	9.1*
All other industries	21	100.0	19.0	--	9.5	42.9	4.8	23.8

*Percentages based on fewer than 15 cases.

^aTotal excludes establishments in which collective bargaining agreements do not influence promotion policies and those not providing information.

"Production workers move up through semi-skilled jobs strictly by seniority. In promoting from semi-skilled to skilled, seniority is still a big factor, but testing and the man's record with the company also play a part." (fabricated metal products)

"Seniority is usually the criterion, but for skilled and semi-skilled jobs, we consider the work record and tests." (fabricated metal products)

"Seniority is the criterion. The company must prove a person can't do the job, if he is senior." (wholesale trade)

In those cases in which seniority is the criterion if ability is considered equal, the situation is sometimes more complicated than this particular classification of combinations of criteria would suggest:

"The higher-level job is posted and workers bid on it. The company selects from among those who apply if the department head of the man selected believes the latter is qualified on the basis of observed performance. If none are qualified, the company goes outside. If two appear equally qualified and there is a tie (but only then), seniority will prevail." (chemicals and allied products)

In connection with promotions not affected by collective bargaining provisions, demonstrated ability was the factor singled out as the most important criterion influencing the choice of persons to be promoted by the great majority of employers (Table 8-5). In their subsequent responses, however, they mentioned other factors, such as "potential for continuing advancement," and "ability along with willingness to undertake training." Interesting, also, seniority played something of a role in nearly a third of the establishments, although it was rarely the most important factor considered.

On the whole, there was little variation by major industry group in the first responses to this question, except for the fact that nearly a third of the government agencies singled out "ability to pass tests" rather

Table 8 - 5

Most Important Factors Influencing Promotion, for Promotions
Not Influenced by Collective Bargaining Agreement(s) --
Bay Area Employer Policy Survey, 1967

Most important factor	1st response	2nd response	3rd response	All responses
All establishments ^a				
Number	297	297	297	297
Per cent	100.0	100.0	100.0	272.8 ^b
Demonstrated ability	86.9	11.8	0.7	99.3
Potential for continuing advancement	6.1	60.0	16.2	82.2
Ability and willingness to undertake training	0.3	10.4	35.0	45.8
Seniority	3.0	10.8	17.5	31.3
Ability to pass tests	3.4	2.4	3.0	8.8
Other	0.3	0.9	4.0	5.4
No second or third response		3.7	23.6	

^aTotal excludes establishments not providing information.

^bTotal exceeds 100.0 per cent, because some establishments gave more than one response.

than "demonstrated ability" as the most important factor influencing promotions. Clearly, here, we find evidence of the influence of civil service policies stressing procedures which have generally been regarded as "objective" in determining the choice of those to be promoted. Adherence to such procedures, moreover, is sometimes supported by public employee groups, such as local police and firefighters associations, as tending to eliminate any element of favoritism.

When the responses were cumulated, however, "demonstrated ability" turned out to be the most frequently mentioned factor in all major industry groups, with "potential for advancement" a close second (Table 8-6). "Ability to pass tests" continued to be mentioned rather rarely outside the government agencies and, to some degree, finance, insurance, and real estate. And, although there appeared to be something of a tendency for seniority to figure in the responses relatively frequently in the industry groups in which collective bargaining agreements affected promotions in the unionized occupations -- even for promotions not influenced by union agreements -- it was also mentioned relatively frequently in the finance group, in which collective bargaining agreements were not a significant influence. Thus it is not just union pressure which has resulted in some attention to seniority as a factor in promotions but the very obvious equity considerations involved in giving some weight to length of service, at least when all other things are equal.

Another way of determining how much weight seniority tends to be given in promotions was sought when we asked under what circumstances a junior employee would be promoted over a senior employee in situations not influenced by collective bargaining provisions. Among the establishments

Table 8 - 6

Most Important Factors Influencing Promotion, for Promotions
Not Influenced by Collective Bargaining Agreement(s),
by Major Industry Group--
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Demonstrated ability	Potential for advancement	Ability and willingness to take training	Seniority	Ability to pass tests	Other
	Number	Per cent ^b						
All establishments ^a	297	272.8	99.3	82.2	45.8	31.3	8.8	5.4
Construction	26	238.4	100.0	80.8	34.6	11.5	--	11.5
Manufacturing								
Durable	55	276.3	96.4	89.1	52.7	23.6	10.9	3.6
Nondurable	60	269.9	98.3	78.3	45.0	38.3	5.0	5.0
Transportation and utilities	25	284.0	100.0	92.0	40.0	40.0	4.0	8.0
Trade								
Wholesale	13	269.3	100.0*	100.0*	38.5*	30.8*	--	--
Retail	32	268.7	100.0	78.1	46.9	34.4	3.1	6.2
Finance, insurance, and real estate	25	292.0	100.0	76.0	48.0	40.0	16.0	12.0
Services	32	259.4	100.0	71.9	53.1	28.1	--	6.3
Government	29	286.1	96.5	86.2	37.9	20.7	37.9	6.9

^aTotal excludes establishments not providing information.

^bTotals exceed 100.0 per cent, because some establishments gave more than one response.

* Percentages based on fewer than 15 cases.

providing a response to this question -- constituting the great majority -- only about 9 per cent indicated that this type of promotion did not occur. Where junior employees were on occasion promoted over senior employees, the criteria considered, according to the responses of our interviewees, were very similar to those indicated in their earlier responses to our more general question about criteria for promotions not affected by collective bargaining agreements. In other words, demonstrated ability was by far the most frequently mentioned criterion in the array of first responses, while potential for advancement was mentioned fairly often in the employers' second responses.

Although promotion of junior over senior employees occurred, then, in the great majority of our establishments, a good many of our interviewees (41 per cent) were not able to provide information as to the percentage of promotions in which a junior was promoted over a senior. This is not surprising, in view of the fact that this is the type of statistic that would not be particularly likely to be readily available within the establishment. Presumably, also, the replies of the employers that did respond to this question involved some guesswork. In any event, their responses covered a wide range. Among the establishments in which such promotions did occur, they were infrequent in nearly a third, ranged rather widely between 1 and 50 per cent in somewhat more than another third, and amounted to 50 per cent or more of all promotions in the remaining 30 per cent of the establishments.

Another question which was designed to shed light on opportunities

for promotion within the establishment inquired whether, in general, most employees with at least five years of service had been promoted at least once. The response was "yes" in slightly more than half of the establishments, but there were rather marked variations by size of firm, with the proportion increasing from about 45 per cent in our smallest size group to 82 per cent in the largest (Table 8-7). The most pronounced "jump" in this progression, moreover, was between the next-to-largest and largest size groups. Thus, our data provide clear confirmation of the generally held impression that opportunities for promotion tend to be relatively limited in smaller as compared with larger firms.

Although variations among major industry groups were clearly affected by differences in the size-of-firm composition of the industry groups, they quite evidently could not be wholly explained on this basis (Table 8-8). The contrast between establishments in retail trade, in relatively few of which most employees with at least five years service had been promoted at least once, and the finance group, in which 80 per cent responded affirmatively to this question, suggested rather clearly, as does other evidence, to be discussed later, that there were a number of factors influencing variations among industry groups.

Employers responding that most employees with five years of service had not been promoted at least once were asked to indicate the reasons why this was the case. About half indicated that the situation was attributable to an "insufficient number of promotional opportunities." Other responses, in order of relative frequency were "insufficient gradations within the job structure," the fact that "specialized skills limited mobility," and "insufficient number of promotional opportunities associated with low turnover."

Table 8 - 7

Per Cent of Survey Establishments That Had Promoted
Most Employees with Five Years Service at Least Once,
by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Per cent
All establishments ^a	51.3
Less than 250	45.2
250 to 499	47.9
500 to 999	50.0
1,000 to 1,999	59.2
2,000 or more	82.1

^aTotal excludes employers that did not provide information.

Table 8 - 8

Per Cent of Survey Establishments That Had Promoted
Most Employees with Five Years of Service
at Least Once, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Per cent
All establishments ^a	51.3
Mining and construction	44.0
Manufacturing	
Durable	62.5
Nondurable	56.5
Transportation and utilities	57.7
Trade	
Wholesale	58.3*
Retail	22.6
Finance, insurance, and real estate	80.0
Services	33.3
Government	43.3

* Percentages based on fewer than 15 cases.

^a The total excludes employers that did not provide information.

Variations by number of employees in the distribution of these responses did not follow a clear pattern, perhaps reflecting the fact that the reasons given tended to be somewhat overlapping. Moreover, such factors as low turnover could be found in both smaller and larger establishments and would be particularly likely to occur in establishments with declining employment.

"Insufficient opportunities because of low turnover" played a considerably more important role in government agencies than in any of the private industry groups as an explanation of not having promoted most employees with at least five years of service. Here we have additional evidence, which has cropped up in a number of parts of our survey data, suggesting that the job security associated with public employment tends to be highly prized, with the result that public employees do not tend to quit their jobs. Apart from this difference, the pattern of explanations of limited promotional opportunities did not vary greatly by major industry group.

Opportunities for Promotion by Occupation

In an attempt to develop information on the types of jobs typically filled by promotion, as opposed to those that were not, we asked a series of questions designed to shed light on this question. More than two-fifths of our respondents indicated that "all jobs" or "almost all jobs" were customarily filled by upgrading, while the proportion replying that "no jobs" were so filled was very small. Differences by size of firm and major industry group in the proportions indicating that all or almost all jobs were usually filled by upgrading were very wide, however, and appeared to

yield as much insight into the whole promotional situation as any set of responses we obtained.

In the first place, the larger the establishment, the more likely was it to indicate that all or almost all jobs were customarily filled by upgrading (Table 8-9). Moreover, the increase in the proportion giving this type of response was particularly marked between the next-to-largest size group and the largest size group.

However, variations by major industry group were also very pronounced and were clearly influenced by other factors as well as by differences in the size composition of the various groups (Table 8-10). Particularly marked was the tendency to indicate that all or nearly all jobs were filled by upgrading in manufacturing. Government agencies were also especially likely to give this type of response, and led all other major industry groups by a considerable margin in the proportion responding that all jobs were customarily filled by upgrading.

At the other end of the scale, respondents in retail trade and in services were least likely to respond that all or almost all jobs were usually filled by upgrading.

Clearly, these differences reflect the combined effects of a number of different types of influences. For one thing, there appears to be a tendency for the proportion of employers responding that all or almost all jobs are filled by upgrading to be small in the major industry groups in which employers are likely to be required to hire

Table 8 - 9

Per Cent of Establishments Filling "All"
or "Almost All" Except Entry Jobs
by Upgrading, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	All	Almost all	Total
All establishments ^a	19.9	21.8	41.7
Less than 250	14.0	18.6	32.6
250 to 499	16.4	19.2	35.6
500 to 999	22.0	24.0	46.0
1,000 to 1,999	32.1	25.0	57.1
2,000 and over	39.3	35.7	75.0

^aTotal excludes two establishments not providing information.

Table 8 - 10

Per Cent of Establishments Filling "All"
or "Almost All" Except Entry Jobs
by Upgrading, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	All	Almost all	Total
All establishments ^a	19.9	21.8	41.7
Construction	11.5	15.4	26.9
Manufacturing			
Durable	25.0	35.7	60.7
Nondurable	25.8	32.3	58.1
Transportation and utilities	14.8	14.8	29.6
Trade			
Wholesale	23.1 [*]	15.4 [*]	38.5 [*]
Retail	6.1	9.1	15.2
Finance, insurance, and real estate	12.0	28.0	40.0
Services	8.6	8.6	17.2
Government	43.3	13.3	56.6

^{*} Percentages based on fewer than 15 cases.

^a Total excludes two establishments not providing information.

through unions (Table 6-18), particularly where, as in construction and some of the transportation industries, jobs are typically short-term and workers are recruited through a union-controlled hiring hall. In contrast with this situation, where jobs are more stable as in manufacturing, unions have stressed collective bargaining clauses controlling promotion, as we have seen.

Another factor influencing the extent to which employers follow a policy of filling all jobs or almost all jobs by upgrading, in all probability, is the proportion of temporary or seasonal jobs in the establishment. This is clearly a factor in construction, retail trade, and services, and also in some types of transportation establishments. Moreover, in retail trade, the fact that sales clerks do not ordinarily have the training required for promotion to buyers was suggested by the comments of several of our interviewees:

"Department managers and buyers are filled from outside the establishment, since buyers are the crux of the success of a store."

"Management positions are filled by upgrading. However, we draw a line at the assistant buyer level, where the jump is more likely to be made by a trainee than by a long-employed salesperson, most of whom are quite old."

In government agencies, civil service policies stressing promotion from within undoubtedly played a major role in explaining the relative prevalence of a response indicating that all jobs are customarily filled by upgrading.

Respondents that did not indicate that all or nearly all jobs were filled by promotion -- or that no jobs were so filled -- answered our question in terms of specific jobs or types of jobs that were customarily filled by upgrading (Table 8-11). Although a good many interviewees mentioned several categories, we have computed percentages, here as in a number of other tables, based on the total number of responding establishments, rather than the total number of responses, in order to indicate clearly the proportion of our establishments in which the specified types of jobs tended to be filled by promotion. Even so, the data cannot be interpreted as providing an accurate indication of the relative importance of occupations usually filled by promotion, in view of the fact that occupations usually so filled are represented in considerably larger proportions in some establishments than in others.

Nevertheless, it is significant that jobs in the managerial hierarchy were mentioned by practically all the respondents answering in terms of specific occupations, whereas other types of jobs were mentioned only by much smaller percentages. About a fifth of all the interviewees mentioned skilled occupations, but, among these, foremen and leadmen -- long known as jobs filled chiefly by promotion -- were those most frequently singled out for specific mention. Almost equally obvious was the predominance of "upper-level clerical or top clerical jobs" among the clerical occupations

Table 8 - 11

Specific Jobs or Job Classifications Customarily Filled by Upgrading --
Bay Area Employer Policy Survey, 1967

Specific jobs or classifications			
All establishments ^a			
Number	307	Professional and technical occupations	11.1
Per cent	100.0	Instructors or teachers	0.3
All jobs customarily filled by upgrading	19.9	Registered nurses	0.7
Almost all jobs customarily filled by upgrading	21.8	Engineers, chemists	2.0
No jobs customarily filled by upgrading	2.6	Accountants	1.0
Specific jobs or classifications mentioned ^b	55.7	Draftsmen	0.3
		Engineering technicians	0.3
		Laboratory technicians and assistants	0.7
		Other professional and technical	5.8
Managerials and officials	54.7	Semi-skilled occupations	8.1
Managers, officials, administrators	21.6	Truck drivers	0.3
Supervisors or supervisory jobs	9.4	Apprentices in skilled trades	0.3
First line supervisors	4.9	Machine operators	2.0
Department managers or department heads	10.4	Assemblers	0.3
Assistant department managers or assistant heads	2.9	Pressmen, cutters, adjusters	0.7
Store managers	2.3	Inspectors	0.3
Assistant store managers	1.6	Other semi-skilled occupations	4.2
Other managerial occupations	1.6	Sales occupations	7.2
		Salesmen	6.9
		Junior salesmen	0.3
Skilled occupations	19.9	Service occupations	5.9
Foremen, leadmen	10.5	Head custodians	1.9
Dispatchers	1.3	Policemen and firemen (above entry level)	0.7
Journeyman	2.9	Waiters and waitresses	0.3
Other skilled occupations	5.2	Cooks	1.0
Clerical occupations	16.9	Nurses' aides and orderlies	0.3
Upper-level clerical or top clerical jobs	12.0	Gardeners and groundsmen	0.7
Clerical jobs or office jobs	2.6	Busboys, etc.	0.3
Secretaries	1.3	Other service occupations	0.7
Stock-clerks and shipping clerks	0.3	Unskilled occupations	1.0
Other clerical occupations	0.7	Lube and wash men (garage)	0.3
		Other unskilled occupations	0.7

^aTotal excludes establishments not providing information.

^bThe total of the percentages represented by specific occupations exceeds that shown in this row, since some establishments mentioned more than one occupation.

mentioned.

Nor was it surprising that professional and technical occupations were mentioned relatively infrequently as jobs customarily filled by upgrading. Because of the specialized education and training required for these jobs, they can rarely be filled by upgrading, except to the extent that there are hierarchies within, let us say, the engineering staff of a large company.

Among the other major occupation groups, semi-skilled occupations were mentioned far more frequently than unskilled jobs, as would be expected, while sales and service occupations of one kind or another figure in the responses occasionally.

When we examine the replies relating to occupations (other than entry jobs) filled from outside the establishment, we can observe quite consistent and rational differences between the jobs usually filled by promotion and those that were not. In fact, Table 8-12, summarizing these responses, clearly represents the "opposite side of the coin" from Table 8-11. Here it was the professional and technical occupations that predominated, not merely because, as already suggested, they require specialized education and training, but also because there was, as has been made abundantly clear in other contexts, a very tight labor market situation prevailing in relation to many of these categories.

In interpreting the remainder of the data assembled in Table 8-12, it is important to keep in mind the fact that entry jobs were excluded. This helps to explain why clerical occupations were mentioned relatively infrequently, even though it is apparent that clerical workers were often hired from outside the establishment, and why unskilled occupations were

Table 8 - 12

Specific Jobs or Job Classifications, Other Than Entry Jobs,
Customarily Filled From Outside the Establishment --
Bay Area Employer Policy Survey, 1967

Specific jobs or classifications			
All establishments ^a			
Number	305	Skilled occupations	14.4
Per cent	100.0	Auto mechanics	1.3
		Dispatchers	0.3
No jobs customarily filled from outside	19.7	Journeymen--construction trades	1.0
Some jobs at all levels customarily filled from outside	2.6	Journeymen--other than construction trades	8.2
Jobs filled from outside when no qualified persons within	8.2	Other skilled occupations	3.6
Jobs filled from outside which customarily cannot be filled by promotion from within	2.0	Managerial occupations	12.5
Blue-collar and/or union jobs	1.3	Managers, officials, administrators	7.5
All or most jobs customarily filled from outside	2.0	Supervisors	0.7
Other practices	0.7	Department managers or department heads	2.0
Specific jobs or classifications mentioned ^b	63.5	Store managers	0.3
		Other managerial occupations	2.0
Professional and technical occupations	62.6	Sales occupations	8.9
Instructors or teachers	1.0	Salesmen	8.6
Registered nurses	0.7	Sales persons and sales clerks	0.3
Pharmacists	0.7	Clerical occupations	7.2
Engineers; chemists	15.7	Clerical or office jobs	3.0
Accountants	9.5	Secretaries	1.0
Attorneys	2.6	Office machine operators	1.6
Physicians and/or dentists	1.3	Upper-level clerical or top clerical jobs	1.3
Technical occupations or technicians	0.7	Other clerical occupations	0.3
Draftsmen	1.3	Semi-skilled occupations	2.0
Engineering technicians, aides, and surveyors	0.7	Truck drivers	1.3
Medical technicians and technologists	0.3	Other semi-skilled occupations	0.7
Laboratory technicians and assistants	1.0	Unskilled occupations	0.3
Programmers--EDP	4.9	Laborers	0.3
Other professional and technical occupations	22.2		

^aTotal excludes establishments not providing information.

^bThe total of the percentages represented by specific occupations exceeds that shown in this row, since some establishments mentioned more than one occupation.

scarcely mentioned at all.

Given the emphasis on recruiting managerial workers from "within" the establishment which was clearly indicated in Section VI, it is somewhat surprising to find that managerial occupations above the entry level figured in as many as an eighth of the establishments as types of jobs customarily filled from outside. Although we did not analyze these responses by size of establishment, there were indications that it was the smaller employers -- especially those with small numbers of managerial employees and no management development programs -- who were likely to have to look to sources outside the firm for management personnel.

Among the reasons given for filling job vacancies from outside the establishment, by far the most frequent was that persons with the required qualifications could not be found within the existing work force (Table 8-13). However, there was a fairly clear tendency for the frequency of this response to vary directly with the size of the employee group, whereas the smaller employers were somewhat more likely to mention lack of adequate facilities for training or the fact that there were types of jobs which could not be filled by employee upgrading. In interpreting these responses, it is important to keep in mind the fact that they probably tended to relate to a considerable extent to professional and technical workers, since these were the jobs most frequently mentioned as being filled from outside the establishment. The pattern of responses, moreover, did not vary greatly among the major industry groups. (It should be explained, incidentally, that, although Table 8-13 is based on the first responses of the interviewees, there were very few second or third reasons mentioned in reply to this question.)

Table 8 - 13

Reasons for Filling Job Vacancies from Outside the Survey
Establishment by Number of Employees--
Bay Area Employer Policy Survey, 1967

(The data are based on the first response of the interviewee)

Reasons for filling job vacancies outside the establishment	Total	Number of Employees				
		Less than 250	250 to 499	500 to 999	1000 to 1999	2000 and over
All establishments ^a						
Number	241	95	57	44	22	23
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Persons with required training, skills, and experience cannot be found within the establish- ment	62.3	52.7	59.8	70.5	68.3	87.0
Employer does not have adequate facilities for training or developing persons in the needed skills	17.4	21.0	15.8	15.9	13.6	13.0
Kinds of jobs exist which cannot be filled by employee upgrading	16.2	20.0	20.9	13.6	9.0	--
Requires persons with broad training and experience in the industry	4.1	6.3	3.5	--	9.1	--

^aThe total excludes employers that did not follow this practice and employers that did not provide information.

Additional light is shed on this whole matter of opportunities for promotion through the replies to still another question as to which occupations were generally not promotable (Table 8-14). Consistently with the replies relating to promotable occupations, about two-fifths of the respondents answered "none, or 'almost' none." Among those mentioning specific occupations some of the replies, such as chairman of the board or president, simply reflected the obvious point there is nowhere to go from the top. More revealing was the fact that a significant proportion mentioned "managers in specialized jobs."

Among the nonmanagerial occupations, clerical categories were those most frequently mentioned as not promotable, while the other replies covered a rather wide range, with obvious explanations in some cases, whereas in others the reasons why a given type of job should not be promotable were not so clear. The fact that "custodians" were frequently mentioned among the service jobs, for example, probably reflects the fact that older workers whose efficiency has declined are sometimes transferred to this type of occupational assignment. Also not difficult to explain was the mention, for example, of truck drivers, since in a good many companies the jobs of truck drivers are unrelated to the main body of activities of the organization.

When we asked more specifically whether unskilled workers could move up to semi-skilled jobs in manufacturing, we received an affirmative response in slightly more than two-thirds of the manufacturing establishments. However, even in those establishments in which the response to this question was negative, such promotions were apparently not altogether impossible but occurred infrequently, for, in response to a second question as to how often such promotions occurred, 69 per cent of the durable goods manufacturers and

Table 8 - 14

Occupations That Are Generally Not Promotable --
Bay Area Employer Policy Survey, 1967

Occupations			
All establishments ^a			
Number	291		
Per cent	100.0		
None, or "almost" none	39.9	Service occupations	10.3
All, or "almost" all jobs are		Custodians	6.2
not promotable	1.4	Guards, policemen, firemen,	
Other practices	1.7	meter maids	1.7
Specific occupations mentioned ^b	57.0	Attendants	0.3
		Waiters and waitresses	0.7
		Other service occupations	1.4
Managerial occupations	23.7	Professional and technical	
Chairman of the Board;		occupations	8.9
President; Superintendent;		Instructors or teachers	0.3
top-level executives	16.2	Registered nurses	0.7
Supervisors	0.3	Accountants	0.3
Department managers or		Attorneys	0.3
department heads	0.3	Physicians	0.3
Managers in specialized jobs	6.9	Technicians	2.2
		Draftsmen	0.3
Clerical occupations	18.6	Programmers-EDP	0.3
Clerical jobs or office jobs	9.3	Dietary technicians	0.7
Secretaries	2.1	Other professional and	
Telephone operators and/or		technical occupations	3.5
receptionists; messengers	2.4		
Upper-level clerical or top		Semi-skilled occupations	7.6
clerical jobs	4.5	Truck drivers, etc.	4.5
Other clerical occupations	0.3	Machine operators	1.4
		Other semi-skilled occupa-	
Skilled occupations	12.0	tions	1.7
Auto mechanics	0.7	Unskilled occupations	6.9
Journeyman--construction		Laborers	3.4
trades	0.7	Warehousemen foremen	0.3
Journeyman--other than con-		Machine operators	0.7
struction trades	7.5	Other unskilled occupations	2.4
Foremen, skilled	1.4		
Other skilled occupations	1.7		

^aTotal excludes establishments not providing information.

^bThe total of the percentages represented by specific occupations exceeds that shown in this row, since some establishments mentioned more than one occupation.

64 per cent of those engaged in nondurable goods manufacturing replied that they occurred frequently, whereas all the others (except for a very few in which the information could not be provided) indicated that they occurred infrequently.

Demonstrated competence was singled out as the most important criterion considered in connection with these promotions by more than half of the respondents, while seniority was mentioned as the most important factor by most of the others (Table 8-15). However, other criteria were frequently mentioned in subsequent responses, and, in the final summation, demonstrated competence, seniority, discretion of the supervisor, and completion of training were the most frequently mentioned criteria, in that order. Interestingly, completion of training scarcely figured at all in the first responses and was mentioned by only 36 per cent of the respondents when the answers were cumulated. Thus training was apparently not involved in a substantial majority of the establishments in connection with this type of reclassification, which is perhaps not surprising in view of the fact that most semi-skilled jobs can be learned fairly quickly. An additional question as to why this type of promotion could not occur yielded very few responses. In most of the manufacturing establishments the answer was to the effect that the question was inapplicable, since such promotions were not impossible.

The picture was somewhat different in connection with promotions from semi-skilled to skilled jobs in manufacturing. Although the proportion indicating that such promotions could take place was larger (89 per cent) than in the case of movements from unskilled to semi-skilled classifications, the percentages responding that movement from semi-skilled to skilled

Table 8 - 15

Most Important Criteria for Promotion of Unskilled Workers
to Semi-skilled Jobs in Manufacturing --
Bay Area Employer Policy Survey, 1967

Most important criteria	1st response	2nd response	3rd response	All responses
All establishments ^a				
Number	108	108	108	108
Per cent	100.0	100.0	100.0	266.6 ^b
Demonstrated competence	54.6	32.3	8.3	95.4
Seniority	39.8	15.7	19.4	75.0
Discretion of supervisor	2.8	24.1	24.1	50.9
Completion of training	1.9	17.6	16.7	36.1
Desire and interest	--	1.9	2.8	4.6
Other criteria	0.9	1.9	1.9	4.6
No second or third response		6.5	26.9	

^aTotal excludes nonmanufacturing establishments, those not employing unskilled workers, and those not providing information.

^bTotal exceeds 100.0 per cent, because some establishments gave more than one response.

positions occurred frequently were considerably smaller -- 42 per cent in the case of the durable goods establishments and 49 per cent in the case of those manufacturing nondurable goods. The primary explanation of this difference between the two types of promotions evidently lay partly in the much greater difficulty involved, and length of time required, in acquiring the qualifications required to achieve skilled status. This is suggested by the fact that "possession of specific skills" was selected by about half the respondents as the most important criterion for such promotions and by 83 per cent as a factor (Table 8-16). Seniority was mentioned somewhat less frequently than in the case of promotions from unskilled to semi-skilled status, although it was singled out as the most important criterion in nearly a third of the establishments and mentioned as a factor in 63 per cent. Completion of training, somewhat surprisingly, was mentioned in only 11 per cent of the first responses, and in only slightly more than half of the responding establishments. However, as we shall find in Section XI, only 44 per cent of the durable goods manufacturing establishments and 36 per cent of the nondurable goods manufacturers had apprenticeship programs. Since apprenticeship is the usual formal path for achieving skilled status, the absence of apprenticeship programs in most of the manufacturing establishments clearly limited the opportunities for moving upward to skilled status.

There is undoubtedly another factor involved, however. In most manufacturing establishments the number of semi-skilled jobs far exceeds the number of skilled jobs. This means that, even though management may encourage promotion from semi-skilled to skilled status the actual opportunities which are likely to arise are frequently far too limited to provide

Table 8 - 16

Most Important Criteria for Promotion of Semi-skilled Workers to
Skilled Jobs in Manufacturing --
Bay Area Employer Policy Survey, 1967

Most important criteria	1st response	2nd response	3rd response	All responses
All establishments ^a				
Number	99	99	99	99
Per cent	100.0	100.0	100.0	264.5 ^b
Possession of specific skills	49.5	22.2	11.1	82.8
Seniority	30.3	13.1	19.2	62.6
Completion of training	11.1	28.3	12.1	51.5
Desire and interest	--	2.0	2.0	4.0
Discretion of supervisor	3.0	25.3	23.2	51.5
Demonstrated competence	5.1	4.0	--	9.1
Other criteria	1.0	--	2.0	3.0
No second or third response		5.1	30.4	

^aTotal excludes nonmanufacturing establishments, those not employing semi-skilled workers, and those not providing information.

^bTotal exceeds 100.0 per cent, because some establishments gave more than one response.

any appreciable probability of promotion for most semi-skilled workers. Moreover, this difficulty is likely to be compounded when, as we found was the case in a number of nondurable goods manufacturing establishments, total employment is tending to decline. It was impossible to test this line of speculation on the basis of answers to the question as to why semi-skilled workers could not be promoted to skilled status, since, as in the case of the analogous question relating to the unskilled-semi-skilled progression, there were very few responses. However, as we shall find in Section XI, the most frequent reason mentioned for not having an apprenticeship program in establishments with apprenticeable trades but lacking such a program was "not enough journeymen employed in relevant trades to warrant employment of apprentices" (Table 11-10). Although the relevant data were not confined to manufacturing establishments, it is likely that a good many employers advancing this reason were in manufacturing.

Promotion Opportunities by Age and Sex

Another way of testing whether employment opportunities tend to be relatively abundant or sluggish is to inquire about the age structure of the managerial component of an establishment's work force. Thus we asked our respondents to indicate what percentage of managers above first line supervision were less than 35 years of age. Interestingly, while data on the age distribution of the total work force were often not available, the great majority of our establishments were able to provide information in response to this more specific question relating to the age structure of the managerial work force.

In any event, there were no managers above first line supervision under 35 years of age in 40 per cent of the responding establishments, while at the other end of the scale 30 per cent or more of these managers were under age 35 in 16 per cent of the establishments (Table 8-17). Moreover, as would have been expected, there was a very clear tendency for the proportion of establishments with no young managers (by this definition) to vary inversely with number of employees. Consistently with some of our other data, moreover, respondents in the largest size group of establishments were particularly likely to report a relatively large percentage of young managers.

We also suspected that the proportion of young managers would tend to vary inversely with the age of the establishment, as measured by number of years in the Bay Area, and found, indeed, that, at least to a certain extent, this was the case (Table 8-18). Actually, the tendency showed up particularly clearly with respect to the proportion of establishments with 30 per cent or more of its managers under age 35 -- a proportion which declined fairly consistently with increasing age of the establishment. On the other hand, although the proportion of establishments with no young managers was comparatively small among those that had been in the Bay Area less than ten years (too small a group to yield a very reliable percentage), it was also comparatively small in the oldest group of establishments. This is not particularly surprising, since in the oldest establishments, those in the original management group would long since have died off, and there would have been a strong tendency to attempt to rejuvenate the managerial staff, at least to a certain extent. As was found in an earlier Institute study of retirement policies, compulsory retirement is particularly

Table 8 - 17

Proportion of Managers Above First Line Supervision Who Are
Less Than 35 Years of Age, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Per cent of managers under 35 years of age				
				Less than 10	10 to 20	20 to 30	30 or more
	Number	Per cent	0				
All establishments ^a	262	100.0	39.7	9.2	19.1	12.2	16.0
Less than 250	114	100.0	55.3	2.6	15.8	14.0	12.3
250 to 499	65	100.0	32.3	15.4	16.9	15.4	20.0
500 to 999	44	100.0	34.1	18.2	25.0	4.5	18.2
1,000 to 1,999	20	100.0	15.0	25.0	45.0	5.0	10.0
2,000 and over	19	100.0	10.5	42.1	5.3	15.8	26.3

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments not providing information.

Table 8 - 18

Proportion of Managers Above First Line Supervision Who Are
Less Than 35 Years of Age, by Number of Years
Establishment Has Been in the Bay Area --
Bay Area Employer Policy Survey, 1967

Number of years in Bay Area	Total		Per cent of managers under 35 years of age				
	Number	Per cent	0	Less than 10	10 to 20	20 to 30	30 or more
All establishments ^a	260	100.0	39.4	13.1	19.0	12.3	16.2
Less than 10 years	12	100.0	25.0*	8.3*	25.0*	16.7*	25.0*
10 to 25 years	57	100.0	40.3	15.8	15.8	8.8	19.3
25 to 50 years	91	100.0	40.6	11.0	20.9	11.0	16.5
50 to 75 years	61	100.0	45.9	11.5	13.1	13.1	16.4
75 to 100 years	23	100.0	39.2	17.4	26.1	13.0	4.3
100 or more	16	100.0	18.8	18.8	31.1	25.0	6.3

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments not providing information.

likely to be found in the oldest establishments, reflecting the resistance of management against permitting its work force to assume an elderly age distribution.³

Sex appears to be a more potent barrier to becoming a manager than youth. Just about three-fifths of our establishments reported that there were no women managers above first line supervisors (Table 8-19). Moreover, in only about a tenth of the establishments were 20 per cent or more of these managers women.

However, the opportunities for women to become managers were distinctly more favorable in the major industry groups in which large proportions of women were found in the employee group, as we might expect. In retail trade, the finance group, services, and government, most establishments had women in the managerial staff, but only in retail trade and services were they present in substantial proportions.

Refusal of Promotions

Although refusal of promotions occurred in our establishments, it was apparently not a very frequent phenomenon. In response to a question as to whether workers who were offered promotions frequently refused them, only about 9 per cent of the employers replied in the affirmative. However, a decided majority had had some experience with such refusals and were in a position to provide information on the reasons most often given by workers for refusing promotions (Table 8-20).

In providing this type of information, about 14 per cent of the respondents indicated that no workers had refused promotions in their establishments. This proportion varied considerably by major industry group,

Table 8 - 19

Proportion of Managers Above First Line Supervision Who Are Women,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Per cent of managers who are women			
	Number	Per cent	0	Less than 10	10 to 20	20 or more
All establishments ^a	266	100.0	59.4	21.4	8.6	10.5
Construction	24	100.0	87.5	4.2	8.3	--
Manufacturing'						
Durable	52	100.0	84.6	13.5	1.9	--
Nondurable	56	100.0	64.3	25.0	7.1	3.6
Transportation and utilities	26	100.0	53.8	38.5	--	7.7
Trade						
Wholesale	12	100.0	83.3	16.7	--	--
Retail	25	100.0	40.0	8.0	12.0	40.0
Finance, insurance, and real estate	20	100.0	40.0	40.0	15.0	5.0
Services	30	100.0	30.0	16.7	23.3	30.0
Government	21	100.0	28.6	38.1	14.3	19.0

^aTotal excludes establishments not providing information.

Table 8 - 20

Reasons Most Often Given by Workers Who Refuse Promotions, by Major
Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Reluctance to		Pay differ- ential inade- quate	All other reasons	No refus- als
	Num- ber	Per cent	Accept more responsi- bility	Leave area			
All establishments ^a	257	100.0	53.0	16.3	9.7	6.6	14.4
Construction	20	100.0	45.0	5.0	20.0	5.0	25.0
Manufacturing							
Durable	48	100.0	50.0	18.8	8.3	8.3	14.6
Nondurable	56	100.0	66.1	10.7	12.5	3.6	7.1
Transportation and utilities	24	100.0	37.5	33.3	25.0	4.2	--
Trade							
Wholesale	11	100.0	45.4*	18.2	9.1*	--	27.3*
Retail	31	100.0	67.7	12.9	6.5	3.2	9.7
Finance, insurance, and real estate	19	100.0	52.6	36.8	--	5.3	5.3
Services	30	100.0	43.3	6.7	3.3	10.0	36.7
Government	18	100.0	44.4	16.7	--	22.2	16.7

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments not providing information.

however, and the variations were not clearly associated with, say, differences in the sex composition of employment. In transportation and utilities, there were no establishments reporting absence of refusals of promotions, while the reasons most frequently given by workers for refusing, as reported by the employers, were more broadly distributed than in the other major industry groups, with "reluctance to leave the area" and "pay differential inadequate" playing relatively important roles. It seems probable that, because transportation and utilities companies were especially likely to be engaged in activities that were broadly dispersed geographically, refusal of promotions that would have required the worker to move probably occurred somewhat more frequently than in most other industry groups.

Contrary to what might have been expected, neither reluctance to accept additional responsibility nor reluctance to leave the area were consistently reported more frequently as reasons given most often for refusing promotions in the major industry groups with large proportions of women in the work force, although the former was reported relatively often in retail trade and the latter especially frequently in finance, insurance, and real estate.

The category, "all other reasons," includes reluctance to take training,

reluctance to leave security of union affiliation, reluctance to leave work area, reluctance to accept change in shift or hours of work, and miscellaneous. In most major industry groups, none of these reasons were reported by any appreciable proportion of our respondents, although reluctance to accept a change in shift or hours of work was mentioned slightly more frequently by government agencies than in the other major industry groups.

Probationary Periods

Our last series of questions in the promotion section of the interview related to probationary periods. The great majority of our establishments (85 per cent) indicated that they had fixed probationary periods, and this proportion did not vary widely among major industry groups, except for the fact that less than half of the construction employers indicated that they had fixed probationary periods. Here, again, as in so many other contexts, the fact that construction workers are frequently hired for short-term jobs undoubtedly explained the difference in practice.

In three-fourths of the establishments with fixed probationary periods, however, the period was not uniform for all newly hired workers but varied among different groups of workers. In considerable part, this tendency was probably associated with the fact that more than one union was represented in many of the establishments, with differing provisions relating to probationary periods in the various collective bargaining agreements. That this was the most likely explanation was supported by the fact that there was something of a tendency for the proportion of establishments reporting a single probationary period to vary inversely by major

industry group with the proportion covered by collective bargaining agreements. In both of the two least unionized groups -- the finance group and government -- half of the establishments with fixed probationary periods reported that it was uniform for all workers.

This interpretation was also supported by the results of a cross-tabulation which related the uniformity or diversity of probationary periods in establishments to whether or not the periods were determined by a collective bargaining agreement. Of nearly 400 probationary periods reported, slightly more than half were determined by collective bargaining agreements. Among the establishments with uniform probationary periods, however, more than seven-tenths of the periods reported were not determined by a collective bargaining agreement, whereas among the establishments with differing periods, only 42 per cent were not determined by a collective bargaining contract.

Where the probationary period was uniform for all entry jobs in the establishment, three months was the most frequently reported period, accounting for nearly two-fifths of the responses. Next in relative importance were 30 days or a month, a year, and six months -- in that order.

The distribution of periods was not greatly different when all the responses of establishments with varying periods for different groups of workers were cumulated. Three months was again the most frequently reported period, accounting for 29 per cent of the responses. Next in order of relative frequency were 30 days or a month, six months, 60 or 65 days, and a year. Less frequently reported, but accounting for about 15 per cent of all the responses, were 21 days, 13 days, 15 days, 45 days, and other periods.

Concluding Remarks

Although nearly all our interviewees indicated that there was an established promotion policy, emphasizing promotion from within, our data indicated very clearly that, for a rather wide variety of reasons, promotional opportunities varied greatly among the establishments in the sample. There was the familiar factor of size of the establishment, with opportunities for promotion tending to rise with increasing size of the work force. There was also the familiar factor of union pressure in favor of preference to existing employees in promotions and in favor of some degree of emphasis on seniority as a criterion. But there were clearly a good many other factors that in practice played an important role in determining to what extent employees could rise from the bottom to higher levels. These included the age of the establishment, the nature of the educational background and training required for managerial positions (e.g., buyers in retail trade), and the occupational structure of the establishment (e.g., the ratio of supervisory to rank-and-file positions and the ratio of skilled to semi-skilled jobs).

Moreover, an important logical inference from our data is that, in view of the rapid increase in the proportion of professional and technical workers in the employed population, opportunities to gain advancement through promotion may tend to become more restricted. It was these workers, who must have specialized professional training that cannot be acquired on the job in most instances, that were most likely to be hired from the outside. This is simply, of course, another way of saying that specialized educational background is becoming relatively more important as the professional and technical occupations grow in relative importance. Yet it is important not

to generalize too widely in this connection. It has now become generally recognized that some of the newer techniques, e.g., programming, can be learned by persons lacking even a high school diploma, that there are opportunities for rising within a professional occupational hierarchy, and that, as our data in Section XI will make abundantly clear, out-service training is evidently being increasingly utilized, not only to impart certain types of professional, technical, and managerial skills, but also to keep them from becoming obsolescent.

Footnotes to Section VIII

1. Clark Kerr, "The Balkanization of Labor Markets," in Labor Mobility and Economic Opportunity (Cambridge, Mass.: The Technology Press of M.I.T. and New York: Wiley, 1954).
2. Cf. Sumner H. Slichter, James J. Healy, and E. Robert Livernash, The Impact of Collective Bargaining on Management (Washington, D.C.: The Brookings Institution, 1960), pp. 198-199.
3. Cf. Margaret S. Gordon, "The Older Worker and Retirement Policies," Monthly Labor Review, LXXXIII (June, 1960), 577-585.

IX. LABOR TURNOVER

Although statistics on labor turnover in manufacturing have been published for some years, data on turnover in other industry groups have been much more limited. Moreover, since the data on factory turnover have not distinguished among the various occupation groups, and since blue-collar workers predominate in most manufacturing industries, the available data have shed little light on turnover among white-collar workers. On the other hand, labor mobility studies based on worker surveys have yielded a good deal of information about variations in the propensity to shift jobs by age, sex, occupation, and other worker characteristics.

Types of Separations

One of the firmly established results of studies of both labor mobility and labor turnover is that voluntary quits tend to predominate among reasons for separations in periods of economic expansion and full employment, whereas layoffs tend to predominate in recession periods. Thus, it is not surprising to find that, in response to a question as to whether separations of workers in the various occupation groups were primarily quits or primarily layoffs, a substantial majority of our establishments indicated that it was primarily quits that were involved (Table 9-1).

However, and not unexpectedly, this tended to be somewhat more true for white-collar workers than for blue-collar workers, and, in their responses with respect to the various groups of blue-collar workers, there was a tendency for the proportion of employers indicating that separations took the form primarily of quits to decline with decreasing skill level.

Table 9 - 1

Types of Separations Occurring in Survey Establishments,
by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Major occupational group	Total		Types of separations			
	Number	Per cent	Pri- marily quits	Pri- marily layoffs	Few of either	Quits and layoffs about equal
All responses ^a	1,977	100.0	70.6	12.5	15.9	1.0
Professional and technical	259	100.0	75.3	1.5	23.2	--
Managerial	299	100.0	69.9	0.3	29.8	--
Clerical	306	100.0	86.6	1.3	12.1	--
Sales	179	100.0	77.0	4.5	17.9	0.6
Skilled	247	100.0	69.2	13.8	16.2	0.8
Semiskilled	238	100.0	57.9	32.8	7.6	1.7
Unskilled	246	100.0	52.4	37.0	6.1	4.5
Services	223	100.0	74.4	13.3	11.3	1.0

^aIn the case of each major occupational group, the total excludes establishments not employing that group and those that did not provide information.

To look at the other side of the coin, a response to the effect that separations were primarily layoffs was most uncommon in answers relating to white-collar workers, quite uncommon in the cases of skilled workers and service workers, but fairly common in the case of semi-skilled workers (33 per cent) and in the case of unskilled workers (37 per cent). It is, of course, the latter two groups that are particularly vulnerable to involuntary unemployment.

In the case of white-collar workers, variations in these patterns by major industry groups were insignificant, and, in the case of the various groups of blue-collar and service workers, they were not very pronounced (Appendix Tables E-1 to E-4). Construction stood out as an industry group in which the great majority of establishments responded that separations took the form primarily of layoffs for all three blue-collar groups. This is scarcely surprising in view of the short-term nature of many construction jobs. At the other end of the scale, government agencies, generally following civil service employment practices which have long been known for their emphasis on job security, included an exceptionally high proportion of establishments indicating that separations took the form primarily of quits.

In the case of both semi-skilled workers and unskilled workers, the proportion of manufacturing establishments reporting "primarily layoffs" tended to be higher than in nonmanufacturing industry groups other than construction, and also to be higher in durable goods than in nondurable goods manufacturing. The latter relationship was, of course, to be expected on the basis of the greater cyclical vulnerability of the durable goods manufacturing establishments and the fact that they would be more likely

to be involved in abrupt employment fluctuations resulting from such factors as shifts in defense contracts. It is also not particularly surprising to find that, in the case of skilled workers, a comparatively large proportion of nondurable goods manufacturers (33 per cent) responded "few of either," whereas this response was considerably less common from this group of employers in the cases of semi-skilled and unskilled workers. This type of situation would be expected in a major industry group in which employment was stable or declining in a relatively large proportion of establishments (Section II) and in which a very considerable amount of technological change was going on (Section IV). Moreover, in food processing establishments with seasonal employment patterns, semi-skilled and unskilled workers are hired in large numbers on a seasonal basis, whereas employers attach importance to retaining maintenance mechanics and other skilled workers on a year-round basis.

Voluntary Quits

Clerical workers easily took first place in the relative frequency with which they were mentioned as having comparatively high quit rates (Table 9-2). This, of course, is altogether consistent with the fact that clerical workers are not only predominantly young but also consist chiefly of young women, who frequently quit for reasons associated with marriage, pregnancy, and child care problems.

Although ranking far below clerical workers in the frequency with which they were mentioned, both professional and technical workers, at the top of the occupational ladder, and unskilled workers, at the bottom, were mentioned relatively often as having high quit rates. The fact that employment opportunities were expanding more rapidly for professional and technical workers than for any other major occupation group would tend to be associated with a comparatively

Table 9 - 2
Major Occupation Groups Mentioned as Having
High Voluntary Quit Rates --
Bay Area Employer Policy Survey, 1967

Major occupational group	1st response	2nd response	3rd response	All responses
All establishments ^a (or all responses)				
Number	231	231	231	282
Per cent	100.0	100.0	100.0	100.0
Professional and technical workers	13.4	4.3	0.4	14.9
Managerial workers	--	--	--	--
Clerical workers	47.5	4.3	--	42.6
Sales workers	6.5	0.9	--	6.0
Skilled workers	4.8	1.3	0.9	5.7
Semi-skilled workers	8.7	1.7	0.4	8.9
Unskilled workers	12.6	3.9	1.3	14.5
Service workers	6.5	2.2	0.4	7.4
No second or third response	--	81.4	96.6	--

^aTotal includes all establishments that mentioned at least one major occupational group with a high voluntary quit rate.

youthful, and hence mobile, age composition of the group, and also with an unusual set of opportunities for improving one's job situation by shifting from one establishment to another. In the case of the unskilled group, on the other hand, youth was doubtless the major factor in explaining the fairly frequent mention of high quit rates.

Although there were some rather wide variations by major industry group in the pattern of responses relating to occupation groups with high quit rates, these variations were closely related to differences in occupational patterns of employment and in the relative importance of quits versus layoffs (Appendix Table E-5). In manufacturing, for example, clerical workers were not mentioned as frequently as in some of the other industry groups, probably reflecting the fact that they often represented a relatively small proportion of the work force compared with blue-collar workers. On the other hand, in finance, insurance, and real estate, they were almost the only group mentioned. In both government and services, professional and technical workers were mentioned by a considerably larger proportion of employers than in other industry groups. In this connection, it should be kept in mind that our service establishments included private educational institutions and certain business service establishments employing substantial numbers of professional workers, while employment of professional workers tends to be relatively important in many types of government agencies, including local school districts.

Among the reasons mentioned by employers for voluntary quits, those relating to the attitude of the worker, the desire to improve his job situation, or domestic and personal considerations predominated, but tended to be mentioned with relatively greater frequency in connection with white-collar workers than in the case of blue-collar or service workers (Tables 9-3 and 9-4).

Table 9 - 3

Reasons for "Higher Than Average Quit Rates" for White-Collar Workers,
by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Reasons	Total	Profes- sional and technical	Cleri- cal	Sales
All responses ^a				
Number	213	53	141	19
Per cent	100.0	100.0	100.0	100.0
Reasons related to type of worker or attitude of worker	88.8	96.2	88.8	78.9
Domestic or personal considerations	47.0	17.0	62.1	15.8
Desire for higher rate of pay or higher paying type of job	9.9	17.0	7.0	--
Desire for better job or other job	11.3	--	12.0	26.3
Inveterate job changers	2.8	9.4	--	--
Abundance of alternative job opportu- nities	7.5	28.3	--	--
Desire to capitalize on training given by current employer -- by changing employers	2.3	--	2.1	--
Desire to return to school	2.3	--	2.8	--
Desire for more prestigious job	2.3	7.5	--	--
Other	3.4	17.0	2.8	36.8
Reasons relating to working conditions	5.2	1.9	6.3	15.8
Kind of work is routine in nature	1.9	--	2.8	--
Undesirable shifts or hours of work	1.4	--	--	--
Other reasons relating to working conditions	3.7	1.9	3.5	15.8
Reasons relating to environmental and transportation difficulties	3.7	1.9	4.2	5.3
Lack of centrality in relation to this community or to shopping centers	2.8	--	3.5	--
Other reasons relating to environmental and transportation difficulties	0.9	1.9	0.7	5.3
Other	0.5		0.7	--

^aTotal excludes establishments not mentioning any of these occupational groups as having higher than average voluntary quit rates and employers that could not provide information. Total responses exceed number of responding establishments, since some respondents mentioned more than one reason.

Table 9 - 4

Reasons for "Higher Than Average Quit Rates" for Blue-Collar
and Service Workers, by Major Occupation Group --
Bay Area Employer Policy Survey, 1967

Reasons	Total	Skilled	Semi- skilled	Un- skilled	Service
All responses ^a					
Number	130	20	31	54	25
Per cent	100.0	100.0	100.0	100.0	100.0
Reasons relating to type of worker or attitude of worker	62.9	75.0	58.0	55.0	76.0
Domestic or personal consider- ations	5.4	--	16.1	--	--
Desire for higher rate of pay or higher paying kind of job	21.3	40.0	9.7	18.5	28.0
Desire for better and/or other job	4.6	--	--	7.4	--
Inveterate job changers	12.3	5.0	12.9	14.8	16.0
Desire to capitalize on train- ing given by current employer-- by changing employers	0.8	--	--	--	--
Intermittent attachment to the labor force	3.1	--	--	5.6	--
Abundance of alternative job opportunities	4.6	30.0	--	--	--
Other	10.8	15.0	19.3	9.3	32.0
Reasons relating to working condi- tions	33.1	20.0	32.3	44.4	20.0
Kind of work is disagreeable, difficult, or dangerous	7.7	--	9.7	11.1	--
Kind of work is routine in nature	0.8	--	--	--	--
Lack of job security	7.7	5.0	--	12.9	--
Undesirable shifts or hours of work	9.2	10.0	12.9	9.3	--
Other	7.7	5.0	9.7	11.1	20.0
Reasons relating to environmental and transportation difficulties	3.2	5.0	6.5	--	4.0
Other	0.8	--	3.2	--	--

^aTotal excludes establishments not mentioning any of these occupational groups as having higher than average voluntary quit rates and those that could not provide information. Total responses exceed number of responding establishments, since some respondents mentioned more than one reason.

Among the white-collar workers, however, the more specific reasons mentioned within this general grouping differed rather sharply, with "abundance of alternative job opportunities" playing a prominent role in reasons attributed to professional workers, while "domestic or personal considerations" were distinctly predominant in the case of clerical workers, and the "desire for a better job or other job" was relatively important in comments relating to sales workers.

Reasons relating to working conditions were mentioned with somewhat greater relative frequency in explaining the voluntary quits of blue-collar and service workers, but more particularly in the cases of the semi-skilled and unskilled, for whom such factors as disagreeable or routine work, undesirable shifts, and lack of job security figured rather prominently in the reasons given by employers to explain their quits.

About half of our respondents indicated that they had programs to reduce voluntary quits, but the proportion varied considerably among the major industry groups, bearing a rough relationship to the extent to which voluntary quits appeared to be a problem for the group (Table 9-5). However, when these employers indicated the particular practices that they regarded as programs to reduce voluntary quits, a decided majority of the practices mentioned were simply aspects of good personnel policies (Table 9-6). Only about 28 per cent of the responses referred to practices which had a specific relation to reducing quits, such as conducting exit interviews, pension or profit-sharing plans, studies of the causes of turnover, and the like. Variations among major industry groups in the distribution of these responses were not particularly pronounced, although service industries stood out as a group in which the proportion mentioning the probable futility of programs to

Table 9 - 5
Per Cent of Establishments Reporting Programs
for Reducing Voluntary Quits,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Number	Per cent
All establishments ^a	308	49.4
Mining and construction	26	34.6
Manufacturing		
Durable	57	57.9
Nondurable	61	41.0
Transportation and utilities	27	48.1
Trade		
Wholesale	13	42.2*
Retail	33	33.3
Finance, insurance, and real estate	25	76.0
Services	36	55.6
Government	30	53.3

^aTotal excludes one establishment not providing information.

Table 9 - 6
Programs for Reducing Voluntary Quits,
as Reported by Respondents --
Bay Area Employer Policy Survey, 1967

Types of programs	
All responses ^a	
Number	236
Per cent	100.0
Programs that could be classified as particularly relevant to reducing voluntary quits	27.9
Exit interviews conducted	14.3
Continuing counseling program	3.8
Savings, pension, profit-sharing, and/or stock-option programs	3.8
Causes of turnover studied	1.7
Develops employee's sense of identification with establishment and its goals	1.7
Employee attitude surveys	1.3
Quit rate of employees reviewed regularly with unit supervisor	1.3
All other programs	72.1
Good employee relations, etc.	10.5
Careful initial screening of employees	5.1
Policy of promotion from within	5.1
Communications program	4.7
Training programs	9.4
Wage and salary plans and/or benefit programs	4.7
Other	32.6

^aTotal responses of the 152 establishments that reported they had programs for reducing voluntary quits; some establishments reported more than one type of program.

reduce voluntary quits (about a third) was comparatively high.

Among the establishments that indicated they had no programs for reducing voluntary quits, about seven-tenths explained that they did not consider there was a need for such a program, since they had relatively few voluntary quits. On the other hand, about a fourth of these employers said that voluntary quits would continue, regardless of any program they might introduce, in view of the type of worker involved in quits or the nature of the reasons for a problem of voluntary quits.

The relative absence of programs specifically directed toward reducing voluntary quits appears understandable in the light of our interviewees' responses relating to the factors they considered most effective in reducing voluntary quits (Table 9-7). Job security ranked well above all other factors in the frequency with which it was mentioned as a first response, with "higher than prevailing wage rates and fringe benefits" and "accumulation of seniority" very close together in second and third places. "Encouragement of promotion from within" was fourth, at some distance, while other factors were mentioned relatively infrequently, although a combination of factors relating to working and environmental conditions played something of a role.

When all the responses were cumulated, job security outranked all the other factors mentioned by a considerable margin, figuring in the answers of more than three-fifths of the interviewees, while accumulation of seniority, which, of course, was closely related to job security, ranked second, followed rather closely by encouragement of promotion from within. "Higher than prevailing wage rates and fringe benefits" had dropped to fourth place, while "proximity to residential areas and other environmental

Table 9 - 7
Most Important Factors as to Effectiveness
in Reducing Voluntary Quits --
Bay Area Employer Policy Survey, 1967

Most important factors	1st response	2nd response	3rd response	All responses
All establishments ^a (or all responses)				
Number	277	277	277	277
Per cent	100.0	100.0	100.0	251.2 ^b
Job security	27.8	20.9	13.7	62.5
Accumulation of seniority	19.1	15.5	8.3	43.0
Encouragement of promotion from within	13.4	15.9	10.8	40.1
Higher than prevailing wage rates and fringe benefits	19.9	10.8	7.9	38.6
Proximity to residential areas; other environmental factors	3.6	9.4	10.8	23.8
Profit sharing plan; provisions of pension plan; good fringe benefits	3.2	8.7	9.0	20.9
Good or above average working conditions	5.1	1.4	1.8	8.3
Improvement of physical facilities	--	4.3	3.6	7.9
Other	7.9	6.5	7.2	6.1
No second or third response	--	6.5	26.7	--

^aTotal includes all establishments that provided information on at least one "most important factor."

^bTotal exceeds 100 per cent, since respondents frequently mentioned more than one important factor.

factors" ranked in fifth place. "Profit sharing plans, pension plans, and other fringe benefits," which were mentioned somewhat more frequently in the second and third responses than in the first, occupied sixth place.

It is perhaps pertinent to point out that, on the basis of the results of labor mobility studies based on worker interviews, there is a tendency for job security and accumulation of seniority to be more highly valued by middle-aged and older workers than by younger workers, and, of course, middle-aged and older workers are considerably less likely to quit than younger workers.

In some of the major industry groups, however, job security was by no means the leading "most important factor" mentioned by respondents (Table 9-8). This was particularly true in construction, where quits appeared to represent an insignificant problem, except in the case of clerical workers, but it was also mentioned particularly infrequently in the first responses of interviewees in retail trade and finance, insurance, and real estate -- both of them industry groups employing large proportions of women, many of whom probably value job security less highly than do men because of their propensity to move into and out of the labor force with changes in the family situation.

At the other end of the spectrum, the proportion of government establishments singling out job security as the most important factor in reducing voluntary quits was considerably larger than in any of the private industry groups. This tends to confirm one's general impression that job security, strongly encouraged by civil service practices, plays an important role as one of the attractive features of public employment. We had occasion to observe, in Section VII, that this may be particularly true for minority

Table 9 - 8

Most Important Factor as to Effectiveness in Reducing Voluntary Quits,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Job security	Higher wage rates etc.	Seniority	Working conditions, environmental factors, etc.	Encouragement of promotion	Pension, other fringe benefits
	Number	Percent						
All establishments ^a	277	100.0	27.8	19.9	19.1	16.6	13.4	3.2
Mining and construction	16	100.0	6.2	25.0	25.0	31.3	12.5	--
Manufacturing								
Durable	55	100.0	29.2	21.8	23.6	12.7	10.9	1.8
Nondurable	56	100.0	34.0	19.6	23.2	9.0	7.1	7.1
Transportation and utilities	25	100.0	20.0	16.0	40.0	4.0	20.0	--
Trade								
Wholesale	9	100.0	33.4 *	33.3 *	11.1 *	11.1 *	11.1 *	
Retail	31	100.0	12.9	19.4	9.7	32.3	22.5	3.2
Finance, insurance, and real estate	24	100.0	16.7	16.7	16.7	16.7	29.0	4.2
Services	33	100.0	24.2	18.2	12.1	33.3	6.1	6.1
Government	28	100.0	60.6	17.9	3.6	7.2	10.7	--

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments not mentioning a most important factor.

group government employees, especially in the least skilled occupation groups.

That seniority should figure relatively prominently in the first responses of transportation and utilities employers comes as no particular surprise. There has been a long tradition of emphasis on seniority in transportation industries, probably reflecting the fact that men who choose a line of work which requires them to spend long periods away from home and out of touch with alternative job opportunities place a high value on the job security associated with seniority.

When the various factors mentioned by employers were cumulated, however, the differences among the major industry groups were narrowed considerably (Appendix Table E-6). Factors that were not singled out in the first response often figured in the second or third responses of interviewees.

Pension Plans and Voluntary Quits

Of considerable interest is the fact that so few establishments mentioned pension plans as a method of attempting to reduce voluntary quits, in view of the widely held impression that pension plans tend to be adopted, at least in part, to encourage employee loyalty to the firm. Certainly the explanation of the minimal importance assigned to pension plans as a means of reducing quits did not lie in any lack of prevalence of pension plans (Table 9-9). More than four-fifths of these establishments with 100 or more employees had pension plans covering white-collar employees, while nearly nine-tenths had plans covering blue-collar employees. In some cases, these plans covered all employees, but in a good many others plans for

Table 9 - 9

Per Cent of Establishments with Pension Plans Covering
White-Collar Workers or Blue-Collar Workers,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

(Some of these workers are covered by plans for all employees.)

Major industry group	Total number	White- collar	Blue-collar	
			Union plans only	Total -- all plans
All establishments	309	81.6	54.4	89.6
Mining and construction	26	53.8	92.3	100.0
Manufacturing				
Durable	57	84.2	59.6	84.2
Nondurable	62	87.1	59.7	98.4
Transportation and utilities	27	85.2	66.7	88.9
Trade				
Wholesale	13	84.6*	69.2*	100.0*
Retail	33	75.8	72.7	90.9
Finance, insurance, and real estate	25	80.0	20.0	80.0
Services	36	75.0	47.2	69.4
Government	30	100.0	--	100.0

* Percentages based on fewer than 15 cases.

white-collar and blue-collar employees were separate, and not all plans covered all blue-collar workers or all white-collar workers.

In nearly all major industry groups a very large proportion of the establishments in the sample had a pension plan covering blue-collar workers. Only services stood out with an appreciably smaller proportion of establishments having such plans, while the proportion in finance, insurance, and real estate was also somewhat smaller than the average. These, also, were the two major industry groups which were least likely to have only a union plan for their blue-collar employees, and this, clearly, was related to the fact that establishments in these industry groups -- particularly in finance, insurance, and real estate -- were less likely to be covered by a collective bargaining agreement than most of the other groups, as we found in Section V.

In the case of white-collar workers, the construction group was least likely to have a plan. Undoubtedly, this was explained at least in part by the fact that many of the smaller construction employers had relatively few white-collar employees. However, some of the larger construction companies had substantial numbers of engineers in their work forces, and this may help to account for the fact that in half of the construction companies without pension plans for white-collar workers, these employees were covered by profit-sharing plans.

These data suggest that there has been an appreciable increase in the prevalence of pension plans in the area since an earlier survey conducted by our Institute in 1960 was completed, although the two surveys are not precisely comparable, because the 1960 survey included only San Francisco and Alameda counties, so far as the northern part of the state was concerned,

and was confined to private employers. However, there would appear to be no reason to assume that pension plan coverage in San Francisco and Alameda counties would be lower than in the rest of our six-county area -- in fact, one would tend to assume the contrary. Moreover, the two surveys are comparable in covering establishments with 100 or more employees. In any case, the earlier survey showed that 22 per cent of the responding firms had no pension plans, and, so far as major industry groups were concerned, it was particularly true in the trade group that the proportion with no plan was considerably higher than our more recent data indicate.¹ This is consistent with data recently published by the California Department of Industrial Relations, which indicated that there was a pronounced increase in pension plan coverage in retail trade in the state between 1958 and 1966, but the data related to number of workers covered rather than to establishments, and were also confined to union workers.²

It will be recalled that only about a fifth of our respondents indicating factors important in reducing voluntary quits mentioned "pension plans, profit-sharing plans, and other fringe benefits" (Table 9-7), and this group of factors ranked only in sixth place among the most important factors figuring in the responses. In view of this, it is not particularly surprising to find that less than two-fifths of the respondents, in replying to a more specific question on the effect of pension plans, thought that they reduced voluntary quits, and many of these qualified their answers by suggesting that the effect was slight or that it varied greatly with the types of workers involved (Table 9-10). Moreover, some of the interviewees who declined to express an opinion in response to this question explained their reluctance to reply by pointing out that workers with different

Table 9 - 10
Effect of Pension Plan on Voluntary Quits,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Respondent thinks pension plan(s)		
			Decreases voluntary quits	Increases voluntary quits	Has no effect, or establish- ment has no plans
	Number	Per cent			
All establishments ^a	284	100.0	38.6	0.4	61.0
Mining and construction	22	100.0	36.2	--	63.8
Manufacturing					
Durable	50	100.0	42.0	--	58.0
Nondurable	57	100.0	42.1	--	57.9
Transportation and utilities	25	100.0	40.0	--	60.0
Trade					
Wholesale	12	100.0	58.2*	--	41.8*
Retail	29	100.0	17.4	--	82.6
Finance, insurance, and real estate	25	100.0	20.0	--	80.0
Services	36	100.0	22.2	--	77.8
Government	28	100.0	75.0	3.6	21.4

^aTotal excludes establishments not providing information.

characteristics or with varying lengths of service react in differing ways to the provisions of a pension plan. One government employer went so far as to indicate his strong belief that the pension plan in effect for his staff, which included many youthful clerical workers, actually increased the propensity to quit. The temptation to leave, he commented, and to convert their equities into ready cash, became overwhelming, particularly in those cases in which accumulated contributions had reached a sizable amount.

Variations in the distribution of these responses by major industry group are rather revealing. The proportion of employers considering that pension plans had some influence in reducing voluntary quits was comparatively small in retail trade, the finance group, and services -- all industry groups employing large numbers of women, many of whom were young women. On the other hand, government employers were particularly prone to reply that the pension plan or plans did reduce voluntary quits. Just why the public employers should stand out as a group in this respect is not entirely clear, although one suspects, without having had an opportunity to study the provisions of pension plans submitted by our employers, that the comparatively liberal benefit formulas found in many of the public employees' retirement systems may play a role.

In general, however, our findings with respect to the apparently rather limited effect of pension plans on voluntary quits are quite consistent with those of several studies of the impact of pension plans on labor mobility, which have tended to indicate that, since it is younger workers who are highly mobile and retirement protection is as yet of little concern to such workers, pension plans have little effect on the quit rate. Moreover,

other factors -- seniority, in particular -- have far greater impact on mobility than pensions.³

The more liberal the vesting and early retirement provisions of pension plans, of course, the less pensions are likely to serve as a barrier to mobility, although the age and service requirements that tend to be associated with vesting and early retirement provisions are such as to confine their benefits largely to workers who have reached an age when they are relatively unlikely to quit in any case. And one of the major trends in the pension field in the last ten years or so has been a pronounced liberalization of vesting and early retirement provisions.

Our findings tend to confirm the importance of this trend. When establishments with pension plans were asked whether they had adopted or liberalized vesting or early retirement provisions within the past five years, 40 per cent replied affirmatively (Table 9-11). Variations by major industry group were rather wide and of some interest. In the more strongly unionized industry groups there was something of a tendency for the proportion responding in the affirmative to this question to exceed the general average, indicating, as does other evidence, that unions have been exerting their influence toward liberalization of these provisions.⁴ On the other hand, liberalizing measures were reported relatively infrequently in retail trade, the finance group, and services -- three major industry groups with large proportions of women in their work forces, and often young women with relatively little interest in the distant prospect of retirement income.

In response to the next question as to whether the quit rate had risen following the change(s), more than a fourth of the employers for whom

Table 9 - 11

Per Cent of Establishments That Adopted or Liberalized
Vesting or Early Retirement Provisions of Pension Plans
in Previous Five Years, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Number	Per cent
All establishments ^a	258	40.3
Mining and construction	23	47.8
Manufacturing		
Durable	46	52.2
Nondurable	54	44.4
Transportation and utilities	24	41.7
Trade		
Wholesale	12	50.0*
Retail	24	20.8
Finance, insurance, and real estate	19	31.6
Services	28	21.4
Government	28	42.9

* Percentage based on fewer than 15 cases.

^aTotal excludes establishments not having a pension plan
and those that did not provide information.

the question was relevant did not feel they could express an opinion, while virtually all of the others indicated that there had been no effect. Again, this result was entirely to be expected, on the basis of previous studies of pension plans. Workers old enough and with long enough service to be affected by such changes are not those among whom voluntary quitting is prevalent.

Layoff Policies

Among the establishments reporting types of measures to minimize layoffs, planning activities to eliminate slack periods was by far the most common policy followed, accounting for about half of the responses. Reassignment of employees to other kinds of work and maintaining the work force at the minimal level necessary to maintain activities were the two other practices mentioned relatively frequently, representing in each case about 18 per cent of all responses.

There were, however, quite pronounced differences among the major industry groups in the relative frequency with which these practices were mentioned. In construction and manufacturing, planning the establishment's activities to eliminate slack periods accounted for very substantial proportions of the responses, whereas in the other industry groups this type of policy was presumably less feasible (Table 9-12). (It should be noted in this connection that, although Table 9-12 incorporates only the first responses of our interviewees to this question, additional responses were not sufficiently frequent to affect the results appreciably.)

A number of the construction employers commented on the importance of avoiding slack periods under the particular labor market conditions

Table 9 - 12
 Actions Taken to Minimize the Need for Layoffs,
 by Major Industry Group --
 Bay Area Employer Policy Survey, 1967

Actions to minimize layoffs	Total	Mining and construc- tion	Manufacturing		All other industries	
			Durable	Non- durable		
All establishments ^a						
Number	145	14	43	39	16	33
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Planning establishment's activities to eliminate slack periods	59.9	71.4 [*]	79.1	66.7	43.8	30.3
Reassignment of workers to other kinds of work	14.5	14.3 [*]	11.6	5.1	31.3	21.2
Regular work force kept at minimum level necessary to maintain activities	13.0	--	4.7	15.4	12.5	30.3
Special efforts made to procure more business	2.1	--	2.3	5.1	--	--
Vacations and/or addition- al days off scheduled	2.1	--	--	--	--	9.1
Other	7.6	14.3 [*]	2.3	7.7	12.5	9.1

^aTotal includes all establishments reporting at least one type of action taken to minimize layoffs.

prevailing, in which engineering and technical staffs tended to become restive when the backlog of contracts appeared unduly slender. Laying off some of their best skilled craftsmen was also especially to be avoided, since, once lost, they might not be available when work picked up again. In fact, the computer was frequently called into service to assist in the complex scheduling necessary to utilize construction crews of different crafts and specialties most effectively as one job phased out and another became active. Several of our construction interviewees, in fact, considered their planning ability in this respect to be of paramount importance in successful bidding.

Although the great majority of employers not reporting practices aimed at minimizing layoffs indicated that such policies were not necessary because layoffs were minimal or nonexistent, there were some significant exceptions (Table 9-13). In manufacturing and in retail trade, the proportions indicating that seasonal layoffs were unavoidable were well above average, while a good many construction employers commented that layoffs could not be avoided because of the contractual nature of the work.

In response to a question with respect to the timing of layoffs, the great majority of employers for whom the question was relevant (92 per cent) indicated that layoffs were made immediately. Most of these respondents indicated that this policy applied to blue-collar or union workers, whereas relatively few said that it was applicable to all workers. Clearly, however, layoffs were relevant chiefly for the blue-collar groups. Only a very small minority of the interviewees replied that layoffs were made after the work week had been reduced. Moreover, there were no significant variations in this pattern of responses by major industry group.

Table 9 - 13
Reasons for No Policies or Programs to Minimize Layoffs,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Minimal or no layoffs	Contractual nature of work	Seasonal layoffs unavoid- able	Other
	Number	Per cent				
All establishments ^a	156	100.0	71.8	5.8	15.4	7.1
Mining and construction	11	100.0	9.1*	63.6*	9.1*	18.2*
Manufacturing	33	100.0	48.5	3.0	30.3	18.2
Transportation and utilities	17	100.0	76.5	--	17.6	5.9
Retail trade	20	100.0	45.0	--	45.0	10.0
Finance, insurance, and real estate	23	100.0	100.0	--	--	--
Services	25	100.0	96.0	4.0	--	--
Government	20	100.0	100.0	--	--	--

* Percentages based on fewer than 15 cases.

^aTotal includes all establishments giving a reason for no policy or program to minimize layoffs. Wholesale trade establishments are included in the total but are not shown separately. No establishment gave more than one reason.

By far the most common practice affecting the types of workers laid off was that those affected were the lowest seniority workers (Table 9-14). However, the construction industry, in which short-term jobs are frequent and seniority provisions relatively inapplicable, the most common practice was that workers at various skill levels were laid off, while a policy of laying off only the least skilled workers was indicated by a significant proportion of the construction employers. Seniority as the governing principle in layoffs was mentioned especially frequently in transportation and utilities where, as suggested earlier, seniority provisions are relatively important. It was also mentioned by the great majority of retail trade employers, while a minority in that industry group as well as in manufacturing responded that only the least skilled workers were laid off.

For establishments covered by collective bargaining agreements and experiencing any appreciable problem with layoffs, the practices governing the timing and types of workers affected by layoffs were, as would have been expected, determined by the provisions of collective bargaining agreements in the great majority (87 per cent) of the cases. Moreover, there was little variation among major industry groups in this respect, although construction and services stood out as two groups in which determination by collective bargaining agreement was somewhat less prevalent than in the other industry groups, though still much the prevailing practice.

Concluding Remarks

As labor mobility and turnover studies have invariably indicated, quits are relatively much more important than layoffs in a period of relatively full employment. Beyond this, perhaps the most interesting aspect

Table 9 - 14

Practices Relating to Type of Worker Affected by Layoffs,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

(Data relate to the first answer given by the respondent)

Practices	Total	Mining and con- struc- tion	Manu- factur- ing	Transpor- tation and util- ities	Retail trade	All other indus- tries
All establishments ^a						
Number	223	26	114	24	26	43
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Lowest seniority workers are laid off	61.0	11.5	68.4	83.3	77.1	58.2
All workers	12.6	--	3.5	41.6	15.4	23.3
Blue-collar or union workers	46.6	11.5	64.9	37.5	57.9	30.1
Other groups of workers	1.8	--	--	4.2	3.8	4.7
Only the least skilled workers are laid off	14.4	26.9	15.8	4.2	15.3	4.6
All workers	1.8	--	--	4.2	7.7	2.3
Blue-collar or union workers	10.8	23.1	14.9	--	3.8	--
Other groups of workers	1.8	3.8	0.9	--	3.8	2.3
Workers at various skill levels are laid off as required	17.0	42.4	11.4	8.3	--	23.3
All workers	1.8	--	--	--	--	7.0
Blue-collar or union workers	15.2	42.4	11.4	8.3	--	16.3
Workers are laid off on a rota- tional basis	3.6	15.4	2.6	4.2	--	--
Other practices	4.0	3.8	1.8	3.6	--	14.0

^aTotal excludes establishments that had minimal or no layoffs and those that did not provide information.

of our results is that, although employers generally expressed concern about quits, and many indicated that they had programs for reducing voluntary quits, most of the programs mentioned were simply aspects of good personnel policies. Programs which could be regarded as specifically aimed at reducing quits were not mentioned very frequently. Moreover, pension plans, which have tended to be regarded as designed at least in part to discourage quitting, were, for the most part, not regarded as playing a very significant role in this respect -- a finding which is consistent with those of several other studies.

Clearly an important reason for the relative absence of policies specifically aimed at reducing voluntary quits lay in the factors which employers stressed as important in reducing voluntary quits. Job security and accumulation of seniority topped the list, but, since these are factors which gain in appeal with advancing age, while the propensity to quit declines, this type of response could well be translated to read, "our most stable workers are middle-aged and older workers for whom considerations of job security are important." The other factors frequently mentioned as effective in reducing voluntary quits were encouragement of promotion from within, which, as the data in Section VIII suggested, ranked high in the estimation of our respondents as deserving great emphasis in the array of good personnel policies, and "higher than prevailing wage rates," a policy deliberately pursued by at least some of our establishments, as will be apparent in Section X.

Layoffs, chiefly a threat to semi-skilled and unskilled blue-collar workers, were a matter of some considerable significance in the industry groups in which they have always been relatively important, and the responses

of employers relating to types of policies followed to minimize layoffs indicated adjustment to the varying conditions prevailing in different industry groups. Planning the establishment's activities to eliminate slack periods was, for example, considerably more feasible in some branches of manufacturing and in some types of construction than in retail trade, where fluctuations in the volume of business were largely dictated by the holidays and the seasons.

Our findings suggest that the chief policy stressed by unions in most of the major industry groups in protecting their members from the impact of layoffs has been the emphasis on collective bargaining provisions calling for laying off workers in reverse order of seniority. Judging from the responses of our employers, however, policies aimed at delaying the impact of layoffs, e.g., through resorting first to a reduced work week, are exceedingly uncommon. Such policies would, of course, call for more widespread sharing of the effects of layoffs and doubtless are resisted by workers with substantial seniority. Moreover, it should be kept in mind that some of the unions in industries in which seasonal or periodic layoffs present a problem, e.g., automobiles and steel, have succeeded in negotiating liberal supplemental unemployment benefit provisions, while the California labor movement has been more successful than those in most other states in pressing for increases in regular state unemployment benefits.

Another consideration that is undoubtedly relevant is that intra-union conflicts over policies affecting layoffs are not unrelated to those over policies relating to older workers and retirement. One of the well-known developments of the period from about 1958 to 1964, when declining

employment opportunities in some of the leading mass production industries, associated with technological change and a prolonged slump in aggregate demand, became a matter of grave concern for union members was a pronounced trend toward negotiating for generous early retirement provisions. The pressure for liberalized early retirement policies was aimed in good part at protecting the job security of younger union members who were particularly vulnerable to layoffs. To put the matter in somewhat oversimplified terms, the younger workers won a concession in the pressure for generous early retirement provisions, whereas the interests of middle-aged and older workers were protected through continued strong emphasis on seniority rather than spreading the work in policies relating to layoffs.

Unfortunately, our questions relating to retirement age policies -- in an interview schedule which we had to struggle to keep within bounds -- were not sufficiently detailed to yield clearly interpretable results relating to early retirement and compulsory retirement policies. For this reason, the results have not been reported.

Footnotes to Section IX

1. Employment and Retirement of Older Workers, Report of the Governor's Commission on the Employment and Retirement Problems of Older Workers (Sacramento, Calif.: State Printing Office, 1960), p. 131.
2. California Industrial Relations Reports, No. 30, California Department of Industrial Relations (San Francisco: 1967), p. 29.
3. Robert Tilove, Pension Plans and Economic Freedom (New York: Fund for the Republic, 1969); Hugh Folk, Private Pension Plans and Manpower Policy, Bulletin No. 1359, U.S. Bureau of Labor Statistics (Washington, D.C.: U.S. Government Printing Office, 1963); and Herbert S. Parnes, "Workers' Attitudes to Job Changing: The Effect of Private Pension Plans," in Gladys L. Palmer and others, The Reluctant Job Changer (Philadelphia: University of Pennsylvania Press, 1962), Chap. III.
4. Bankers Trust Company, 1965 Study of Industrial Retirement Plans (New York: Bankers Trust Company, 1965), pp. 12-20.

X. WAGE POLICY AND WAGE DIFFERENTIALS

General Wage and Salary Increases

In the postwar period, general wage and salary increases, often at annual intervals, have come to be taken for granted. However, our data suggest that they are not always as "general" as may commonly be supposed. True, the great majority of establishments in our sample (about 90 per cent) indicated that they followed a practice of granting general wage and salary increases. But only rarely, in private employment, did such increases apply to all employees. In the majority of cases, the most recent increase granted by these establishments applied to a group or groups of union and/or blue-collar employees (Table 10-1). (The prevalence of multi-employer bargaining in the area, and the multiplicity of unions represented in many of the establishments, discussed in Section V, should be recalled in this connection.)

In a considerably smaller proportion of cases, but amounting in all to more than a fifth of the most recent increases, they applied to all union and/or blue-collar employees, while in nearly as large a proportion of cases they applied to specified or unspecified groups of nonunion white-collar employees. Less frequent still were increases applying to all employees, while rarest of all were those applying to groups of union white-collar workers. Incidentally, this last point provides further evidence, along with data discussed in Section V, of the relative weakness of unionism among white-collar workers, as compared with blue-collar and service workers.

The contrast between the private sector and the public sector in the applicability of general wage increases is striking (Table 10-2). Nearly

Table 10 - 1

Employees Affected by Establishment's
Most Recent General Wage Increase --
Bay Area Employer Policy Survey, 1967

Employees affected	1st response	2nd response	All responses
All establishments ^a			
Number	274	274	274
Per cent	100.0	100.0	117.3 ^a
All employees	11.3	--	11.3
All union and/or blue-collar employees	21.2	1.5	22.6
Some union and/or blue-collar employees -- exact group unspecified	17.2	--	17.2
Some union and/or blue-collar employees -- exact groups specified	37.9	1.1	39.1
Some union white-collar employees -- exact groups unspecified	1.1	0.4	1.5
Some union white-collar employees -- exact groups specified	1.5	2.6	4.0
Some nonunion white-collar employees -- exact groups unspecified	2.9	4.7	7.7
Some nonunion white-collar employees -- exact groups specified	6.9	6.9	13.9
No second response		82.8	

^aTotal exceeds 100.0 per cent because some establishments gave more than one response.

Table 10 - 2
Employees Affected by the Establishment's Most Recent General Wage Increase
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		All employees	All union and/or blue-collar	Some union or blue-collar groups	Some union white-collar groups	Some nonunion white-collar groups
	Number	Per cent					
All responses ^a	321	100.0	9.7	19.3	47.9	4.7	18.4
Mining and construction	29	100.0	--	6.9	69.0	--	24.1
Manufacturing	62	100.0	4.8	33.9	43.6	--	17.7
Durable	69	100.0	1.4	20.3	62.4	4.3	11.6
Non-durable	37	100.0	--	8.1	56.8	18.9	16.2
Transportation and utilities	47	100.0	--	21.3	55.3	2.1	21.3
Trade	4	100.0	50.0*	25.0*	--	--	25.0*
Finance, insurance and real estate	43	100.0	7.0	9.3	39.5	9.3	34.9
Services	30	100.0	73.4	23.3	--	--	3.3
Government							

* Percentages based on fewer than 15 cases.

^aTotal excludes some establishments for which information on employees affected by the most recent general wage increase was not available. It also excludes establishments which do not follow the practice of granting general wage increases. Nevertheless, total responses exceed the total of all establishments, because some of the recent general wage increases had affected more than one of the groups of employees included in our classification.

three-quarters of the most recent general wage increases granted by the governmental units in our sample applied to all employees, as compared with less than a tenth of those in all industry groups. And, if we compute the proportion for private employers alone, we find that it amounted to only 3.1 per cent.

These findings suggest that private employers tend to be quite selective in granting general wage and salary increases, responding to union pressures, or to evidence that compensation for certain groups of employees needs to be adjusted upward to keep it in line with prevailing trends. Government agencies, sensitive to political considerations, are evidently more hesitant to discriminate among their employees in the granting of general wage and salary increases. Even though public employers have had no difficulty in recruiting unskilled workers in the Bay Area in recent years, whereas there have been critical shortages of applicants for professional and technical jobs and for some other types of jobs, such as policemen and public health workers, a government agency which excluded unskilled workers from a general increase would be subject to the criticism of having discriminated against its lowest paid workers. Another factor, of course, is the relative absence of collective bargaining in public agencies. Although it is fairly common for unions to present wage and salary demands on behalf of groups of members whom they represent in public employment, the absence of actual bargaining removes an element which might lead to different settlements for different groups. It may be that, as a result of recent liberalizing amendments to California state legislation relating to collective bargaining rights in public employment, this pattern may change.

It should also be recognized that private employers, involved in multi-employer agreements relating to various groups of union employees, are likely to have quite separate wage structures for these union groups, whereas public agencies typically have a single wage and salary structure, which would require extensive modifications and adjustments if differential increases were granted to various groups of employees. Although specific increases are granted to particular classifications from time to time, to correct inequities or to aid in recruiting and retaining those in shortage occupations, an effort tends to be made to keep such specific class increases to a minimum in order not to disturb relationships within the overall structure.

Another important consideration is that the lowest paid workers in public agencies -- laborers, gardeners, janitors, garbage collectors, etc. -- perhaps even more than in private employment are likely to be members of minority groups. Thus, charges of discrimination would take on particular significance if unskilled workers were excluded from general wage and salary increases.

The contrast between public and private employment, in connection with general increases, should not, however, be overemphasized. It must be recognized that the "most recent" general increase may have been preceded only a short time before, or might be destined to be followed a short time thereafter, by a similar increase applying to another group of employees. There is considerable evidence that there are strong pressures in private employment against depriving groups of employees, for very long, of increases comparable to those that have been granted to other groups. And, indeed, unionism would probably be stronger among white-collar workers than

it is, if increases negotiated under collective bargaining agreements were not followed fairly frequently by somewhat similar increases to white-collar employees. Certainly the annual data collected on wage and salary trends in the Bay Area do not suggest that professional and other white-collar workers have lagged behind blue-collar workers in annual rates of increase in compensation in recent years.¹ The selectivity of general increases granted by private employers is undoubtedly influenced by a desire to retain the flexibility that will permit differential increases for various groups of workers, geared to differences in labor market conditions for different occupation groups.

As to the form which general wage and salary increases take in these establishments, flat dollar-and-cents increases tend to predominate (Table 10-3). This is clearly related to the high proportion of general increases which are granted to union groups. Moreover, the proportion of increases taking the form of flat dollar-and-cents raises tends to be highest in the major industry groups in which relatively large proportions of establishments are covered by collective bargaining agreements (Appendix Table F-1).

Next in relative importance to flat dollar-and-cents increases are flat percentage increases. Such increases tend to predominate in government agencies and to be granted with greater than average frequency in transportation and utilities. However, they are relatively rare in trade.

Range increases are most infrequent in several major industry groups, and nonexistent in some, but occur with greater than average frequency in the finance group, services, and government. Range increases may differ from flat percentage increases or flat dollar-and-cents increases in that the amount of the percentage increase or the amount of the dollar-and-cents

Table 10 - 3

Types of General Wage Increases Granted by Establishments --
Bay Area Employer Policy Survey, 1967

Type of increase	1st response	2nd response	3rd response	All responses
All establishments				
Number	309	309	309	309
Per cent	100.0	100.0	100.0	120.7 ^a
Flat percentage increase	30.1	0.6	--	30.7
Flat dollars-and-cents increase	52.1	12.0	--	64.1
Range increase with one-step raise for all within range	2.3	2.3	--	4.5
Range increase with individual adjustments	1.9	5.8	1.6	9.4
Range increase, type unspecified	1.0	0.3	--	1.3
Other	0.3	--	--	0.3
Does not grant general wage increases	10.4	79.0	98.4	10.4
Information not available or no 2nd or 3rd response given	1.9			--

^aTotal exceeds 100.0 per cent because some establishments gave more than one type of increase.

increase may vary between the lower and higher levels of an existing wage and salary structure. For example, in the federal government in recent years, the lower level grades received percentage increases of lesser magnitude than the upper levels. Similarly, dollar-and-cents increases may be higher at the upper levels than at the lower levels. One-step increases within rate ranges are frequent methods of utilizing ranges for general increases to all employees. Ordinarily, the bottom and the top of the range are moved ahead one step in this type of adjustment. And, as indicated in our classification, range increases may or may not be accompanied by individual adjustments.

Finally, it should be noted that, although only about a tenth of the establishments indicated that they did not follow a policy of granting general wage and salary increases, the proportion which did not amounted to 84 per cent in the least unionized private sector -- finance, insurance, and real estate. Among the other major industry groups, establishments that did not grant general increases were nonexistent or almost nonexistent in all groups but durable goods manufacturing, in which the proportion not granting general increases was about equal to the overall average.

When asked about the factors influencing the most recent increase granted to blue-collar employees, nearly four-fifths of the employers replied that the decision to grant the increase had been made in the "normal process of collective bargaining" (data not shown). Among other responses, actual or anticipated wage increases in other Bay Area establishments accounted for about 8 per cent and the rising cost of living for about 5 per cent. Only 3 per cent of the responses referred to the desire to avoid a strike or organization by a union. However, the normal process of collective

bargaining played a relatively more important role in the highly unionized industry groups than in the relatively less unionized services group, in which the majority of responses referred either to actual or anticipated wage increases in other Bay Area establishments or to the rising cost of living.

Very different, as might be expected, was the pattern of responses relating to the most recent general wage or range increase granted to white-collar employees (Table 10-4). In the case of these workers, the normal process of collective bargaining accounted for less than a third of the responses, although, in retail trade, the proportion was much higher (70 per cent). Here, again, we have evidence of the relative importance of unionized white-collar (sales) workers in this industry group. Actual or anticipated wage increases in other Bay Area establishments (and to some extent, in establishments outside the Bay Area) accounted for about as many responses as the "normal process of collective bargaining," but was an especially prevalent response in service industries. Among other types of responses, the rising cost of living was mentioned relatively frequently. It should be noted that responses to this question were relatively infrequent in the finance group, in which, as we have seen, most establishments did not follow a policy of granting general wage or salary increases. Government establishments, also, responded relatively infrequently to this question, since their increases were generally granted to all employees rather than to white-collar workers alone. However, in connection with their general increases, government agencies indicated that actual or anticipated wage increases in other Bay Area establishments played a relatively important role in influencing their decisions (data not shown).

Table 10 - 4

Factors That Influenced the Most Recent General Wage
or Range Increase Granted to White-Collar Employees,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Factors that influenced most recent increase	Total	Most strongly unionized groups ^b	Retail trade	Ser- vices	Finance, insurance, and real estate; government
All responses ^a					
Number	139	70	27	29	13
Per cent	100.0	100.0	100.0	100.0	100.0
Normal process of collective bar- gaining	30.2	22.8	70.4	24.1	--
Actual or anticipated wage increase	29.5	22.9	22.2	44.9	46.1*
In other Bay Area establishments	24.5	18.6	22.2	38.0	30.7*
In establishments outside the Bay Area	5.0	4.3	--	6.9	15.4*
Rising cost of living	15.8	17.1	3.7	20.7	23.1*
Excessive number of job vacancies	4.3	4.3	--	3.4	15.4*
Excessive labor turnover	2.9	4.3	--	--	7.7*
Favorable net earnings of the establishment	2.9	5.7	--	--	--
Desire to avoid strike or organiza- tion by union	2.2	4.3	--	--	--
Other	12.2	18.6	3.7	6.9	7.7*

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments with no recent general wage or range increase to white-collar employees only and those that did not provide information. The total exceeds the number of establishments reporting, since some establishments reported more than one factor.

^bIncludes construction, manufacturing, transportation and utilities, and whole-sale trade. These are the industry groups with the largest proportions of establishments covered by a collective bargaining agreement, but most of these agreements apply to blue-collar workers, while relatively few apply to white-collar workers.

This latter factor also accounted for most (62 per cent) of the responses relating to general increases granted to blue-collar workers in nonunionized establishments, while it also played a relatively important role in connection with increases granted to white-collar workers in nonunionized firms (about 45 per cent of the responses). On the other hand, in establishments covered by collective bargaining agreements, actual or anticipated wage increases by other Bay Area establishments accounted for only 17 per cent of the responses relating to the most recent general increase granted to white-collar workers, whereas "normal process of collective bargaining" accounted for 42 per cent. In interpreting this result, it is important to keep in mind the fact that, outside of retail trade, most collective bargaining agreements relate only to blue-collar workers. Thus, this pattern of responses suggests that in unionized firms, general wage increases for white-collar workers are sometimes associated directly or indirectly with general increases for blue-collar workers even though the white-collar groups may not be covered by the collective bargaining agreement(s).

Other Salary Adjustment Policies

When employers were asked more specifically about salary adjustment policies for white-collar employees, the great majority (91 per cent) indicated that they did have some type of policy designed for this purpose. However, only a small percentage of the responses (about 11 per cent) indicated that, in the case of nonexempt white-collar employees, increases were pegged directly to general wage increases under collective bargaining agreements (Appendix Table F-2). (Nonexempt employees are those covered by federal wage

and hours provisions -- exempt employees are those not covered by those provisions.)

Approximately a third of the responses indicated that adjustments were made on an individual basis, and in the majority of these cases the decisions were made entirely at the discretion of management, while in the remainder they were timed for anniversary hiring dates or other selected dates.

The most frequent response, however, accounting for about 44 per cent of all the responses, indicated that the establishment followed a policy of formal periodic review, in most cases based on merit, but in some cases based on other factors.

Not unexpectedly, there were consistent size-of-firm variations in the pattern of these responses. Individual adjustments tended to be relatively more prevalent in the smaller firms, whereas formal periodic review was comparatively more common in the larger firms. In interpreting this result it is important to keep in mind the fact that many of our smaller establishments, particularly in construction, were likely to have very few white-collar employees, whereas establishments with large proportions of white-collar employees, e.g., in government and in the finance group, were disproportionately represented among the relatively large establishments. Variations in these policies by major industry group tended to follow a pattern which appeared to reflect primarily the influence of differences in size-of-firm composition of the various groups.

Policies applying to exempt white-collar employees differed from those applying to the nonexempt group only in that individual adjustments played a slightly more important relative role. This is scarcely surprising,

since exempt white-collar employees tend to belong to the ranks of the higher-paid professional and managerial employees.

Additional information relating to salary adjustments may be found in Appendix F.

Increases in Compensation Necessitated by Shortages of Workers in Particular Occupations

In Section VI, we found that employers tended, as other studies have shown, to adjust to shortages of workers in particular occupations by intensifying recruitment efforts and lowering selection standards rather than by increasing wages in most instances. However, a large proportion (66 per cent)



of our establishments had found it necessary at some time in the previous five years to increase employee compensation in order to attract or retain workers in certain occupations. For the most part, these wage adjustments had applied to white-collar workers, and especially to professional and technical workers, as our data on employment changes in Section II would suggest, but there were some instances in which wages had been increased because of shortages of certain categories of skilled workers (machinists and mechanics, electricians, and tool and die makers, for example), while there had also been less frequent instances of wage increases in response to shortages of other blue-collar or service workers. Among the specific occupations most frequently mentioned in connection with such increases were engineers, data programmers, nurses, draftsmen, key punch operators, and machinists and mechanics.

The most common type of policy followed in increasing compensation of white-collar categories was to raise the wage or salary level for the group (Appendix Table F-4). However, the granting of individual wage increases was almost as common. Moreover, it should be noted that many employers had apparently followed more than one type of policy -- evidently having tailored their policies to particular situations -- for there were slightly more than twice as many responses relating to increases granted to groups of white-collar workers as there were employers reporting any increases in compensation in response to shortages.

There was very little variation among major industry groups in the distribution of types of increases granted, except for a contrast between the private employers and the government agencies. More than half of the responses of the government units indicated that the wage or salary level

for the group had been raised, whereas the granting of individual increases had been relatively infrequent and the offering of "other inducements" comparatively common.

Rather different was the distribution of responses relating to the much less frequent instances in which employee compensation had been increased in response to shortages of groups of blue-collar workers. Although raising the wage level for the group where no union agreement prevailed was reported in a third of these cases, it was least common in the strongly unionized industries and most common in the government agencies, with the less strongly unionized private establishments occupying an intermediate position. On the other hand, raising the wage level for the group beyond union rates, where a union agreement did prevail, or adding a premium to the union rate for individual workers, were the predominant types of adjustments in the strongly unionized industries, accounting for more than half of the responses of establishments in this group. Thus, there has been something of a phenomenon of "wage drift" in the area, but the number of establishments involved represented a small proportion of our sample, and this type of adjustment was largely confined to skilled occupations in which shortages had appeared.

Payment on an Incentive Basis

Payment on an incentive basis turned out to be decidedly uncommon in our sample of establishments, particularly in the case of blue-collar workers. In part, this reflects the historical predominance of craft (AFL) unions, with their policies of opposing this type of payment, in the area. In any case, only 30 per cent of the employers reported paying any workers on an

incentive basis, and, of these, more than half indicated that the workers receiving incentive payments were salesmen on commissions. Of the remainder, the largest single group (18 per cent) mentioned bonuses or percentages of profits paid to officers of the company. Only 16 per cent of the establishments mentioning incentive plans indicated that they applied to production workers. In this group were establishments representing primary metals, apparel, and a scattering of other (chiefly durable goods) manufacturers. Also mentioned in a small number of instances were the payment of driver salesmen on an incentive basis. Interestingly, a few interviewees lamented the fact that union policies prevented their paying on a piece work basis in this area, whereas branches of their organization in other areas did so.

Wage Differentials Within the Area

One of the major purposes of our study was to determine the extent of wage differentials within this highly unionized labor market area and to analyze the characteristics of firms that paid relatively high or relatively low rates. In the interview itself employers were asked to give their own assessments as to how their wage rates -- for white collar, blue-collar, and service workers -- compared with those paid by other Bay Area establishments engaged in similar activities, while in the Part II schedule employers were asked to complete frequency tables relating to wages paid to workers in seven carefully selected and carefully defined specific occupations.

Employers' assessments of relative rates. One of the most significant results of the question in the interview schedule was the indication that there were more likely to be wage differences within the area for

white-collar workers than for blue-collar or service workers (Tables 10-5 to 10-8). More than four-fifths of the establishments that employed blue-collar workers indicated that their wage rates for employees in this group were about the same as those of other Bay Area establishments engaged in similar activities, while an even larger percentage of the somewhat smaller number of establishments employing service workers gave this response. The corresponding proportion for white-collar workers was about 65 per cent. These differences are undoubtedly in large part related to the far greater degree of unionization of blue-collar and service jobs, although the relative heterogeneity of white-collar jobs may also have influenced some of the responses.

To the extent that interviewees indicated that their wage rates differed from prevailing rates, they assessed them as higher in most cases. Relatively few respondents thought their wage rates were below prevailing rates.

Variations among major industry groups in patterns of responses were not very pronounced, although in connection with both white-collar and blue-collar workers, establishments in transportation and utilities were relatively likely, and those in service industries were comparatively unlikely, to report higher rates. Of some interest, also, is the fact that the proportion of government agencies reporting lower rates for white-collar workers and blue-collar workers was somewhat above the average. Interestingly, however, all the government agencies reporting these lower rates were relatively small local governmental units outside the central city areas. Little significant variation by major industry groups was found in the case of service workers (data not shown).

Table 10 - 5

Estimated Relation of Wage Rates Paid by Establishment to Rates Paid
by Other Bay Area Establishments Engaged in Similar Activities,
for White-Collar Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Higher	Lower	About the same
	Number	Per cent			
All establishments ^a	292	100.0	30.1	4.5	65.4
Mining and construction	24	100.0	33.3	4.2	62.5
Manufacturing					
Durable	54	100.0	25.9	1.9	72.2
Nondurable	59	100.0	37.3	6.8	55.9
Transportation and utilities	27	100.0	44.4	3.7	51.9
Trade	42	100.0	28.6	--	71.4
Finance, insurance and real estate	24	100.0	33.3	--	66.7
Services	34	100.0	17.6	5.9	76.5
Government	28	100.0	21.4	14.3	64.3

^aTotal excludes establishments not reporting information on relative wage rates.

Table 10 - 6

Estimated Relation of Wage Rates Paid by Establishment to Rates Paid
by Other Bay Area Establishments Engaged in Similar Activities,
for Blue-Collar Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Higher	Lower	About the same
	Number	Per cent			
All establishments ^a	257	100.0	12.8	4.3	82.9
Mining and construction	25	100.0	8.0	--	92.0
Manufacturing Durable	52	100.0	13.5	5.8	80.7
Nondurable	59	100.0	15.3	3.4	81.3
Transportation and utilities	25	100.0	20.0	4.0	76.0
Trade	39	100.0	10.3	--	89.7
Finance, insurance, and real estate	3	100.0	*	*	*
Services	26	100.0	7.7	3.8	88.5
Government	28	100.0	10.7	14.3	75.0

* Percentages have not been computed because of the small number of cases.

^a Total excludes establishments not reporting information on relative wage rates and establishments not employing blue-collar workers.

Table 10 - 7

Estimated Relation of Wage Rates Paid by Establishment to
Rates Paid by Other Bay Area Establishments Engaged in
Similar Activities, for Three Occupation Groups,
by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Higher	Lower	About the same
	Number	Per cent			
White-collar workers					
All establishments ^a	292	100.0	30.1	4.5	65.4
Less than 250	125	100.0	28.8	4.0	67.2
250 to 499	66	100.0	25.8	6.1	68.1
500 to 999	47	100.0	38.3	--	61.7
1,000 to 1,999	27	100.0	33.3	3.7	63.0
2,000 or more	27	100.0	29.6	11.1	59.3
Blue-collar workers					
All establishments ^a	257	100.0	12.8	4.3	82.9
Less than 250	112	100.0	14.3	5.4	80.3
250 to 499	58	100.0	12.1	3.4	84.5
500 to 999	41	100.0	14.6	--	85.4
1,000 to 1,999	22	100.0	9.1	--	90.9
2,000 or more	24	100.0	8.3	12.5	79.2
Service workers					
All establishments ^a	188	100.0	10.6	3.7	85.7
Less than 250	67	100.0	13.4	4.5	82.1
250 to 499	48	100.0	10.4	2.1	87.5
500 to 999	33	100.0	9.1	--	90.9
1,000 to 1,999	17	100.0	5.9	11.8	82.3
2,000 or more	23	100.0	8.7	4.3	87.0

^aTotal excludes establishments not providing information on relative wage rates and establishments not employing the specified occupation group.

Table 10 - 8

Estimated Relation of Wage Rates Paid by Establishment to
Rates Paid by Other Bay Area Establishments
Engaged in Similar Activities, for Three
Occupation Groups, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Main address	Total		Higher	Lower	About the same
	Number	Per Cent			
White-collar workers					
All establishments ^a	292	100.0	30.1	4.5	65.4
San Francisco County ^b	108	100.0	29.6	1.9	68.5
Oakland-Berkeley area ^b	53	100.0	28.3	5.7	66.0
Southern Alameda County ^b	36	100.0	38.9	-	61.1
Northern San Mateo County ^b	21	100.0	33.3	4.8	61.9
Southern San Mateo County ^b	22	100.0	27.3	13.6	59.1
Santa Clara County	25	100.0	24.0	8.0	68.0
Contra Costa and Marin counties	27	100.0	29.6	7.4	63.0
Blue-collar workers					
All establishments ^a	257	100.0	12.8	4.3	82.9
San Francisco County ^b	81	100.0	12.3	3.7	84.0
Oakland-Berkeley area ^b	51	100.0	9.8	2.0	88.2
Southern Alameda County ^b	34	100.0	14.7	8.8	76.5
Northern San Mateo County ^b	20	100.0	10.0	-	90.0
Southern San Mateo County ^b	20	100.0	10.0	15.0	75.0
Santa Clara County	24	100.0	12.5	4.2	83.3
Contra Costa and Marin counties	27	100.0	22.2	-	77.8
Service workers					
All establishments ^a	188	100.0	10.6	3.7	85.7
San Francisco County ^b	68	100.0	8.8	1.5	89.7
Oakland-Berkeley area ^b	39	100.0	7.7	2.6	89.7
Southern Alameda County ^b	17	100.0	29.4	5.9	64.7
Northern San Mateo County ^b	15	100.0	6.7	-	93.3
Southern San Mateo County ^b	14	100.0	14.3	7.1	78.6
Santa Clara County	21	100.0	14.3	4.7	81.0
Contra Costa and Marin counties	14	100.0	-	14.3	85.7

^aTotal excludes establishments not providing information on relative wage rates and those not employing the specified occupation group.

^bFor definitions of these areas, see Table 3-3.

Patterns of variation by size of establishment might have been expected, but, in fact, did not appear in any consistent manner (Table 10-7). It is entirely possible that we would have obtained a somewhat different pattern of variation by number of employees had our sample included establishments with fewer than 100 employees. The small, marginal firm seeking to maintain a precarious existence by hiring workers below prevailing wage rates is simply not represented in any significant manner in our sample. Whether and to what extent small establishments manage to "get away with" the payment of sub-standard rates in the unionized occupations probably varies a good deal, depending on the strength of the particular union. There are, however, a few well-known instances of unorganized segments of specific industries paying wages well below prevailing union rates in the area, such as the small clothing "sweatshops" in San Francisco's Chinatown.

Patterns of variation by geographical location are of considerable interest and, as we shall see, tend to be confirmed in some respects by the actual wage data reported in Part II schedules. The proportion of establishments reporting relatively high wage rates for white-collar workers

was comparatively large in Southern Alameda County and below average in Santa Clara County (Table 10-8). In the case of blue-collar workers, the only appreciable deviation from the average proportion of employers reporting higher-than-prevailing rates was the Contra Costa-Marin area, where a sizable majority of our establishments were manufacturing enterprises. In connection with service workers, Southern Alameda County stood out as an area with an exceptionally large proportion of establishments reporting relatively high rates, while San Francisco, the Oakland-Berkeley area, and Northern San Mateo County included comparatively few such establishments. Part II wage data, now to be examined, will shed a good deal of light on these and other patterns of intra-regional variations in wage rates.

Wage differentials indicated by Part II wage data. In the Part II schedule employers were asked to report the number of workers being compensated at each wage rate paid by the establishment to workers in the following seven occupations: typist A, draftsman A, cashier checker, maintenance mechanic, truck driver, laborer, and janitor. These occupations were selected because, with the exception of cashier checker, they tended to be found in a wide variety of industries and could be fairly precisely defined. (A definition of each of these occupational classes may be found in the Appendix.)

Although 174 employers returned Part II schedules -- usually some weeks after the interview -- not all establishments completed all parts of the schedule, and, in general, wage data were less frequently reported than employment data. Moreover, as was to be expected, not all of our occupations were represented in all reporting establishments. The number

reporting cashier checker's wages turned out to be too small for meaningful analysis, but, in the case of the other six occupations, there were enough wage tables completed to permit a certain amount of statistical analysis, though not for refined categories of establishments.

For purposes of the present report, we have selected two wage measures from the array of wage rates reported by each employer for each occupation -- the lowest rate and the median rate within the establishment.² The lowest rate paid by the establishment, we believe, probably provides the best measure yielded by our data of the rate at which the establishment would be likely to recruit workers, although in some cases the lowest rate currently paid may have been above the rate at which the establishment would recruit.³

Tables 10-5 to 10-8 suggest J-shaped or skewed distributions with long upper tails. In other words, very few employers reported that their wages were below the prevailing rate, most felt that they were paying the prevailing rate, and, particularly in the case of white-collar workers, a significant percentage felt they were paying more than the prevailing rate.

However, the distributions obtained from Part II data suggest that employers paying wages below the prevailing rate were likely to assess their wages as "about the same" rather than to assess them as relatively low, for the distributions of Part II wage rates for most of our occupations are not as J-shaped, or skewed, as the preceding tables might have suggested, but more closely approach normal distributions (Tables 10-9 and 10-10). Moreover, a special analysis relating to typist A rates reported in the appendix suggests that there was a tendency for most employers to report their relative wages as "about the same" even when they were well above or well below

Table 10 - 9

Lowest Hourly Wage Rate Paid by Establishments
to Workers in Selected Occupations --
Bay Area Employer Policy Survey, 1967
Part II Data

Lowest hourly rate	Typist A	Janitor	Laborer	Maintenance mechanic	Drafts- man A	Truck driver
All establishments ^a						
Number	73	71	64	55	31	32
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
\$1.20 - 1.59	2.7	2.8	1.6	--	--	--
1.60 - 1.99	12.3	1.4	3.1	--	3.2	--
2.00 - 2.39	48.0	14.1	3.1	--	3.2	3.1
2.40 - 2.79	27.4	47.9	26.6	1.8	--	6.3
2.80 - 3.19	6.9	26.8	42.1	10.9	12.9	6.3
3.20 - 3.59	2.7	7.0	18.8	32.8	25.8	25.0
3.60 - 3.99	--	--	4.7	30.9	22.6	43.7
4.00 - 4.39	--	--	--	12.7	12.9	12.5
4.40 - 4.79	--	--	--	3.6	3.2	3.1
4.80 - 5.19	--	--	--	5.5	6.5	--
5.20 - 5.59	--	--	--	1.8	6.5	--
5.60 - 5.99	--	--	--	--	--	--
6.00 - 6.39	--	--	--	--	3.2	--
Median ^b	\$ 2.33	\$ 2.68	\$ 3.06	\$ 3.56	\$ 3.75	\$ 3.74
Inter-quartile range ^b	2.10- 2.50	2.46- 2.93	2.51- 3.20	3.40- 4.00	3.37- 4.09	3.44- 3.93

^aTotals include all establishments reporting wage rates on Part II schedules for each occupation, respectively.

^bMedians and quartiles have been computed from more detailed distributions.

Table 10 - 10

Median Hourly Wage Rate Paid by Establishments
to Workers in Selected Occupations --
Bay Area Employer Policy Survey, 1967
Part II Data

Median hourly rate	Typist A	Janitor	Laborer	Maintenance mechanic	Drafts- man A	Truck driver
All establishments ^a						
Number	73	71	64	55	31	32
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
\$1.20 - 1.59	--	2.8	--	--	--	--
1.60 - 1.99	6.8	1.4	--	--	3.2	--
2.00 - 2.39	39.7	9.9	6.3	--	--	--
2.40 - 2.79	39.8	45.0	20.3	--	3.2	3.1
2.80 - 3.19	9.6	32.4	42.1	--	6.5	6.3
3.20 - 3.59	4.1	8.5	23.4	25.5	16.1	28.1
3.60 - 3.99	--	--	6.3	45.4	22.5	40.7
4.00 - 4.39	--	--	1.6	18.2	22.6	15.6
4.40 - 4.79	--	--	--	3.6	6.5	3.1
4.80 - 5.19	--	--	--	1.8	6.5	--
5.20 - 5.59	--	--	--	5.5	9.7	--
5.60 - 5.99	--	--	--	--	--	--
6.00 - 6.39	--	--	--	--	3.2	3.1
Median ^b	\$ 2.45	\$ 2.75	\$ 3.13	\$ 3.81	\$ 3.98	\$ 3.76
Interquartile range ^b	2.25- 2.57	2.50- 3.00	2.79- 3.32	3.78- 4.02	3.54- 4.41	3.54- 3.94

^aTotal includes all establishments reporting wage rates on Part II schedules for each occupation, respectively.

^bMedians and quartiles have been computed from more detailed classifications.

the median for the relevant major industry group, although there was also a positive relationship between the employers' actual relative rates and the proportion reporting their white-collar rates as comparatively high (Appendix Table F-5).

So long as a distribution has a clear central tendency -- and all of ours do -- the relationship of the median to the first and third quartiles should provide a fairly good indication of whether the distribution is somewhat skewed or fairly normal and whether, if skewed, the distribution has a long upper tail or a long lower tail. On this basis, the distributions of lowest rates for typists, draftsmen, and janitors most closely approach normality, i.e., the median is roughly half way between the first and third quartiles. The distribution for laborers, on the other hand, has some tendency toward a long lower tail, while that for truck drivers displays a slight tendency in the same direction. Contrariwise, the distribution for maintenance mechanics is somewhat skewed with a long upper tail. Similar comments apply to distributions of median rates (Table 10-10), although in the case of a few of the occupations the tendency toward skewness is less pronounced in the case of median rates than of lowest rates.

That the least unionized occupations should be characterized by distributions more closely approaching normality was entirely to be expected, but the differences in shapes of the distributions for the other occupations -- strongly unionized in the cases of maintenance mechanics and truck drivers and quite strongly unionized in the case of laborers -- are not so readily explained.

A few other comments are in order with respect to these distributions.

In all cases except draftsman A, some 60 to 70 per cent or more of the rates are concentrated within two adjacent class intervals. Even so, the spread of these prevailing rates amounts to about 80 cents. Moreover, for all occupations -- even the two that are most strongly unionized -- there is a difference of two dollars or more between the lowest and the highest rates represented in both Table 10-9 and Table 10-10. Thus, although our distributions display fairly strong central tendencies, they also indicate that wage differentials within the Bay Area continue to be quite wide, even in strongly unionized occupations.

Although the total number of Part II wage reports, particularly for some of our occupations, was disappointingly small, the median rates for our reporting establishments were largely well in line with median rates for the same occupations based on the U.S. Bureau of Labor Statistics area wage surveys conducted in the San Jose Area in September 1967 and the San Francisco-Oakland Area in January 1968 (Appendix Table F-6). Moreover, our median rates were, for the most part, closer to the BLS medians for the San Francisco-Oakland Area than for the San Jose Area, as would be expected in view of the far greater representation of establishments in the former area in our sample. Where this was not true (particularly in the case of truck drivers), the explanation may lie in the fact that the BLS San Francisco-Oakland survey occurred later than most of our interviews.

The most interesting patterns of variation among establishments were geographical in nature, including a number of striking resemblances to patterns found in a recent Chicago labor market study (Tables 10-11 and 10-12). Unfortunately, the number of wage reports for some occupations from some of our areas was too small to yield reliable results. Nevertheless, the results

Table 10 - 11

Median of Lowest Wage Rates Paid by Establishments to Workers
in Selected Occupations, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967,
Part II Data

(Numbers in parenthesis indicate number of reporting establishments.)

Occupation	Total	San Francisco County	Oakland-Berkeley area	Southern Alameda County	San Mateo and Santa Clara counties	Contra Costa and Marin counties
Typist A (per month)	\$ 403 (73)	\$ 374 (26)	\$ 410* (12)	\$ 450* (13)	\$ 406 (17)	\$ 395* (5)
Janitor (per hour)	2.68 (71)	2.64 (25)	2.80 (15)	3.00* (7)	2.55 (17)	2.86* (7)
Laborer (per hour)	3.06 (64)	3.05 (16)	3.17 (15)	3.07* (12)	2.70* (10)	2.96* (11)
Maintenance mechanic (per hour)	3.56 (55)	3.95* (8)	3.95* (14)	3.69* (13)	3.46* (10)	3.38* (10)
Draftsman A (per month)	649 (31)	594* (8)	638* (4)	674* (9)	620* (8)	--**
Truck driver (per hour)	3.74 (32)	3.75* (12)	3.88* (6)	3.79* (5)	3.30* (4)	3.50* (5)

* Medians based on fewer than 15 cases.

** Too few cases.

Table 10 - 12

Median of Median Wage Rates Paid by Establishments to Workers
in Selected Occupations, by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967,
Part II Data

(Numbers in parentheses indicate number of reporting establishments.)

Occupation	Total	San Francisco County	Oakland-Berkeley area	Southern Alameda County	San Mateo and Santa Clara counties	Contra Costa and Marin counties
Typist A (per month)	\$ 423 (73)	\$ 418 (26)	\$ 433* (12)	\$ 470* (13)	\$ 416 (17)	\$ 415* (5)
Janitor (per hour)	2.75 (71)	2.68 (25)	2.77 (15)	3.00* (7)	2.74 (17)	2.88* (7)
Laborer (per hour)	3.08 (64)	3.10 (16)	3.19 (15)	3.07* (12)	2.73* (10)	3.19* (11)
Maintenance mechanic (per hour)	3.81 (55)	4.00* (8)	3.98* (14)	3.78* (13)	3.67* (10)	3.75* (10)
Draftsman A (per month)	688 (31)	719* (8)	713* (4)	699* (9)	630* (8)	--**
Truck driver (per hour)	3.76 (32)	3.75* (12)	3.90* (6)	3.89* (5)	3.39* (4)	3.55* (5)

* Medians based on fewer than 15 cases.

** Too few cases.

suggest a clear tendency for blue-collar rates to be relatively low on the Peninsula (San Mateo and Santa Clara counties). This is consistent with the lower level of blue-collar wage rates in the San Jose Area, as compared with the San Francisco-Oakland Area, indicated by the BLS data shown in Appendix Table F-6.

There was also a tendency for blue-collar wage rates to be relatively high in the Oakland-Berkeley area, although for maintenance machanics, San Francisco's median (based, however, on too few establishment reports for reliable inferences) was as high as Oakland-Berkeley's. Our data, moreover, are not sufficiently extensive to rule out the possibility, suggested by the relatively large proportion of our respondents in the Contra Costa-Marin area who considered their wage rates for blue-collar workers to be higher than those of other employers engaged in similar activities in the area, that wage rates for blue-collar workers in Contra Costa County may actually be as high or higher than those in the Oakland-Berkeley area.⁴ Patterns of geographical differentials for blue-collar workers were only slightly altered on the basis of median rates paid by establishments (Table 10-12).

In the case of typists, the median lowest rate in Southern Alameda County was well above average, while that in San Francisco County was well below average. The same comments apply to draftsmen, although the number of cases, again, was too small for reliable inferences. The relatively high rates in Southern Alameda County tend to support the assessments of a comparatively large proportion of employers in that area that their white-collar wage rates were relatively high. When comparisons are based on the median rates of establishments, the most significant change that occurs

(Table 10-12) is that San Francisco's median rate for typists exceeds the median lowest rate for that area by a relatively large margin and falls below the general average only slightly. Thus, on the basis of median rates paid by establishments, San Francisco's rates for typists appear to be closer to the general average than on the basis of lowest rates. This result was clearly influenced by the fact that a number of the reporting establishments in San Francisco were large banks or other large organizations in which the range of rates of typist A was quite wide and the median rate was likely to exceed the lowest rate by a considerably wider margin than in smaller establishments.

For janitors, the median lowest rate (though based on comparatively few cases) was well above average in Southern Alameda County, where, it will be recalled, a relatively large proportion of employers considered their wage rates for service workers to be higher than those paid by other establishments in the area engaged in similar activities. Janitors' rates were also comparatively high in the Oakland-Berkeley area and in the Contra Costa-Marin area, although in the latter area the number of reports was small. On the other hand, rates for janitors, like those for blue-collar workers, were comparatively low on the Peninsula.

It may be argued, of course, that these geographical wage differences may be almost entirely, if not entirely, explained by differences in the industry-mix of the establishments reporting wages in the various areas. (As we shall see, at a later point, there were significant differences among major industry groups in patterns of prevailing wage rates.)

In an attempt to control for this factor, to the greatest extent possible within the limitations of our data, we developed wage distributions

for each occupation within each major industry group from which a reasonably satisfactory number of reports were received on wages for that occupation. The relationship of the lowest wage rate in each establishment to the median for its major industry group was identified, and these relationships were then analyzed for establishments in each geographical area. The use of more refined industry groups would have been preferable but was precluded by the limited number of cases. The results, as well as further details on the method, are presented in Appendix Tables F-7 to F-9. Interestingly, the patterns of geographical differentials already discussed show up quite clearly in these tables, although in some cases the numbers of establishments represented are too small for reliable inferences.

In the Chicago study, Rees and Shultz found that the highest blue-collar rates were in the South Chicago area -- ascribed to the presence in the South region of major concentrations of heavy industry, especially basic steel and petroleum refining in the Gary-South Chicago area.⁵ Although our data are less extensive in some respects, the indications that blue-collar rates in the Oakland-Berkeley area were relatively high suggests a similar influence. Historically, Oakland, as the terminal point of the transcontinental railroad, became a center of heavy industry. Since shipment of heavy raw materials or finished products across the Bay would have been expensive -- especially the shifting of cargo from trains to boats -- San Francisco tended to become a center of light manufacturing industry, and, of course, of finance and commerce. Something of an exception should be made for certain heavy industrial establishments located on the Bay south of San Francisco with direct access to shipping.

A relatively large proportion of establishments in the Oakland-Berkeley

area, it will be recalled, mentioned high wage rates as a locational disadvantage (Section III). Although we have interpreted these comments as largely relating to the comparatively high wages in the Bay Area, as compared with other labor market areas throughout the nation, it may well be that some of them were actually intended to refer to high wages as compared with those in other parts of the Bay Area. In fact, a few interviewees made specific reference to the fact that wage rates on the Peninsula were lower than in the Oakland area.

The indication that wages for janitors were relatively high in Southern Alameda County, though based on only a few cases, also suggests a similarity to certain findings of the Chicago study. Rees and Shultz found that wages of nonwhite service workers were relatively high in the North and West region, with its well-to-do suburbs on the North Shore, where very few nonwhites lived and where the demand for service workers, as a result, tended to be high in relation to the supply of such workers. Although Southern Alameda County is largely a working-class residential area, as we have seen, rather than an upper middle-class area, it is also an area in which almost no Negroes and only a few scattered pickets of Mexican Americans live. And, since many janitors in the Bay Area are members of minority groups, there may well be a relative shortage of such workers residing in Southern Alameda County. Across the Bay, on the Peninsula, on the other hand, there is a fairly sizable Negro population in East Palo Alto, while there are numerous Mexican Americans in the San Jose Area.

The fact that wages of typists -- at least on the basis of lowest rates of establishments -- tended to be below average in San Francisco

County and above average in Southern Alameda County would again appear to reflect demand-supply relationships. San Francisco has long attracted young female in-migrants, who find it an enticing city in which to live and work, and has much to offer in the way of living accommodations for young women. Southern Alameda County, on the other hand, as an area of working-class tract homes, has few attractions and little in the way of residential accommodations for single women. It must be recognized, also, that differences in industry-mix, for which we have only partially been able to adjust our data, may play a role.

There are some indications in the comments made by a few of our interviewees of higher wages for white-collar workers in San Francisco than in at least some of the outlying areas -- for example:

"Our wage rates for white-collar workers are higher in the central city areas than in outlying areas."
(transportation and utilities)

"Compared to other branches, our wages are higher for white-collar and service workers; it depends on the area -- San Francisco would be higher than San Jose, which, in turn, would be higher than in localities south of San Jose." (bank)

"Our wages for white-collar workers are higher in San Francisco than in our district offices."
(insurance company)

Just as employers' assessments of their relative wage rates revealed no consistent variations by size of establishment, so our Part II wage data revealed little in the way of consistent size-of-firm variations (Tables 10-13 and 10-14).⁶ So far as lowest rates are concerned (Table 10-13), there appeared to be some slight tendency for the rates paid to laborers to decline with size of establishment, whereas those for maintenance mechanics showed a slight tendency to increase with size of establishment.

Table 10 - 13

Median of Lowest Wage Rates Paid by Establishments to Workers
in Selected Occupations, by Number of Employees --
Bay Area Employer Policy Survey, 1967
Part II Data

(Numbers in parentheses indicate number of reporting establishments)

Occupation	Total	Less than 250	250 to 999	1,000 and over
Typist A (per month)	\$ 403 (73)	\$ 404 (25)	\$ 405 (25)	\$ 405 (23)
Janitor (per hour)	2.68 (71)	2.73 (25)	2.75 (30)	2.63 (16)
Laborer (per hour)	3.06 (64)	3.07 (30)	3.05 (20)	2.80* (14)
Maintenance mechanic (per hour)	3.56 (55)	3.63 (25)	3.67 (18)	3.73* (12)
Draftsman A (per month)	649 (31)	624* (11)	713* (8)	663* (12)
Truck driver (per hour)	3.74 (32)	3.86* (12)	3.84* (12)	3.43* (8)

* Medians based on fewer than 15 cases.

Table 10 - 14

Median of Median Wage Rates Paid by Establishments to Workers
in Selected Occupations, by Number of Employees --
Bay Area Employer Policy Survey, 1967
Part II Data

(Numbers in parentheses indicate number of reporting establishments)

Occupation	Total	Less than 250	250 to 999	1,000 and over
Typist A (per month)	\$ 423 (73)	\$ 417 (25)	\$ 430 (25)	\$ 427 (23)
Janitor (per hour)	2.75 (71)	2.78 (25)	2.77 (30)	2.75 (16)
Laborer (per hour)	3.13 (64)	3.12 (30)	3.13 (20)	2.90* (14)
Maintenance mechanic (per hour)	3.81 (55)	3.84 (25)	3.79 (18)	3.82* (12)
Draftsman A (per month)	688 (31)	674* (11)	810* (8)	665* (12)
Truck driver (per hour)	3.76 (32)	3.89* (12)	3.85* (12)	3.53* (8)

* Medians based on fewer than 15 cases.

Since, as we found in Section V, our larger establishments were less likely to be unionized than the smaller establishments, it may be that this reflected some tendency for nonunionized larger establishments to be able to offer somewhat lower rates to laborers than the unionized establishments, whereas, in the case of the more completely unionized occupation of maintenance mechanics, this was not possible. Such an interpretation is to some degree supported by the data in Table 10-15, which suggests a tendency toward lower rates for laborers, but higher rates for maintenance mechanics, in nonunionized firms. However, the number of nonunionized firms reporting rates for laborers and maintenance mechanics is so small that this inference must be considered highly tentative.

When we examine the corresponding tables giving median rates for establishments (Tables 10-14 and 10-16), tendencies toward lower rates in larger establishments and nonunionized establishments partially disappear. This probably reflects the fact that the larger establishments tended to have wider ranges of rates, with more possibilities of moving up to higher rates with increasing years of service.

Because of the small numbers of establishments reporting wages for some of our occupations in various nonmanufacturing industry groups, we present comparisons only between manufacturing and nonmanufacturing industries (Tables 10-17 and 10-18), together with a limited amount of additional detail in Appendix Table F-10. To the extent that any pattern emerges from the comparisons of lowest rates, it suggests higher rates in nonmanufacturing industries for the most strongly unionized occupations and some slight suggestion of a reverse tendency in the less unionized

Table 10 - 15

Median of Lowest Wage Rates Paid by Establishments to Workers
in Selected Occupations, by Whether or Not Establishment
Was Covered by a Collective Bargaining Agreement --
Bay Area Employer Policy Survey, 1967
Part II Data
(Numbers in parenthesis indicate the number of
reporting establishments.)

Occupation	Total	Covered by collective bargaining agreement	
		Yes	No
Typist A (per month)	\$ 403 (73)	\$ 398 (46)	\$ 409 (27)
Janitor (per hour)	2.68 (71)	2.71 (53)	2.58 (18)
Laborer (per hour)	3.06 (64)	3.03 (55)	2.80* (9)
Maintenance mechanic (per hour)	3.56 (55)	3.64 (47)	3.80* (8)
Draftsman A (per month)	649 (31)	663 (24)	624* (7)
Truck driver (per hour)	3.74 (32)	3.78 (30)	3.30* (2)

* Medians based on fewer than 15 cases.

Table 10 - 16

Median of Median Wage Rates Paid by Establishments to Workers
in Selected Occupations, by Whether or Not Establishment
Was Covered by a Collective Bargaining Agreement --
Bay Area Employer Policy Survey, 1967
Part II Data

(Numbers in parentheses indicate number of
reporting establishments.)

Occupation	Total	Covered by collective bargaining agreement	
		Yes	No
Typist A (per month)	\$ 423 (73)	\$ 418 (47)	\$ 432 (26)
Janitor (per hour)	2.75 (71)	2.75 (53)	2.78 (18)
Laborer (per hour)	3.13 (64)	3.08 (55)	3.10* (9)
Maintenance mechanic (per hour)	3.81 (55)	3.78 (47)	4.00* (8)
Draftsman A (per month)	688 (31)	668 (24)	724* (7)
Truck driver (per hour)	3.76 (32)	3.78 (30)	3.60* (2)

* Medians based on fewer than 15 cases.

Table 10 - 17

Median of Lowest Wage Rates Paid by Establishments
to Workers in Selected Occupations,
for Manufacturing and Nonmanufacturing Industries --
Bay Area Employer Policy Survey, 1967
Part II Data

(Numbers in parentheses indicate number of reporting establishments)

Occupation	Total	Manu- facturing	Nonmanu- facturing
Typist A (per month)	\$ 403 (73)	\$ 409 (31)	\$ 398 (42)
Janitor (per hour)	2.68 (71)	2.78 (36)	2.65 (35)
Laborer (per hour)	3.06 (64)	2.99 (38)	3.08 (26)
Maintenance mechanic (per hour)	3.56 (55)	3.59 (41)	3.87* (14)
Draftsman A (per month)	649 (31)	706 (19)	663* (12)
Truck driver (per hour)	3.74 (32)	3.68* (14)	3.85 (18)

* Medians based on fewer than 15 cases.

Table 10 - 18

Median of Median Wage Rates Paid by Establishments
to Workers in Selected Occupations,
for Manufacturing and Nonmanufacturing Industries --
Bay Area Employer Policy Survey, 1967
Part II Data

(Numbers in parentheses indicate number of reporting establishments)

Occupation	Total	Manu- facturing	Nonmanu- facturing
Typist A (per month)	\$ 425 (73)	\$ 425 (31)	\$ 423 (42)
Janitor (per hour)	2.75 (71)	2.80 (36)	2.70 (35)
Laborer (per hour)	3.13 (64)	3.03 (38)	3.26 (26)
Maintenance mechanic (per hour)	3.81 (55)	3.75 (41)	4.01* (14)
Draftsman A (per month)	688 (31)	674 (19)	715* (12)
Truck driver (per hour)	3.76 (32)	3.73* (14)	3.87 (18)

* Medians based on fewer than 15 cases.

occupations. The data in Appendix Table F-10 also suggest significant differences in wages paid in durable and nondurable goods manufacturing establishments, though in different directions in some occupations than in others. The relatively low rates for typists in finance, insurance, and real estate are also of interest, although comparisons of median rates (not shown) would tend to reduce this difference, as in the case of the San Francisco rates for typists.

Undoubtedly the most significant aspect of our findings is the indication of relatively low wage rates on the San Francisco Peninsula for a number of our occupations. This suggests that wage relationships may be playing something of a role in encouraging the location of manufacturing establishments on the Peninsula, rather than in the older industrial areas. In view of the limitations of our wage data, this finding must be regarded as somewhat tentative at this stage, but, at least for the unionized occupations, could be more extensively analyzed on the basis of a study of wage rates set forth in collective bargaining agreements.

To the extent that geographical location plays a role in explaining wage rates within the Bay Area, it suggests that demand and supply influences are important, along with the relative strength of various unions and the decisions of individual establishments to maintain wage rates somewhat above, equal to, or under those of other establishments engaged in similar activities. However, there were indications in Section VII that establishments that maintained relatively high wage rates tended, at least to some extent, also to be those that maintained high qualifications for entry level jobs and that provided formal on-the-job training.

There were also some indications in interviewees' comments on their relative wage rates that some of the establishments were deliberately following policies of maintaining wages somewhat above the prevailing rates:

"Our pay policy is to keep our wage and salary level in the upper 50 per cent of the pay prevailing among other paper manufacturers in the area." (paper manufacturer)

"As a matter of policy we try to stay a little above the median rates in the Bay Area." (fabricated metal products)

"The company's salary plan is based on average rates of pay higher than those of competing firms in the area." (nonelectrical machinery)

"We try to stay a little above the median of salaries suggested by the Federated Employers of the Bay Area." (nonelectrical machinery)

"It has always been the philosophy of the bank to pay more than our competitors. Also, our employees have to know more than at other banks, as their jobs cannot be as specialized as in larger organizations." (bank)

However, our data yield very little, if any, evidence of any clear tendency for policies of maintaining wages above prevailing rates to be associated positively with size of firm. Employers' own assessments of their relative wages suggested that establishments in transportation and utilities and in nondurable goods manufacturing were relatively likely to maintain white-collar rates that exceeded prevailing wages, whereas those in services and in government were relatively unlikely to follow such policies.

It will be recalled that we found in Section VII a tendency toward a positive association between relatively high qualification standards for entry level jobs and relatively high wage rates for white-collar workers.

In an attempt to identify the characteristics of establishments that maintained high standards in terms of both these measures, we carried out special tabulations in which establishments were classified according to whether they indicated (1) both that their qualification standards for entry level jobs were comparatively high and that their wage rates for white-collar workers were higher than those of other establishments in the area engaged in similar activities, (2) that only one of these conditions prevailed, and (3) that neither of these conditions prevailed.

The results of this special analysis indicated that 14 per cent of reporting establishments fell into the first category ("both"), 36 per cent into the second category ("one"), and 50 per cent into the "neither" class. On a major industry basis, the transportation and utilities group stood out with a particularly high percentage of establishments in the "both" category (38.5 per cent), whereas establishments in nondurable goods manufacturing and government were quite unlikely to fall into that category (about 7 per cent each), and there were no service employers in the "both" class.

There were no consistent variations by number of employees, even when we distinguished between establishments that were and those that were not covered by collective bargaining agreements. Type of organization, however, made a significant difference, with only 5 per cent of the single-unit establishments falling into the "both" class, as compared with 14 per cent of the branch establishments and 18 per cent of the headquarters establishments.

Finally, there was a distinct tendency for the central city areas, especially San Francisco (17 per cent), to be particularly likely to have

both high qualification standards for entry level jobs and relatively high wage rates for white-collar workers, whereas, at the other end of the spectrum, both of these conditions were especially unlikely to be reported by employers in the Contra Costa-Marin area (4 per cent) and in Southern San Mateo County (9 per cent).

Thus, this analysis suggests that establishments that maintained relatively high standards in terms of the particular two measures we chose for this analysis were especially likely to be headquarters establishments and to be located in San Francisco. They were also more likely to be found in the transportation and utilities sector than in any of the other major industry groups. Other combinations of measures might, of course, have yielded different results.

Entry Level Occupations and Wage Rates

Since we were interested in employment opportunities for inexperienced workers, employers were asked, in both the interview and the Part II schedule, to indicate the types of entry level jobs available in their establishments and the wage rates paid in these entry level occupations. Although reporting of this information on Part II schedules was rather sparse, and has not been analyzed, extensive information was provided in the interviews.

On the basis of these establishment reports, it would appear that the variety of entry level jobs available to persons with no prior work experience and no more than high school graduation is wide (Table 10-19). Roughly half of the employers' responses referred to various types of clerical jobs, while the rest referred largely to sales, semi-skilled,

Table 10 - 19

Entry Level Occupations Mentioned by Employers,
Requiring No Prior Work Experience
and No More Than High School Graduation --
Bay Area Employer Policy Survey, 1967

All responses ^a			
Number	540		
Per cent	100.0		
Professional occupations	0.2	Semi-skilled occupations	11.5
Technical occupations	1.2	Truck drivers; bus drivers;	
Junior or apprentice		truck drivers' helpers	0.7
draftsmen; draftsmen	0.6	Trades helpers or general	
Teachers' aides	0.2	helpers	3.0
Dietary technicians	0.4	Apprentices in the skilled	
		trades	3.3
Clerical occupations	51.1	Machine operators	
Clerical or office jobs	6.9	(except unskilled)	0.2
Secretaries, stenographers		Assemblers	1.3
or junior stenographers	2.2	Inspectors	0.4
Typists, typist-clerks,		Other	2.6
junior typists, junior			
typist-clerks	11.7	Unskilled occupations	19.8
Clerks or junior clerks	18.2	Laborers, including materials	
Office machine operators		handlers	9.2
(including key punch		Warehousemen and lumpers	2.4
or duplicating machine		Machine operators (except	
operators)	3.1	semi-skilled)	0.4
Telephone operators,		Wrappers or mailers	1.5
receptionists,		Lube and wash men (garage)	1.1
messengers, office		Other	5.2
girls or boys	4.4	Service occupations	10.7
Stock clerks and shipping		Custodians	4.0
clerks	3.7	Police and firemen	1.9
Other	0.9	Attendants	0.7
Sales occupations	4.8	Waiters, waitresses	0.6
Sales persons and sales		Cooks	0.2
clerks	4.8	Nurses' aides	0.2
Skilled occupations	0.7	Groundsmen or yardmen	0.7
		Busboys and related food	
		service workers	1.7
		Other	0.7

^aTotal excludes establishments that did not provide information. The total exceeds the number of establishments reporting, since some employers reported more than one occupation.

unskilled, and service occupations. Almost needless to point out, there was a certain amount of variation by major industry group in the types of entry level jobs available, with clerical occupations accounting for 94 per cent of the responses in finance, insurance, and real estate, while semi-skilled and unskilled occupations played a relatively more important role in manufacturing and service occupations (particularly policemen, firemen, and custodians) were mentioned relatively frequently by government agencies.

Not unexpectedly, the wage rates paid in these entry level jobs varied widely -- from a low of less than \$1.50 an hour (reported in only a few cases) to a high of \$4.00 or more (again reported only in a few cases).



It should be noted that, at the time of our interviews, the federal minimum wage was \$1.40 an hour and the California minimum wage -- applying to women and minors in most occupations -- was \$1.30 an hour. A lower rate could be paid to minors under certain conditions. The median rate reported for all these entry level occupations in this relatively high wage area was \$2.21 an hour, while the interquartile range was \$1.88 to \$2.67.

In Table 10-20, we present the distribution of rates reported for some of the more homogeneous categories. At least for some of these occupations, there was a less pronounced central tendency than for most of the occupations represented in Table 10-9. Where comparisons between the two tables are at all possible -- for the clerical workers, laborers, and custodians -- the median entry level rate was lower than the median lowest rate actually paid, as indicated in Table 10-9. This was particularly true for the laborers. It may reflect the fact that the lowest rates actually being paid to laborers in a number of our establishments were above the starting rate.

There was also a clear tendency for the entry level rates in the predominantly male occupations to be considerably higher than in the predominantly female occupations, which, among other things, were much less likely to be unionized. Moreover, median entry level rates, particularly for the male occupations, were so far above the minimum wage that -- at least in these larger establishments in the strongly unionized Bay Area -- it would appear that the minimum wage was probably a considerably less significant barrier to employment of young inexperienced workers than the much higher entry level rates that prevailed, particularly in the more unionized occupations.

Table 10 - 20
Hourly Wage Rates Paid by Establishments for Selected
Entry Level Occupations --
Bay Area Employer Policy Survey, 1967

Hourly rate	Typists and typist- clerks	Clerks and junior clerks	Tele- phone opera- tors	Trades helpers	Appren- tices	Laborers	Custo- dians
All establishments ^a							
Number	57	90	21	16	15	44	18
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$1.50	1.8	5.6	4.8	--	--	--	--
1.50 - 1.59	--	2.2	4.8	--	--	--	--
1.60 - 1.79	14.1	31.1	28.6	--	6.7	--	11.1
1.80 - 1.99	33.2	17.8	14.3	--	--	--	--
2.00 - 2.19	24.5	17.8	37.9	--	13.3	--	22.2
2.20 - 2.39	19.3	8.9	9.6	12.5	13.3	13.6	--
2.40 - 2.59	5.3	7.8	--	18.8	26.6	25.0	38.9
2.60 - 2.79	--	1.1	--	25.0	20.0	20.5	22.2
2.80 - 2.99	1.8	4.4	--	18.8	6.7	20.4	5.6
3.00 - 3.19	--	3.3	--	6.2	6.7	6.8	--
3.20 - 3.39	--	--	--	--	6.7	2.3	--
3.40 - 3.59	--	--	--	6.2	--	2.3	--
3.60 - 3.79	--	--	--	6.3	--	--	--
3.80 - 3.99	--	--	--	--	--	2.3	--
4.00 or more	--	--	--	6.2	--	6.8	--
Median	2.01	1.92	1.96	2.77	2.54	2.69	2.53
Interquartile range	1.87- 2.24	1.73- 2.24	1.76- 2.24	2.56- 2.99	2.24- 2.78	2.48- 2.94	2.13- 2.62

For persons with no previous work experience, but with a junior college or college degree, our respondents also mentioned a wide variety of entry level occupations, particularly in the professional, technical, and managerial fields -- with engineers, accountants, technicians, and management trainees being mentioned with particular frequency (Table 10-21). Again, there was considerable variation among major industry groups in the relative frequency with which occupations were mentioned, with professional workers (predominantly engineers) being reported particularly frequently by construction establishments and with openings for both engineers and teachers mentioned relatively often by the governmental units (data not shown). On the other hand, management trainees were mentioned unusually frequently by retail trade employers.

Salaries paid in these higher level entry positions ranged from less than \$500 a month to \$800 or more, but nearly two-thirds paid less than \$600. There was, of course, some variation among the occupation groups, depending on the level of education and specialized training required, but detailed analysis was largely precluded because there were not enough responses for homogeneous categories.

Wage Comparisons with Other Areas

The fact that wage rates in the Bay Area have historically tended to be relatively high, as compared with other areas, was mentioned in the discussion of locational advantages and disadvantages in Section III. Establishments associated with organizations which had branches in other areas were asked to indicate how their wage rates compared with those of branches in other areas -- again for white-collar workers, blue-collar

Table 10 - 21

Entry Level Occupations Mentioned by Employers,
Requiring No Prior Work Experience, but Requiring
Graduation From a Junior College or a College Degree --
Bay Area Employer Policy Survey, 1967

All responses ^a			
Number	290		
Per cent	100.0		
Professional occupations	42.7	Managers and officials	20.0
Teachers	2.4	Assistant supervisors, supervisor trainees	2.8
Social welfare workers; probation officers	1.0	Management trainees	16.9
Registered nurses	2.8	Other	0.3
Pharmacists	0.3	Clerical occupations	12.8
Engineers, junior engineers, engineering trainees; chemists	21.3	Clerks including accounting clerks; production clerks and assistants	5.5
Accountants, junior accountants, accountant trainees	9.3	Office machine operators (including key punch and duplicating machine operators)	2.1
Attorneys	2.8	Claims trainees	4.9
Other	2.8	Other	0.3
Technical occupations	16.6	Sales occupations	6.2
Technicians, junior techni- cians	8.3	Salesmen	1.0
Draftsmen, junior draftsmen	1.4	Junior salesmen or sales trainees	5.2
Medical technicians and technologists	0.7	Skilled occupations	0.7
Laboratory technicians and assistants; research tech- nicians	4.8	Service occupations	1.0
Programmers, EDP	0.7	Nurses' aides	0.7
Other	0.7	Other	0.3

^aTotal excludes establishments that did not provide information. The total exceeds the number of establishments reporting, since some employers reported more than one occupation.

workers, and service workers.

In commenting on white-collar wage rates, very few, indeed, of these establishments indicated that their wage rates were lower than those of branches of their organization in other areas (Table 10-22). Slightly more than half of the respondents thought they were higher, while most of the others considered them to be about the same. The proportion reporting their rates as higher was especially large in retail trade, which may well reflect the fact that unionization of retail trade tends to be weaker in most other areas than in the Bay Area. On the other hand, establishments in transportation and utilities, an industry group with a relatively high degree of unionization throughout the country, were relatively unlikely to report their wage rates for white-collar workers as higher than those in other areas, whereas two-thirds of these establishments indicated that their white-collar wage rates were about the same. Interestingly, also, establishments in durable goods manufacturing were relatively likely to report higher wage rates for white-collar workers.

In the case of blue-collar workers, the proportion of establishments reporting relatively high wage rates, as compared with branches of their organization in other areas, was somewhat larger than in the case of white-collar workers, whereas in the case of service workers the pattern appeared to be about the same as for white-collar workers (Table 10-23). But in both cases, variations among major industry groups were similar to those prevailing for white-collar wage rates, although some of the major industry groups represented in Table 10-22 were not shown separately in Table 10-23, because too few of the establishments employed the relevant types of workers to yield reliable distributions.

Table 10 - 22

Estimated Relation of Wage Rates Paid by Establishment to Rates Paid
by Branches of Organization in Other Areas, for White-Collar Workers,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Higher	Lower	About the same
	Number	Per cent			
All establishments ^a	185	100.0	51.9	2.2	45.9
Manufacturing					
Durable	40	100.0	67.5	--	32.5
Nondurable	45	100.0	51.1	--	48.9
Transportation and utilities	18	100.0	33.3	--	66.7
Retail trade	17	100.0	76.5	--	23.5
Finance, insurance, and real estate	18	100.0	55.6	--	44.4
All other industries	47	100.0	36.2	8.5	55.3

^aTotal excludes establishments not reporting information on relative wage rates and establishments with no branches of the organization in other areas.

Table 10 - 23

Estimated Relation of Wage Rates Paid by Establishment
to Rates Paid by Branches of Organization in Other Areas,
for Blue-Collar and Service Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Higher	Lower	About the same
	Number	Per cent			
Blue-collar workers					
All establishments ^a	155	100.0	57.5	0.6	41.9
Manufacturing					
Durable goods	39	100.0	74.4	--	25.6
Nondurable goods	44	100.0	63.6	--	36.4
Transportation and utilities	16	100.0	18.8	--	81.2
Retail trade	15	100.0	73.3	--	26.7
All other industries	41	100.0	43.9	2.4	53.7
Service workers					
All establishments ^a	108	100.0	53.7	0.9	45.4
Manufacturing					
Durable goods	30	100.0	70.0	--	30.0
Nondurable goods	27	100.0	51.8	--	48.2
Retail trade	15	100.0	60.0	--	40.0
All other industries	36	100.0	38.9	2.8	58.3

^aTotal excludes establishments not reporting information on relative wage rates, those with no branches of the organization in other areas, and those not employing the specific occupation group.

Of particular interest are the responses to our next question, which asked interviewees in establishments with relatively high rates in the Bay Area for any of the three groups of workers to indicate whether they considered their higher wage rates to be offset by other factors, such as higher productivity or lower transportation costs.

The results for blue-collar workers are presented in Tables 10-24 and 10-25. First of all, the proportion of establishments in the machinery and aerospace groups reporting higher wage rates in the Bay Area was appreciably higher than in the "other durable" group. Interestingly the explanation of this difference appears to lie chiefly in the fact that in the "other durable" group, which was more highly unionized, it will be recalled (Table 6-1), the establishments reporting that their wage rates were about the same as those in other areas were nearly all in industries whose blue-collar workers were in large industrial unions which had nationwide collective bargaining contracts imposing uniform wage rates throughout the nation. Such collective bargaining contracts clearly have a tendency to protect the Bay Area from a competitive disadvantage associated with its historical pattern of high wage rates.

The durable goods establishments reporting higher wage rates were almost equally divided between those that indicated no offsetting factors and those that reported factors partly or wholly offsetting the higher rates. However, establishments in the machinery and aerospace group were more likely to report higher productivity, chiefly of blue-collar workers, whereas there was a slight tendency for relatively more of the establishments in the other durables group -- likely to be involved in the production of bulky commodities -- to mention lower transportation costs as an offsetting factor. A

Table 10 - 24

Estimated Relation of Blue-Collar Wage Rates in Bay Area to Those of
Branches of Organization in Other Areas, and Extent to Which
High Wage Rates Are Offset by Other Factors,
Selected Industry Groups Within Manufacturing --
Bay Area Employer Policy Survey, 1967

Wage relationship and offsetting factors	Durable				Nondurable		
	Total	Total	Machinery and aerospace ^b	Other	Total	Food	Other
All manufacturing establishments ^a							
Number	85	40	15	25	45	24	21
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Wage rates about the same	30.6	25.0	6.7	36.0	35.6	33.3	38.1
No comparison possible -- different types of products or operations	2.4	2.5	6.7	--	2.2	4.2	--
Wage rates higher	67.0	72.5	86.6	64.0	62.2	62.5	61.9
No offsetting factors	38.7	32.5	40.0	28.0	44.4	41.7	47.6
Offsetting factors ^c	25.9	35.0	46.6	28.0	17.8	20.8	14.3
Higher productivity	21.2	30.0	33.4	16.0	13.4	16.5	14.3
Blue-collar workers	10.6	15.0	20.0	12.0	6.8	8.3	4.7
White-collar workers	3.5	5.0	6.7	--	2.2	4.2	
Both	7.1	10.0	6.7	4.0	4.4	4.2	4.8
Lower transporta- tion costs	7.1	10.0	6.7	12.0	4.4	4.2	4.8
Proximity to markets	1.2	2.5	--	--	--	--	
Better management	1.2	2.5	--	--	--	--	
Higher quality product	1.2	2.5	6.7	--	--	--	
Information on off- setting factors not available	2.4	5.0	--	8.0	--	--	

^aExcludes establishments with no branches of the organization in other areas, those for which information on relative wage rates was not available, and those with no blue-collar workers.

^bIncludes nonelectrical machinery, electrical machinery, ordnance, and instruments.

^cTotal percentages for specific offsetting factors exceed total shown in this row, since some establishments mentioned more than one offsetting factor.

Table 10 - 25

Estimated Relation of Blue-Collar Wage Rates in Bay Area
to Those of Branches of the Organization in Other Areas,
and Extent to Which High Wage Rates Are Offset by Other
Factors, Private Nonmanufacturing Industry Groups --
Bay Area Employer Policy Survey, 1967

Wage relationship and offsetting factors	Total	Strongly unionized groups ^b	Less strongly unionized groups ^c
All establishments ^a			
Number	59	37	22
Per cent	100.0	100.0	100.0
Wage rates about the same	50.8	62.2	31.8
Wage rates lower	1.7	--	4.5
Wage rates higher	47.5	37.8	63.7
No offsetting factors	30.5	29.7	31.8
Offsetting factors ^d	15.3	5.4	31.7
Higher productivity	18.6	5.4	40.9
Blue-collar workers	3.4	2.7	4.5
White-collar workers	11.8	2.7	27.3
Service workers	3.4	--	9.1
Proximity to markets	1.7	2.7	--
Other lower cost factors	3.4	2.7	4.5
Information on offsetting factors not available	1.7	2.7	--

^aExcludes establishments with no branches of the organization in other areas, those for which information on relative wage rates was not available, and those with no blue-collar workers.

^bIncludes construction; transportation and utilities; and wholesale trade.

^cIncludes retail trade; finance, insurance, and real estate; and services.

^dTotal percentages for specific offsetting factors exceed total shown in this row, since some establishments mentioned more than one offsetting factor.

number of those mentioning lower transportation costs -- in both durable and nondurable industries -- pointed out that it was lower transportation costs within the area, as compared with branches in other areas, that they had in mind. California's highly developed system of freeways probably plays a role here.

That low wages in the South did not always mean lower labor costs was clearly indicated by one of our interviewees, who commented:

"Wage rates job for job are about 30 per cent lower in our Virginia plant, but productivity is proportionately lower. 'We get what we pay for here.'" (electrical machinery)

The picture in the nondurable goods sector tended to be considerably bleaker, with a substantial proportion of the establishments that reported relatively high wage rates indicating that the higher rates were not offset by any other factor. It will be recalled that the establishments in the nondurable sector tended to be older than those in the more rapidly expanding durable goods sector. And in this context, a comment of a representative of one of these firms is particularly interesting:

"Historically, workers in this plant were considerably more productive than those in eastern branches. However, the difference in productivity has narrowed appreciably. Nevertheless, this branch is likely to be maintained because of the investment in it. Moreover, our products have been adapted to the special needs of the California market." (chemical products)

Another respondent, this time in a relatively small firm in the durable goods sector, commented:

"There are no offsets at all, and no locational advantages whatsoever. We are here simply because we got started here 40 years ago." (nonelectrical machinery)

Incidentally, both of these firms were in central city areas.

On the other hand, among nondurable goods establishments mentioning

the offsetting factor of higher productivity, there were three -- all of them manufacturing various food products -- that specifically mentioned lower unit labor costs associated with superior equipment or mechanization.

A particularly interesting aspect of these findings is that higher productivity appeared to be playing a relatively important role in the comparatively young and rapidly expanding machinery and aerospace group. This was probably related to the greater likelihood that these establishments had relatively new plants and modern equipment.

In Table 10-25, relating to nonmanufacturing industry groups, we have excluded government, since the government agencies with branches in other areas are chiefly federal, and federal civil service regulations preclude regional differentials in wage and salary rates. Moreover, it must be recognized that some of the nonmanufacturing firms cater almost exclusively to the local market and thus do not compete directly with establishments in other areas. This is not true, however, of some of the large construction employers, many transportation establishments, certain types of wholesale trade concerns, large insurance companies, and some of the business service establishments.

All in all, private nonmanufacturing establishments tended to be less affected by higher blue-collar wage rates than the manufacturing concerns, but this was considerably more true of the strongly unionized groups -- whose competitors in other parts of the country were also likely to be unionized, than of the less strongly unionized groups. On the other hand, the less strongly unionized groups were considerably more likely to report offsetting factors, particularly relatively high productivity of white-collar workers, than the more strongly unionized groups.

Excluding the government establishments, we find that nearly three-fifths of the reporting employers considered their white-collar wage rates to be higher than those of branches of their organizations in other areas, and over three-fifths of these, in turn, did not think there were any offsetting factors (Table 10-26). Nor was there much difference between manufacturing and nonmanufacturing establishments in this respect, although, to the extent that they did mention offsetting factors, manufacturing employers were more likely to mention higher productivity of blue-collar workers and lower transportation costs, whereas nonmanufacturing establishments were relatively likely to mention higher productivity of white-collar workers.

Concluding Remarks

Undoubtedly the most interesting of our findings on Bay Area wages are the indications that substantial wage differentials persist within the area, despite its high degree of unionization and the prevalence of relatively formal internal wage structures, particularly in the larger firms. Moreover, although our wage distributions displayed fairly pronounced central tendencies, wage dispersion might well have been increased somewhat had our sample included establishments with fewer than 100 employees.

Among the factors which we examined that might have influenced wage differentials, geographical location within the area appeared to yield the most significant results, although more research is needed before our findings can be regarded as firmly established. Furthermore, the geographical pattern of wage differentials varied for different types of workers. In the case of blue-collar workers, there was evidence that wage rates were highest in the Oakland-Berkeley area and lowest in the San Mateo-Santa Clara area.

Table 10 - 26

Estimated Relation of White-Collar Wage Rates in Bay Area
to Those of Branches of the Organization in Other Areas,
and Extent to Which High Wage Rates Are Offset by Other Factors,
for Private Manufacturing and Nonmanufacturing Industries --
Bay Area Employer Policy Survey, 1967

Wage relationship and offsetting factors	Total	Manu- facturing	Nonmanu- facturing
All establishments ^a			
Number	172	84	88
Per cent	100.0	100.0	100.0
Wage rates about the same	41.2	40.5	42.0
Wage rates lower	1.7	--	3.4
Wage rates higher	57.1	59.5	54.6
No offsetting factors	37.3	36.9	37.6
Offsetting factors ^b	18.1	20.2	15.9
Higher productivity	16.9	19.0	14.8
Blue-collar workers	7.0	13.1	1.1
White-collar workers	9.3	6.0	12.5
Service workers	1.2	--	2.3
Lower transportation costs	4.1	8.3	--
Proximity to markets	0.6	--	1.1
Higher quality product	0.6	1.2	--
Other lower cost factors	2.3	--	4.5
Information on offsetting factors not available	1.7	2.4	1.1

^aExcludes establishments with no branches of the organization in other areas and those for which information on relative wage rates was not available. There were no establishments which did not employ white-collar workers.

^bTotal percentages for specific offsetting factors exceed total shown in this row, since some establishments mentioned more than one offsetting factor.

As in the Rees-Shultz Chicago study, the highest blue-collar rates, in other words, tended to be found in the part of the area which had historically been the center of heavy industry and which, at least in the light of comments made by some of our respondents, was characterized by particularly strong local unions. It is possible that blue-collar wage rates tend to be as high, or perhaps even higher, in Contra Costa County than in the Oakland-Berkeley area, but we did not receive enough wage reports from the Contra Costa area to prove or disprove this proposition.⁶

On the basis of comparisons of lowest rates paid by establishments, clerical wages appeared to be relatively low in San Francisco and relatively high in Southern Alameda County, with the other areas represented in our tables occupying intermediate positions. On the basis of median rates paid by employers, however, San Francisco clerical wages were only slightly below the general average for the Bay Area as a whole. The impressions of some of our interviewees that clerical wages were higher in San Francisco than in some of the more outlying areas were not necessarily inconsistent with our data, since these interviewees were evidently thinking of the Peninsula or Marin County, rather than Southern Alameda County. In any case, it is apparent that the pattern of geographical differentials for white-collar workers within the Bay Area requires considerable further study.

In the case of service workers, there appeared to be a pattern of lower wage rates in areas with large minority group populations and higher rates in certain outlying areas, especially Southern Alameda County, with its white working-class residential pattern.

Interestingly, also, these patterns of wage differentials are largely consistent with the data in Section VI relating to geographical differences in the relative difficulties faced in recruiting various types of workers. Together, the patterns of geographical differences in wage rates and recruitment difficulties suggest that demand and supply factors, which in turn are related, to some degree, to differences in the relationships between industrial and residential characteristics of the various parts of the area played an important role in explaining wage differentials in the Bay Area. In addition, in the case of blue-collar workers, variations in the strength of unionism throughout the area played a role. Perhaps the most important implication of these findings is that wage differentials, as well as other factors, were probably somewhat influential in encouraging the location of industry on the Peninsula and in the San Jose area.

We also found some evidence that the relatively high wage rates in some of our establishments were at least partially explained by employer policies designed to maintain wages and salaries somewhat above those generally prevailing in the area, but there was no evidence that these tended consistently to be the large establishments. There were some indications, although not altogether clear cut, that the proportion of employers maintaining comparatively high wage rates tended to vary with degree of unionization of the major industry groups. On the other hand, there was no consistent pattern of wage differences between unionized and nonunionized establishments -- wages in the unionized establishments tended to be higher in some occupations and lower in others. These two findings, however, are not necessarily inconsistent.

Although Bay Area establishments typically must pay higher wage rates than branches of their organizations in other areas, this tended to be somewhat more true for blue-collar than for white-collar workers, with service workers occupying an intermediate position. In those industry groups in which strong national unions have negotiated uniform national wage rates, Bay Area establishments did not face this type of disadvantage in relation to branches of their organizations in other parts of the country, especially in the case of blue-collar workers. At the opposite extreme are industry groups such as retail trade which are less likely to be unionized in other parts of the country than in the Bay Area, but which also cater in large part to a local market and are thus less disadvantaged by high wage rates.

For the most part, employers facing higher wage rates than those paid by branches of their organizations in other areas did not consider their higher wages to be offset by other factors, such as higher productivity, although a minority of these employers did mention offsetting factors. Further analysis would be required to determine whether the employers mentioning offsetting factors were more likely to be those competing in a national or worldwide market. One would expect that such a relationship would prevail. The fact that offsetting factors were more likely to be mentioned by establishments in the machinery and aerospace industries than in other manufacturing industries is consistent with this interpretation. Certainly, the food processing establishments, which were especially likely to mention no offsetting factors and which -- except for fruit and vegetable canning -- were likely in large part to service a Bay Area or Northern California

market undoubtedly in practice offset their higher wage rates by higher prices for their products than those charged by branches of their organizations in many other parts of the country.

Finally, relatively high wage rates in the Bay Area may have hastened the process of technological change and the apparently related phenomenon of the buying up of locally owned single-unit establishments by larger regional or national organizations. Comparative interregional analysis of Census of Manufactures data, with particular reference to such factors as interregional differences in proportions of nonproduction workers within industries, might be of considerable interest in this connection.

Footnotes to Section X

1. Joint Wage and Salary Survey, Bay Area Salary Survey Committee (annual).

2. Other measures, e.g., the mean, might have been used but would have required considerably more time-consuming computations. Although our wage data would lend themselves to econometric analysis, this has not as yet been attempted.

3. Although we asked employers to report the starting rate for each occupation, as well as the actual rates being paid, there was no consistency in the manner in which the starting rate was reported. In some cases, the starting was below the lowest rate actually being paid. This was especially likely to be true in government agencies, which tend to have formal wage structures and which may not, at any given time, have any workers employed at Step I of a particular occupational class. In most cases, however, the starting rate reported by the employer was simply the lowest rate actually being paid. On the whole, therefore, we felt that the lowest rates being paid were more clearly comparable than the starting rates and did not include the latter in our statistical analysis.

4. Wage specialists in the Bay Area consider blue-collar wage rates in Contra Costa County to be relatively high.

5. Albert Rees, "Spatial Wage Differentials in the Large City Labor Market," Proceedings of the Twenty-first Annual Meeting of the Industrial Relations Research Association, 1968, pp. 237-247.

6. If more complete data were to indicate that wage rates were actually higher in Contra Costa County than in the Oakland-Berkeley area, there would be an even more interesting analogy with the results of the

Chicago study, for Rees and Shultz' finding that blue-collar wage rates tended to decline between the southwestern and northeastern parts of the Chicago area would be paralleled by a tendency in the Bay Area for blue-collar rates to decline between the northeastern and the southwestern portions of the area.

XI. TRAINING

In recent years the expansion of public manpower programs designed to stimulate both institutional and subsidized on-the-job training have, to some degree, altered the relative roles of traditional employer-sponsored training programs, as compared with programs sponsored, at least in part, by the federal government. Innovations and changes have been so continuous, however, that our data on training, gathered largely in 1967, were probably to some degree out of date by the time they had been processed. The principal reason for suspecting that this may be the case has been the development and expansion during the course of 1968 of the JOBS program, which involves a partnership between the federal government and the National Alliance of Businessmen. The JOBS program is designed to stimulate hiring the hard-core unemployed, but special training programs for those hired are often involved. In no other section of the report is there a comparable hazard that the situation may have changed appreciably since the interviews were conducted.

Nearly all the employers indicated that informal on-the-job training went on to a considerable extent in their companies. This type of training, in fact, was so ubiquitous that no meaningful variations by industry or size of firm would be likely to be identified. For this reason, no analysis of the informal programs will be included in this section, which will be confined to a discussion of formal programs.

Types of Formal Training

Employers were asked to indicate which, if any, of the following types

of formal training were provided by their establishments:

1. Vestibule training (training given before the worker assumes the full duties of his position);
2. Formal employer-supported on-the-job training;
3. On-the-job training funded under the federal Manpower Development and Training Act;
4. Other government-supported on-the-job training;
5. Apprenticeship programs;
6. Out-service training (training sponsored by the establishment but provided by other organizations).

Only about a fifth of the establishments offered no formal training, but, as other studies have invariably indicated, the proportion of employers providing no formal training was relatively high (about a third) in the smallest size group and tended to decline with increasing size (Table 11-1). Moreover, the tendency to provide a substantial number of types of training varied directly with number of employees. About two-thirds of the employers in our largest size class provided three or more types of training, whereas at the other end of the scale only 15 per cent of the smallest establishments offered three or more types. As in the case of the tables relating to types of technological change, moreover, the mere count of the number of types of training provided may well understate the contrasts between the smaller and larger establishments, since the larger establishments were likely to be involved in offering a number of training courses of a given type.

Type of organization made a difference in the smallest group of establishments, those with fewer than 250 employees. Among the single unit

Table 11 - 1

Number of Types of Formal Training Provided in Establishments,
by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of types of formal training	Total	Less than 250	250 to 499	500 to 999	1,000 to 1,999	2,000 and over
All establishments						
Number	309	130	73	50	28	28
Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Less than three types	71.9	85.4	72.7	70.0	53.6	32.1
No types	21.0	31.5	19.2	12.0	3.6	10.7
One type	27.9	32.4	31.6	24.0	21.4	14.3
Two types	23.0	21.5	21.9	34.0	28.6	7.1
Three or more types	28.1	14.6	27.3	30.0	46.4	67.9
Three types	22.7	13.8	20.5	26.0	32.1	50.0
Four types	4.5	0.8	6.8	4.0	7.1	14.3
Five types	0.6	--	--	--	3.6	3.6
Six types	0.3	--	--	--	3.6	--

establishments in this size group, 45 per cent provided no formal training, while only 6.5 per cent offered three or more types. In both the branch establishments and the headquarters establishments, however, the proportion offering no formal training was only about 24 per cent and the percentage offering three or more types of training amounted to about 17 per cent. In the larger size groups, there were no consistent differences among types of organizations in the relative extent of types of training provided. In interpreting the difference in the smallest size group, it must be kept in mind that branch units in this group were frequently parts of large national organizations, which were likely to emphasize the importance of training in all their branches, while headquarters units were in some cases the head offices of firms with outlets in other areas, and thus the establishment's Bay Area employment may have been considerably smaller than the firm's total employment.

There were, also, significant variations by major industry group in the prevalence of types of training -- not all, by any means, explained by differences in the size-of-establishment composition of the industry groups (Table 11-2). Virtually all the construction establishments, for example, provided at least one type of training, despite the prevalence of smaller establishments in this industry group, reflecting the likelihood that construction employers would have some apprenticeship training, even though it might be on a very modest scale. There were very few establishments, moreover, in finance, insurance, and real estate that did not make provision for some formal training for their employees, doubtless reflecting the need for specialized knowledge in this industry group, on which we commented in Section V. On the other hand, the proportion of establishments

Table 11 - 2
Number of Types of Formal Training Provided in Establishments, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Number of types of formal training	Total	Manufacturing			Transportation and utilities	Trade			Government
		Construction	Durable	Non-durable		Wholesale	Retail	Finance, insurance, and real estate services	
All establishments									
Number	309	26	57	62	27	13	33	25	30
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than three types	71.9	69.2	68.4	80.6	59.3	69.2*	69.7	80.0	59.9
No types	21.0	3.9	24.6	17.7	29.7	23.0*	27.3	8.0	13.3
One type	27.9	53.8	28.0	37.1	7.4	15.1*	24.2	20.0	13.3
Two types	23.0	11.5	15.8	25.8	22.2	30.8*	18.2	52.0	33.3
Three or more types	28.1	30.8	31.6	19.4	40.7	30.8*	30.3	20.0	40.1
Three types	22.7	30.8	22.8	19.4	29.6	30.8*	24.2	20.0	26.8
Four types	4.5	--	8.8	--	11.1	--	6.1	--	6.6
Five types	0.6	--	--	--	--	--	--	--	6.7
Six types	0.3	--	--	--	--	--	--	--	--

* Percentages based on fewer than 15 cases.

providing no formal training was well above average in services, suggesting, to some extent, the lack of need for specialized training in some of the service industries.¹

Out-Service Training

Among the various types of formal training, the type of program sponsored by the largest proportion of establishments was out-service training, in which employees enrolled in courses, most frequently in educational or training institutions in the community (Table 11-3). Well over half of our establishments reported programs of this type, and the proportion was particularly high in the larger establishments. Indeed, there was a consistent tendency for the percentage of establishments sponsoring such programs to rise with increasing size.

Such programs are in large part designed to encourage further training and upgrading for supervisory and certain other types of white-collar employees. For this reason, it is not surprising to find that the largest proportion of establishments reporting them was in finance, insurance, and real estate (Table 11-4). The proportion of employers providing such programs was also well above average in government, while it tended to be comparatively low in construction, retail trade, and services. Again, as in many other areas of employer policy, these differences were clearly influenced by differences in size of establishment within the various major industry groups, as well as by differences in the occupational characteristics of employees.

There is evidence that this method of providing training for supervisory

Table 11 - 3

Per Cent of Establishments Offering Selected Types
of Training, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of Employees	Total	Per cent offering training					
		Vestibule	MDTA	Apprenticeship			Out- service
				Total	Has current enrollees	No current enrollees	
All establishments	309	19.4	5.5	33.9	30.7	3.2	57.0
Less than 250	130	3.8	3.1	33.9	28.5	5.4	43.1
250 to 499	73	21.9	4.1	38.4	37.0	1.4	56.2
500 to 999	50	32.0	4.0	28.0	26.0	2.0	70.0
1,000 to 1,999	28	28.6	14.3	32.2	28.6	3.6	75.0
2,000 or more	28	53.6	14.3	35.7	35.7	---	82.1

Table 11 - 4

Per Cent of Establishments Offering Selected
Types of Training, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total	Per cent offering training				
		Vestibule	Total	Apprenticeship		Out- service
				Has current enrollees	No current enrollees	
All establishments	309	19.4	33.9	30.7	3.2	57.0
Mining and construction	26	----	92.3	84.6	7.7	34.6
Manufacturing						
Durable	57	15.8	43.9	43.9	---	57.9
Nondurable	62	12.9	35.5	33.9	1.6	58.1
Transportation and utilities	27	33.3	25.9	18.5	7.4	63.0
Trade						
Wholesale	13	23.1*	23.1	15.4*	7.7*	69.2*
Retail	33	30.3	45.4	42.4	3.0	36.4
Finance, insurance, and real estate	25	28.0	----	----	---	88.0
Services	36	13.9	16.6	8.3	8.3	44.4
Government	30	30.0	10.0	10.0	---	73.3

* Percentages based on fewer than 15 cases.

employees has increased considerably in relative importance since an earlier Institute survey of employer policies was conducted nearly 20 years ago, although caution must be observed in making comparisons because of differences in sample design between this earlier study and the present survey.² Undoubtedly, a number of factors underlie this trend: (1) greatly increased emphasis on the importance of supervisory training and executive development; (2) changes in the occupational structure, including the increase in the relative importance of nonproduction workers in manufacturing and in the employment of specialized types of white-collar and professional employees in a number of the major industry groups; and (3) expansion in the number and resources of institutions and agencies offering adult education courses.

Our data on the types of courses in which out-service trainees were enrolled tend to provide clear evidence that such programs are designed in large part for supervisory and other groups of white-collar employees (Table 11-5). Out-ranking all others in relative importance, by a considerable margin, were courses in job or profession-related subjects, followed by management training and related courses and by various specialized courses designed for particular groups of white-collar workers. Only a few establishments, relatively, reported courses providing skilled manual or technical training, on the one hand, or training for clerical workers, on the other.

One of the concerns of management that came out clearly in some of our interviews was ensuring that certain highly specialized types of employees, e.g., engineers, kept up with the latest developments in their fields. Some of the out-service courses were especially designed for this

Table 11 - 5

Types of Courses in Which Establishment's
Out-Service Trainees Were Enrolled,
Ranked by Percentage of the 309 Establishments
Mentioning Them --
Bay Area Employer Policy Survey, 1967

Type of course	Per cent ^a
Job or profession-related subjects	31.7
Management or foreman training; executive development; human relations	9.7
Science or engineering subjects	6.8
Electronic data processing	4.9
Insurance, real estate, or investments	3.9
Study toward a degree	3.9
Skilled trades or technical training	3.9
Subjects considered helpful in improving job performance or upgrading employees	3.6
Business administration	2.6
Salesmanship	2.3
Accounting or taxation	1.9
Clerical	1.6
New processes or techniques -- other than EDP	1.3
Medical or health subjects	1.0
Safety training	0.6
Other	0.6

^aSome establishments gave more than one response; percentages have been computed on the basis of the total number of establishments mentioning a given type of course divided by the total number of all establishments.

purpose, as were certain training programs provided by the establishments themselves.

In view of the types of training sought and provided in this manner, it is not surprising to find that institutions of higher education of various types played a leading role in providing the courses in which employees of our respondents were enrolled (Table 11-6). Also rather frequently reported, and particularly common in relation to computer techniques, were specialized training programs conducted by other establishments, while, in some cases, though a much smaller proportion of the total, employees were enrolled in special training programs conducted by other units of the organization. In addition, associations of various kinds -- industry or professional associations and management associations -- were mentioned with considerable frequency by our respondents as providing courses in which employees were enrolled. It will be recalled that about a fourth of the establishments belonging to employer associations concerned with industrial relations indicated that the association conducted or coordinated training activities (Section V).

The prevailing practice in connection with these out-service courses was for the employer to pay the full costs, including tuition, incidental expenses such as transportation costs, and the employee's regular compensation if the course was attended during working hours (data not shown). More than two-fifths of the establishments sponsoring such training paid the full costs without any qualification, while about a fourth paid the full costs on certain conditions -- that the employee completed the course satisfactorily, or that the employee attended at management's request, or that the course was one for which management had agreed to pay the full costs.

Table 11 - 6

Types of Organizations Providing Courses in Which
Establishment's Out-Service Trainees Were
Enrolled, Ranked by Percentage of the 309
Establishments Mentioning Them --
Bay Area Employer Policy Survey, 1967

Type of organization	Per cent ^a
Universities and colleges -- liberal arts or sciences	17.5
Other establishments with specialized training programs	12.3
Industry or professional associations	12.0
Schools and colleges -- types not specified	9.1
Junior colleges	3.9
Business or technical colleges	3.9
Management associations	3.9
Correspondence schools and private institutes	3.2
Other units of own organization conducting special training programs	2.9
Trade schools	2.6
Adult education courses -- public school systems	1.6

^aSome establishments gave more than one response; percentages have been computed on the basis of the total number of establishments mentioning a given type of organization divided by the total number of all establishments.

Less prevalent was the practice, found in about 14 per cent of the establishments, of paying the full tuition, with or without qualification, rather than the full costs. Finally, about 19 per cent of the employers sponsoring such training paid a portion of the costs, but there was considerable variation in the specific proportions paid.

Formal On-the-Job Training

Although formal on-the-job training programs (other than vestibule training) were reported less frequently than out-service training programs, they were found in 46.3 per cent of all the establishments (data not shown). Three types of programs -- training for entry workers, refresher training, and training for upgrading -- accounted for virtually all of the on-the-job training programs reported. A good many of the companies offered more than one of these types of training, with courses designed for upgrading accounting for a considerably larger proportion of all the courses than either programs for entry workers or refresher training (Table 11-7). Variations by major industry group in the relative importance of the three types of training were not pronounced, although refresher courses accounted for more than the average proportion in service industries, and courses designed for upgrading played a particularly important relative role in nondurable goods manufacturing. The latter finding is, in all probability, related to the evidence, discussed in Section IV, of a great deal of technological change in the nondurable goods sector. Refresher courses also tended to be relatively more important in the smallest size group of establishments in our sample -- those with less than 250 employees -- than in the larger establishments (data not shown).

Table 11 - 7

Types of Formal On-the-Job Training Other
Than Vestibule Training,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Entry workers	Re- fresher	Up- grading	Other
	Number	Per cent				
All responses ^a	254	100.0	28.7	30.3	40.2	0.8
Mining and construction	12	100.0	41.7*	25.0*	33.3*	---
Manufacturing						
Durable	35	100.0	34.3	25.7	40.0	---
Nondurable	37	100.0	24.3	21.6	54.1	---
Transportation and utilities	31	100.0	29.0	29.0	38.7	3.2
Trade	33	100.0	27.3	36.4	36.3	---
Finance, insurance, and real estate	30	100.0	20.0	36.7	40.0	3.3
Services	27	100.0	29.6	40.7	29.6	---
Government	49	100.0	30.6	28.6	40.8	---

* Percentages based on fewer than 15 cases.

^a Total responses of the 143 establishments that had formal on-the-job training programs, excluding a few that did not provide information on types of training.

While out-service training programs were clearly utilized primarily for supervisory employees and certain other groups of white-collar workers, formal on-the-job training programs were provided for both white-collar and blue-collar workers, depending on the needs of the establishment.

In view of the fact that the labor market was relatively tight for many types of workers at the time of our survey, it seems likely that the proportion of employers offering formal on-the-job training was higher than under the looser labor market conditions prevailing a few years earlier. On the other hand, we found no clearcut relationship between the prevalence of on-the-job training and the change in the volume of employment in the establishment from 1960 to 1967. In fact, a relatively large proportion of establishments providing formal on-the-job training (57 per cent) was found among the group reporting a decrease in employment. In view of the evidence in Sections II and IV that a decrease in employment was likely to be explained by technological change in a good many instances, this finding is not especially surprising. As we found in Section IV, a very substantial proportion of employers experiencing technological change found it necessary to provide special on-the-job training for employees whose job requirements were shifting, even though training was frequently needed only for a very short period. However, among the employers experiencing substantial increases in employment in the 1960-1967 period, the proportion with formal on-the-job training was also slightly above average (49 per cent), whereas such training was somewhat less prevalent among establishments that had experienced only slight increases or relatively stable employment.

Moreover, there was a very clear relationship between occupational

change within the establishment and the prevalence of formal on-the-job training. Among the employers that reported changes in the occupational distribution of their employment in the 1960-1967 period, 61 per cent indicated that they provided formal on-the-job training, as compared with only 40 per cent of the employers that had not experienced changes in the occupational composition of their work forces.

In view of these relationships and the evidence in Section IV that employer-sponsored training associated with technological change was predominantly of short duration, it would appear that our findings with respect to the prevalence of on-the-job training were probably influenced, not only by the state of the labor market at the time of the survey, but also by the fact that some employers were temporarily involved in providing short on-the-job training programs as a means of adjustment to technological change.

Apprenticeship Training

Next to out-service and on-the-job training, in relative frequency with which it was reported, was apprenticeship training -- found in roughly a third of our establishments (Table 11-3). Although there was no consistent relationship between size of firm and the presence of apprenticeship programs in the establishments, major industry group variations were pronounced (Table 11-4).³ Construction led the field, with more than 90 per cent of

the establishments reporting apprenticeship programs. Retail trade and durable goods manufacturing also included relatively large proportions of respondents reporting apprenticeship programs -- in the neighborhood of 45 per cent in each of these industry groups.⁴ Relatively small proportions of employers had apprenticeship programs in services and government, while there were none at all in the finance group, with its predominantly white-collar work force.

These patterns of variation by major industry group were, of course, related to the fact that in the Bay Area -- as throughout the country -- apprenticeship programs are largely confined to the building trades and the metal trades (Tables 11-8 and 11-9). The only other trades in which any appreciable proportion of establishments reported apprenticeship programs were meat cutters -- partially helping to explain the relatively large proportion of retail trade establishments involved in apprenticeship programs -- and the printing trades.

As Table 11-9 clearly indicates, the number of apprentices in any given establishment tended to be very small, even though our sample included only establishments with 100 or more employees. Approximately 65 per cent of the employers with apprenticeship programs reported fewer than four apprentices, while only about 15 per cent reported ten or more. There was a tendency, however, for the companies with apprentices in the metal trades to have them in slightly larger numbers than in the building trades. This was doubtless related to the comparatively greater prevalence of larger establishments in our sample of durable goods manufacturing firms than in construction.

Probably the most interesting aspect of the information we obtained

Table 11 - 8

Apprenticeable Trades Ranked by Percentage
of the 309 Establishments in Which They
Were Represented --
Bay Area Employer Policy Survey, 1967

Trade	Per cent ^a
Machinist	8.7
Pressmen and related printing crafts	3.2
Tool and die maker, die caster, and pattern makers	2.6
Meat cutter	2.6
Auto mechanic	2.3
Carpenter	1.9
Operating engineer	1.9
Electrician	1.6
Stationary engineer	1.6
Ornamental ironworker	1.0
Molder and coremaker	1.0
Pipefitter	1.0
Other	6.5

^aSome establishments gave more than one response; percentages have been computed on the basis of the total number of establishments mentioning a given trade divided by the total number of all establishments.

Table 11 - 9

Number of Apprentices in Establishments,
by Trade --
Day Area Employer Policy Survey, 1967

Trade	Total		None at present	1	2 to 3	4 to 5	6 to 9	10 or more
	Number	Per cent						
All responses ^a	96	100.0	2.1	30.2	32.3	14.6	6.2	14.6
Metal trades	41	100.0	4.9	26.8	31.7	14.6	9.8	12.2
Machinists	25	100.0	4.0	16.0	36.0	20.0	8.0	16.0
Other	16	100.0	6.3	43.8	25.0	6.3	12.5	6.3
Building trades	18	100.0	---	38.9	38.9	16.7	5.6	----
All other	37	100.0	---	29.7	29.7	13.5	2.7	24.3

^aTotal is based on responses of 73 establishments that provided information on the number of apprentices in the first trade mentioned and 23 that provided information on the second trade mentioned. This means that, of 105 establishments reporting that they had apprenticeship programs, 32 did not provide information on number of apprentices in any trade.

on apprenticeship programs related to reasons for not having them, reported by 105 establishments that included apprenticeable trades in their work forces but had no apprentices (Table 11-10). The most frequently reported reason was that there were not enough journeymen in the relevant trades to warrant the employment of apprentices. Quite apart from regulations limiting the ratio of apprentices to journeymen, slow turnover of journeymen would in some cases tend to limit the need for apprentices. One of the government agencies in our sample, for example, employs a small number of electricians, who represent a very small proportion of the agency's total work force. In such a situation, apprenticeship training does not seem particularly feasible.

Other commonly reported reasons for not having apprenticeship programs, in order of relative importance, were lack of sufficient need, the prevalence of formal or informal employer-sponsored training programs which evidently were considered to provide training more or less equivalent to apprenticeship training, and the fact that total employment in the establishment was too limited or too unstable to justify an apprenticeship program. Finally, there were small percentages of these respondents who cited union seniority provisions which precluded the employment of apprentices in their cases, union lack of interest in apprenticeship programs, and other factors.

In view of the vigorous efforts that have been made by civil rights groups in the Bay Area to "open doors" to apprenticeship training for members of minority groups, it may be that, here again, developments since our

Table 11 - 10

Reasons for Not Having Apprenticeship Program,
for Establishments Lacking Program but in
Which Work Force Includes
Apprenticeable Trades --
Bay Area Employer Policy Survey, 1967

Reasons	Per cent
All establishments with apprenticeable trades in work force but no program ^a	
Number	105
Per cent	100.0
Not enough journeymen employed in relevant trades to warrant employment of apprentices	38.1
Not a sufficient need or not practicable	15.2
Training conducted on an informal basis within establishment	9.5
Establishment has own formal training program	7.6
Employment too limited or too unstable	7.6
Costs of program prohibitive	5.7
Union seniority restrictions governing selection of apprentices	4.8
Union's lack of interest	4.8
Licensing and/or certification requirements other than normal accreditation through apprenticeship program	3.8
Other	2.9

^aTotal excludes 173 establishments with no apprenticeable trades and 31 not providing information on reason.

interviews were completed may have altered the picture somewhat, though perhaps particularly in small construction firms with fewer than 100 employees, not included in our sample. These efforts have been directed especially, and with a certain amount of success, toward persuading public employers in the area to inaugurate vigorous "affirmative action" programs in the awarding of construction contracts to private contractors. Such policies often cannot be implemented very effectively unless the contractor can employ minority group apprentices in some of the trades, e.g., operating engineers, in which there are almost no minority group journeymen. Thus, one well-known development in the Bay Area has been a special pre-apprenticeship training program for operating engineers.

Vestibule Training

Vestibule training (provided before the worker assumes his full job duties) was considerably less common in the establishments in our sample than the types of training thus far discussed, but about a fifth of our employers did provide this type of training, and there was a decided tendency for its relative prevalence to vary directly with the size of the establishment. Moreover, since vestibule training tends to be provided especially for newly hired white-collar workers, variations by major industry group in the relative frequency with which it was reported tended to be related to differences in the extent to which white-collar workers were employed in the various major industry groups (Table 11-4).

MDTA On-the-Job Training

Least prevalent of all the types of formal training about which we inquired was MDTA on-the-job training, reported by only about 5 per cent of the establishments. Although the Department of Labor was, by 1967, placing considerably greater emphasis on encouraging subsidized on-the-job training than had been true in the first few years of operation of the Manpower Development and Training Act, many obstacles were encountered in inducing employers to participate, including the reluctance of many employers to become involved in the complex "red tape" associated with the program.⁵ Moreover, consistent with one's impressions, our data indicated that MDTA training programs were considerably more likely to be found in the relatively large establishments.

Although we asked a series of questions about the impact of MDTA-OJT programs on recruitment, selection, promotion, etc., the number of establishments involved in such programs was so small that responses to these questions could not be regarded as significant and are not reported.

We also asked about involvement in other government-sponsored training programs and found, again, only very limited participation, confined to approximately 3 per cent of the employers.

Protection of the Investment in Training

In recent years, there has been a good deal of economic analysis of the costs and benefits involved in employer-sponsored training, with considerable emphasis on the fact that the more specialized the training -- or, more accurately, the more specifically it is related to the technology or business practices of a particular firm -- the greater the

likelihood that the employer will enjoy a return on his investment in training. As Becker has put it,

Completely general training increases the marginal productivity of trainees by exactly the same amount in the firms providing the training and in other firms. Training that increases productivity more in firms providing it will be called specific training. Completely specific training can be defined as training that has no effect on the productivity of trainees that would be useful in other firms. Much on-the-job training is neither completely specific nor completely general but increases productivity more in the firms providing it and falls within the definition of specific training.⁶

Thus, we were interested in determining to what extent firms experienced losses of trained personnel and what steps, if any, were taken to prevent such losses. Our question related, it should be noted, to losses of personnel that had been trained at considerable cost to the company. About a fifth of the establishments indicated that they had experienced significant losses of such trained personnel, but there was a decided tendency for such losses to be reported with greater relative frequency by the larger employers than by the smaller establishments (Table 11-11). They were also reported with relative frequency by employers in finance, insurance, and real estate and in transportation and utilities, but with relative infrequency by establishments in nondurable goods manufacturing and not at all by construction companies (Table 11-12).

Major industry group variations were clearly related to size-of-firm variations to some degree. It will be recalled that the finance group and transportation and utilities tended to include larger establishments than many of the other major industry groups. However, one suspects that the data do not reflect so much a tendency for the larger firms to be particularly vulnerable to losses of expensively trained personnel as a tendency

Table 11 - 11

Per Cent of Establishments That Have Experienced a Significant
Loss of Trained Personnel and Per Cent That Have Taken Steps
to Safeguard Training Investment,
by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total	Per cent that have	
		Experienced significant loss of trained personnel	Taken steps to safeguard training investment
All establishments ^a	309	20.7	30.4
Less than 250	130	13.1	23.1
250 to 499	73	20.5	30.1
500 to 999	50	24.0	34.0
1,000 to 1,999	28	32.1	46.4
2,000 or more	28	39.3	42.9

^aA few establishments did not provide information in response to these two questions, but percentages are based on total number of establishments in each size group.

Table 11 - 12

Per Cent of Establishments That Have Experienced a
Significant Loss of Trained Personnel and Per Cent
That Have Taken Steps to Safeguard
Training Investment, by Major Industry Group --
Bay Area Employee Policy Survey, 1967

Major industry group	Total	Per cent that have	
		Experienced significant loss of trained personnel	Taken steps to safeguard training investment
All establishments ^a	309	20.7	30.4
Mining and construction	26	----	7.7
Manufacturing			
Durable	57	17.5	29.8
Nondurable	62	12.9	38.7
Transportation and utilities	27	33.3	33.3
Trade			
Wholesale	13	23.1*	30.8*
Retail	33	18.2	33.3
Finance, insurance and real estate	25	40.0	40.0
Services	36	27.8	19.4
Government	30	26.7	33.3

* Percentages based on fewer than 15 cases.

^a A few establishments did not provide information in response to these two questions, but percentages are based on total number of establishments in each major industry group.

for the larger firms to be much more likely to have costly training programs. Certainly, our data on training programs of various types, with the single exception of apprenticeship programs, indicate a pronounced positive relationship between size of firm and the prevalence of such programs. In other words, the question was undoubtedly less relevant for the smaller companies than for the larger establishments.

Interestingly, the proportion of establishments that indicated they had taken steps to safeguard their training investment tended to exceed the proportion that reported the experience of having lost expensively trained personnel. Moreover, this relationship prevailed throughout the size-of-firm groups, but was somewhat less consistent among the major industry groups. For example, in services industries, relatively more establishments reported losses of trained personnel than a policy of having taken steps to prevent them. On the other hand, in nondurable goods manufacturing, the proportion reporting having taken steps to safeguard their training investment exceeded by a particularly wide margin the comparatively small percentage reporting losses of trained personnel.

These relationships suggest another factor that undoubtedly helps to explain variations in losses of trained personnel by major industry group, i.e., the extent to which substantial increases in employment were being experienced. Firms that are experiencing rapid increases of employment are likely to have work forces composed to a relatively large extent of comparatively young, short-service employees, who tend to have high mobility rates and are particularly prone to quit. On the other hand, companies whose employment is relatively stagnant or declining are likely to have relatively large proportions of older, long-service, stable employees.

Among the establishments represented in our sample, the nondurable goods manufacturing firms were least likely to report substantial increases in employment in the 1960-1967 period and most likely to report decreases (Table 2-2). Respondents in transportation and utilities, on the other hand, were especially likely to report substantial increases in employment, while the proportions of employers reporting substantial increases were well above average in the finance group, services, and government.

To a very considerable extent, the types of steps taken to safeguard their training investments, as reported by our respondents, were simply good personnel policies. Thus, the responses to this question tended to be similar to those relating to efforts to reduce voluntary quits (Section IX) -- they did not, for the most part, represent policies specifically designed to reduce quits or to retain trained personnel, but rather types of personnel policies that are broadly aimed at aiding both recruitment and retention. In connection with steps taken to safeguard training investment, however, there were several types of responses that were more specifically related to the particular problem concerned. The most frequently reported type of step -- albeit even in this case mentioned by a fairly small percentage of all establishments in the sample -- was confining the training given, where possible, to the establishment's own specialized requirements. In other words, it would appear that some employers were well aware that employees who had received specialized training might be less likely to leave, since their training would not be valuable to other firms (Table 11-13).

In a few instances, representing only 2.6 per cent of our total sample, and primarily in federal government agencies, respondents indicated

Table 11 - 13
Per Cent of Establishments Taking Various
Types of Steps to Safeguard
Training Investment --
Bay Area Employer Policy Survey, 1967

Types of steps	Per cent ^a
Per cent of all establishments taking any steps to safeguard training investment	30.4
Confines the training given, where possible, to the establishment's own specialized requirements	8.7
Provides opportunities for advancement; attempts to provide attractive job opportunities	5.8
Good screening practices	4.2
Maintains good personnel relations	3.2
General policies to promote job security	2.9
Policy of providing good or superior wage rates and/or fringe benefits	2.9
Asks the employer to sign an agreement limiting his freedom to terminate employment after receiving training	2.6
Maintains good working conditions	2.3
Other	2.6

^aIn a few cases, respondents reported more than one type of step to safeguard training investment; the percentages have been computed by dividing the total number of establishments reporting any given type of step by the total number of establishments in the sample.

that trainees were asked to sign an agreement limiting their freedom to leave the establishment after completion of training. The purpose of such restrictions is to save the taxpayers money, but they tend to be waived, for example, in cases of transfer to another federal government agency. The virtually complete absence of the practice in private employment is not surprising, in view of the general recognition of the fact that limiting the freedom of an employee to quit is not a desirable personnel practice.

Involvement in Community Efforts

To what extent do these larger Bay Area employers become involved in community efforts to improve basic and vocational education programs in the community? Responses to our question relating to such efforts suggested that they were substantially involved. Nearly half of the respondents indicated that representatives of the establishment had worked with local school officials to improve basic or vocational education programs, while about a third reported having worked with civil rights groups (Table 11-14). Roughly a quarter had had relationships with state vocational education officials, and about the same proportion indicated that representatives of the establishment had worked with occupational or industrial advisory committees. Less common were responses indicating relationships with local manpower advisory committees -- only about an eighth of the establishments indicated that representatives had worked with such committees. This is not surprising, since the committees that have been formed to advise on manpower programs have generally been organized on a county-wide basis, with tripartite representation of employers, labor organizations, and the general public. As a result, the number of employer representatives on

Table 11 - 14

Groups With Which Representatives of Establishment Have Work to Improve
Community's Basic and Vocational Education Programs,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

	Total	Per cent working with				
		Officers of local school districts	State vocational education officials	Occupational or industrial advisory committees	Local manpower advisory committees	Local civil rights groups
All establishments ^a	309	46.0	25.2	26.9	12.9	34.3
Mining and construction	26	26.9	15.4	26.9	----	15.4
Manufacturing						
Durable	57	52.6	28.1	36.8	12.3	31.6
Nondurable	62	41.9	21.0	27.4	12.9	25.8
Transportation and utilities	27	33.3	22.2	22.2	25.9	44.4
Trade	46	41.3	19.5	10.9	4.3	37.0
Finance, insurance, and real estate	25	52.0	20.0	28.0	12.0	40.0
Services	36	50.0	19.4	19.4	19.4	41.7
Government	30	66.7	60.0	43.3	20.0	46.7

^aA few establishments did not provide information on groups with which they worked, but percentages are based on total number of establishments in each major industry group.

such committees in any given county tends to be quite small.

Among the various major industry groups, government agencies were most likely to report involvement with community groups of all types. This is scarcely surprising, since federal, state, and local government agencies (including local school districts) tend to have policies encouraging such participation. Variations among other major industry groups did not follow a uniform pattern with respect to involvement with the various types of community agencies. The construction establishments, for example, were comparatively unlikely to be involved with most of the community agencies, although the proportion indicating that representatives had worked with occupational or industrial advisory committees was identical with that for all establishments. This probably largely reflects representation of construction employers on joint apprenticeship boards. On the other hand, the relative absence of involvement of construction establishments with other community groups is probably explained by the prevalence of hiring through unions, as well, perhaps, as by the comparatively small size of most of the construction firms in the sample. Particularly in connection with involvement with civil rights groups, there appeared to be some tendency for major industry groups that included relatively high proportions of larger firms to indicate such involvement. In part this probably reflects the greater sense of community responsibility frequently displayed by larger firms, but it is also true that there has been a tendency for civil rights groups in the Bay Area to exert strong pressure on some of the very large firms.

Interestingly, there was no clear tendency for the establishments in the central city areas to report involvement with civil rights groups in larger proportion than those in outlying areas (Table 11-15). Employers in

Table 11 - 15

Whether Establishment Has Worked With Local Civil Rights Groups
to Improve Basic and Vocational Education,
by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Main address	Total		Yes	No	Information not available
	Number	Per cent			
All establishments	309	100.0	34.3	63.4	2.3
San Francisco County	112	100.0	40.2	58.0	1.8
Oakland-Berkeley Area	63	100.0	34.9	61.9	3.2
Southern Alameda County	38	100.0	23.7	76.3	--
San Mateo County	43	100.0	37.2	58.1	4.7
Santa Clara County	25	100.0	40.0	60.0	--
Contra Costa and Marin counties	28	100.0	14.3	82.1	3.6

both San Mateo and Santa Clara counties were relatively likely to report that they had worked with civil rights groups, as were those in San Francisco. On the other hand, this type of response was relatively infrequent in Southern Alameda County, which, as we have seen includes practically no Negro residents and only scattered pockets of Mexican Americans, while it was especially infrequent in the Contra Costa-Marín area.

Although the establishments in our sample indicated a substantial degree of involvement with community agencies, they did not tend to display much satisfaction with the results of such involvement (Table 11-16). About a fifth, for example, indicated that their relationships with local school officials had helped in recruitment, while about a tenth indicated that such contacts aided the firm's public relations, but the proportions reporting that this type of contact had affected curricula or resulted in the introduction of new courses were small indeed. And a number of the comments that were volunteered in responding to this line of questioning indicated considerable dissatisfaction with the willingness of local school districts to improve vocational education. Dissatisfaction was also expressed in some instances with the qualifications of high school graduates. Lack of ability to read or to perform simple arithmetical computations was mentioned in some instances, while there were also critical comments about the attitudes of some of the high school graduates toward work.

The pattern of responses relating to the results of involvement with other community groups tended to be quite similar. For example, about 15 per cent indicated that involvement with local civil rights groups had been of assistance in recruiting, while about 8 per cent felt that this

Table 11 - 16

Per Cent of the 309 Establishments Mentioning Types of Benefits Derived
From Working With Selected Community Groups --
Day Area Employer Policy Survey, 1967

Types of benefits ^a	Group involved					
	Local school officials	State vocational education officials	Occupational or industrial committees	Local manpower advisory committees	Local civil rights groups	Universities or colleges
Helped in recruitment; better qualified recruits	19.1	9.4	6.8	5.8	14.9	2.9
Resulted in new courses in junior colleges or high schools	3.2	1.3	2.3	0.3	0.3	---
Curricula affected or quality of courses improved	5.2	2.3	3.6	0.3	0.6	0.6
Good public relations and related benefits	10.0	6.5	8.7	4.5	8.4	1.3
Informed schools about needs of establishment	2.3	1.3	0.6	----	---	0.3
Improved liaison; mutual understanding	1.9	1.3	1.9	0.3	1.3	---
Skills of employees upgraded	1.6	1.0	1.3	---	0.3	---
Increased number of minority group employees hired	0.3	---	---	---	1.0	---
Other	2.0	0.6	0.6	---	0.3	---

^aSome establishments gave more than one response; percentages have been computed on the basis of the total number of establishments mentioning a given type of benefit divided by the total number of all establishments.

type of relationship aided the firm's public relations, but other favorable results were rarely reported.

Employment of Graduates of Federal Government Training Programs

By the time our interviews were being conducted, the Manpower Development and Training Act had been in effect for approximately five years and the Economic Opportunity Act for about three years. Thus, there was a reasonable degree of probability that a good many establishments in our sample had hired persons who had completed an MDTA training program, or a Job Corps or Neighborhood Youth Corps program sponsored by the Office of Economic Opportunity. It should be noted that NYC is not strictly a training program but is designed to provide work experience and stable work habits which will improve the employability of the youngsters enrolled.

In fact, it turned out that the proportion of establishments that had hired graduates of such programs -- or persons who were continuing their training in one of these programs -- was quite small. Only about 15 per cent had hired MDTA graduates, 11 per cent Job Corps graduates, and about 7 per cent NYC graduates (Table 11-17). Moreover, hiring of these persons had been in considerable measure confined to the larger firms. There was a decided positive relationship between the size of the establishment and the likelihood that it had hired graduates of these programs. There are probably several reasons for this relationship, which has been generally known to persons administering the programs, but which is confirmed rather dramatically by our results. In the first place, the larger establishments were probably more likely to have been contacted by manpower officials concerned with inducing employers to hire graduates of MDTA and

Table 11 - 17

Per Cent of Establishments That Have Hired Applicants Who
Have Had^a MDTA, Job Corps, or NYC Training, by
Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total	Per cent that have hired applicants		
		MDTA	Job corps	NYC
All establishments ^b	309	15.2	11.0	6.8
Less than 250	130	1.5	3.8	3.8
250 to 499	73	16.4	9.6	4.1
500 to 999	50	20.0	10.0	6.0
1,000 to 1,999	28	42.9	21.4	17.9
2,000 or more	28	39.3	39.3	17.9

^aThe question related to applicants who had completed or who were continuing their training in the specified program.

^bA few establishments did not provide information on whether applicants had been hired from a given group, but percentages are based on total number of establishments in each size group.

other programs. Secondly, as suggested in other connections, very large employers are particularly likely to have a sense of community responsibility. Thirdly, the largest firms are likely to be quite conspicuous in their communities and to attach a good deal of importance to the public relations aspects of their policies. This tends to result in relatively positive attitudes toward cooperating with government programs.

Our recruitment data (Section VI) suggest another possible reason for this relationship which is probably of considerable significance in the Bay Area. We found that smaller establishments were somewhat more likely to be unionized and to be required to hire through unions. We also found that smaller establishments were relatively likely to turn to private employment agencies for their white-collar workers, whereas there was a tendency for the proportion of employers reporting "use" of the California Department of Employment to vary directly with size of firm. Thus, the larger employers were more likely to have been exposed to special efforts of the public employment service to place graduates of these government training and work experience programs.

Major industry group variations in the extent to which establishments had hired graduates of these programs were interrelated with size-of-firm variations, but there were also other factors at work (Table 11-18). In the early years of MDTA in California, but to a somewhat lesser extent in the last few years, representatives of blue-collar unions tended to take the position that there was a considerable amount of unemployment in their crafts and to oppose proposals for MDTA training in blue-collar occupations. The results are suggested in the complete absence of establishments that had hired MDTA graduates in construction, as well as the relatively small

Table 11 - 18

Per Cent of Establishments That Have Hired Applicants
Who Have Had^a MDTA, Job Corps,
or NYC Training, by
Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total	Per cent that have hired applicants		
		MDTA	Job corps	NYC
All establishments ^b	309	15.2	11.0	6.8
Mining and construction	26	----	3.8	3.8
Manufacturing				
Durable	57	12.3	12.3	7.0
Nondurable	62	6.5	8.1	3.2
Transportation and utilities	27	22.2	7.4	3.7
Trade				
Wholesale	13	7.7*	7.7*	7.7*
Retail	33	15.2	12.1	---
Finance, insurance and real estate	25	20.0	8.0	8.0
Services	36	30.6	16.7	2.8
Government	30	26.7	20.0	30.0

* Percentages based on fewer than 15 cases.

^aThe question related to applicants who had completed or who were continuing their training in the specified program.

^bA few establishments did not provide information on whether applicants had been hired from a given group, but percentages are based on total number of establishments in each major industry group.

proportion in nondurable goods manufacturing and wholesale trade. In fact, there was some justification for this attitude. Not only has the California unemployment rate been above the national rate throughout the period since 1960, but our data on employment changes also indicate that the proportion of establishments reporting substantial increases in employment was particularly small in nondurable goods manufacturing and comparatively small in construction (Section II).

On the other hand, employment in clerical, sales, and service occupations was expanding rapidly, and there was a decided tendency for MDTA training to be offered in such occupations. This tendency is reflected in the relatively large proportion of establishments that had hired MDTA graduates in services industries and in government.

Most of the employers that had hired job applicants who had had MDTA or the other types of government-sponsored training indicated that the number hired had been from one to five. However, some of the establishments -- probably large companies -- had hired up to ten or more.

Reflecting not only the labor market situation in the Bay Area but also union opposition to MDTA training in the skilled crafts, nearly half of the responses relating to the occupational characteristics of persons with these types of training that had been hired indicated clerical occupations -- typists, stenographers, clerks, etc., while nearly a fourth referred to service occupations, such as custodians, nurses aides, and groundsmen. Among the blue-collar occupations, semi-skilled and unskilled types of work were mentioned more frequently than skilled occupations, which figured in only a very small percentage of the responses. Although

the situation has changed somewhat in California in the last few years, not only was relatively little government-sponsored training offered in blue-collar occupations, but the proportion of women in MDTA training programs was higher than in the nation in the early years of MDTA.

In response to other questions relating to the experience of employers who had hired job applicants with government-sponsored training, about four-fifths of the relevant respondents indicated that they would not have hired these persons without such training, while about three-fourths reported that they had not found it necessary to provide special training or counselling for this group of employees. In interpreting these responses, the occupational characteristics of the persons hired, indicating a preponderance of female clerical employees, must be kept in mind. More recent programs aimed particularly at reaching the hard-core unemployed, such as the NAB program, have quite evidently called for more in the way of special counselling services.

Concluding Remarks

Most studies of employer training policies have been concerned with particular types of training, such as apprenticeship or formal on-the-job training, and have shed relatively little light on the broad spectrum of employer-sponsored training policies or the relative importance of different types of programs.

The indication that larger establishments were more likely to be involved in providing varied types of training than smaller establishments was to be expected on the basis of previous studies. The chief explanation for this difference is, of course, quite clear. Because many types

of formal training require a certain amount of relatively fixed overhead expense, larger companies are in a better position to achieve economies of scale by spreading this overhead over more trainees. Less familiar, but not unexpected, is our finding that, among the smaller establishments, single unit employers were more likely to have no training programs than branch or headquarters units.

Also of considerable interest is our finding that out-service training was by far the most prevalent type of formal training sponsored by our establishments. Here, again, we find evidence -- as in the use of temporary staff agencies or private employment agencies -- of a tendency to utilize specialized services outside the firm when there are economies in such a procedure. In all these cases, the economies take the form of sharing expenses for these specialized services, the need for which may fluctuate greatly, with other firms -- expenses which would otherwise have to be met, at least in part, by expanding the establishment's own personnel department (or establishing a personnel department where none had existed). In view of the direction of occupational changes and the fact that out-service training is used chiefly for specialized white-collar personnel, it may be anticipated that out-service training will assume increasing relative importance in the future.

Another significant finding -- reached by deductive reasoning from some of our data rather than by direct evidence -- is that the training needs of the establishment are likely to fluctuate, not only with the state of the labor market, but also with the extent to which the establishment may be involved at any given time in installing new equipment or procedures which require retraining of existing personnel. Where employment

fluctuates irregularly, moreover, because of, e.g., changes in defense contracts, the training needs of the establishment may vary substantially over time. Whether and to what extent it is in such situations that employers turn to employer associations or other organizations to provide specialized training services is not clear from our data, but evidently there would be advantages in turning to outside establishments for specialized training services to meet fluctuating training needs rather than maintaining the requisite training staff on a permanent basis within the firm.

Related to the previous point is the indication that a substantial proportion of the total training effort among our establishments takes the form of refresher training, retraining for existing employees, and training directed toward the upgrading of existing employees, rather than initial training for new employees. This factor, as well as government "red tape," may well play a role in explaining the difficulties involved in expanding MDTA on-the-job training.

Finally, an interesting aspect of our findings is the indication that many employers are dissatisfied with the high school graduates they hire and yet also report relatively little success in any attempts to influence the vocational education offerings of high schools and junior colleges in their communities. We shall return to this point in the concluding chapter.

Footnotes to Section XI

1. These findings are similar in most respects to the results of a nationwide survey of training in industry conducted by the U.S. Bureau of Apprenticeship and Training in 1962. See Training of Workers in American Industry, U.S. Bureau of Apprenticeship and Training, Research Division Report No. 1 (Washington, D.C.: U.S. Government Printing Office, 1964.

2. F. Theodore Malm, The Effects of Unions and Employers' Associations on Personnel Practices: A Study of the San Francisco Bay Area Labor Market (unpublished paper on file in Institute of Industrial Relations Library, University of California, Berkeley).

3. The 1962 nationwide survey, cited in footnote 1, indicated that more than half of all apprentices were employed in establishments with fewer than 100 workers and that three-fourths worked for employers of fewer than 500 workers. (Training of Workers in American Industry, p. 58.)

4. Although the high proportion of retail trade establishments may seem surprising, about half of these establishments were foodstores, where the apprentices were training to be butchers. Among the others were automobile dealers (auto mechanics), furniture stores (probably upholsterer trainees), and a jewelry store (watch repair trainees).

5. A discussion of this problem is included in V. Lane Rawlins, Government Sponsored Training Programs for the Disadvantaged Youth as a Part of Efficient Long-run Manpower Policy (unpublished doctoral thesis, University of California, Berkeley, 1969).

6. Gary Becker, Human Capital (New York and London: Columbia University Press, 1964), p. 18.

XII. EMPLOYMENT PROJECTIONS

The rapidity of occupational change and the growing emphasis on manpower policies and programs has led to a great deal of interest in the development of improved methods of predicting trends in employment and in the occupational structure. It is generally recognized that the use of aggregative data needs to be supplemented by analysis of micro-economic predictive data gathered from individual firms. The question as to how accurately employers can predict changes in the level and composition of their work forces, and for how long a period ahead, however, is one on which there has been only limited research. Yet the issue is one of great importance, in view of the critical need for improved data on future occupational shortages and surpluses as a guide for manpower training programs and for the development of vocational education programs in the high schools and junior colleges.

For these reasons, we included a series of questions designed to determine, not only to what extent the establishments in our sample regularly prepared projections of their output and employment, but also the techniques that were used and the conditions under which employers would be willing to make the results of such projections available to public or private agencies.

The Preparation of Projections

We learned that almost three-fourths of our respondents regularly prepared projections of output and more than half prepared projections of employment (Table 12-1). As in so many parts of our survey, however, we

Table 12 - 1

Per Cent of Establishments That Regularly Prepare
Projections of Future Output and Future
Employment Levels, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Per cent preparing projections of	
	Output	Employment
All establishments ^a	72.7	55.4
Less than 250	64.8	43.4
250 to 499	72.2	58.3
500 to 999	84.0	66.0
1,000 to 1,999	64.3	57.7
2,000 and over	92.9	82.1

^aTotal excludes five establishments not providing information on preparation of output projections and four establishments not providing information on preparation of employment projections.

found a decided tendency, although not an altogether consistent one, for the proportion of establishments responding in the affirmative to these questions to rise with increasing number of employees. There were, moreover, variations by major industry group that did not appear to be altogether explained by differences in the size composition of the groups (Table 12-2). Construction establishments were considerably less likely to report that they prepared either type of projection, undoubtedly reflecting the fact that, since construction employers were accustomed to hiring in large part on a short-term basis in accordance with the fluctuating needs associated with their contracts, and since, to a considerable extent, the construction employer's "plant" was the temporary work site, planning for future output and employment was neither necessary nor very feasible. In all probability, the construction establishments that did prepare such projections were the larger employers with sizable permanent staffs of engineers and technical workers. It should also be noted, however, that a good many establishments in this industry employ sophisticated techniques of short-term manpower forecasting in connection with preparing bids and in allocating construction crews as the contract work load moves from one phase to the next.

Interestingly, differences among the major industry groups in the proportions preparing employment projections were wider than those relating to output projections. Although the proportion of establishments in the retail trade and service industries preparing output projections, for example, was about average or not far below average, the proportions preparing employment projections were well below average. On the other hand, government establishments, with their rigid budgeting procedures, ranked very high with respect to the proportions preparing both types of projections.

Table 12 - 2

Per Cent of Establishments That Regularly Prepare Projections
of Future Output and Future Employment Levels,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Per cent preparing projections of	
	Output	Employment
All establishments ^a	72.7	55.4
Construction	34.6	30.8
Manufacturing		
Durable	85.5	67.9
Nondurable	78.7	57.4
Transportation and utilities	63.0	44.4
Trade		
Wholesale	76.9*	46.2*
Retail	71.9	40.6
Finance, insurance, and real estate	76.0	68.0
Services	65.7	40.0
Government	83.3	86.7

* Percentages based on fewer than 15 cases.

^aTotal excludes five establishments not providing information on preparation of output projections and four establishments not providing information on preparation of employment projections.

Among the reasons given for not preparing projections, by far the most frequent, accounting for more than half of the responses, was "unnecessary, because hiring plans can be adjusted easily" (Table 12-13). Other reasons reported with some degree of frequency were "not enough information" or "we have not got around to it," while "stable employment" or "employment that was dependent on contracts" were mentioned by respondents in some of the major industry groups.

"Unnecessary" was the predominant response in all the major industry groups except for nondurable goods manufacturing, while "not enough information" was mentioned rather more frequently than was usual in both manufacturing groups, "stable employment" in services and in other industries, and, as was to be expected, "employment depends on contracts" relatively often in construction.

Methods and Reliability

When we asked about methods used in preparing projections of employment, we found that projections based primarily on estimates of some measure of future work load were the most prevalent, accounting for about two-fifths of the responding establishments, while projections based on a combination of factors, such as population, share of the market, etc., accounted for another fourth (Table 12-4). Some of the other methods reported represented variations of these more prevalent approaches, while, on the other hand, about an eighth of the replies were not particularly informative--i.e., "the projection is part of regular planning procedures." Whether and to what extent sophisticated econometric methods were used was not clear from the responses, although it is known that some of the largest establishments in the Bay Area use such methods.

Table 12 - 3

Reasons Given by Establishments for not Preparing Employment Projections,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Unneces- sary	Not enough infor- mation	"Have not got around to it"	Employ- ment is stable	Employ- ment depends on con- tracts	Other
	Num- ber	Per cent						
All establish- ments ^a	128	100.0	52.1	19.5	10.2	6.3	4.7	7.2
Construction	18	100.0	55.5	16.7	--	--	27.8	--
Manufacturing								
Durable	18	100.0	61.1	33.3	5.6	--	--	--
Nondurable	26	100.0	38.5	34.6	19.2	--	--	7.7
Transportation and utilities	14	100.0	50.1 *	21.4 *	21.4 *	--	--	7.1 *
Trade	19	100.0	68.4	15.8	10.5	5.3	--	--
Services	20	100.0	50.0	10.0	5.0	20.0	5.0	10.0
Other indus- tries ^b	13	100.0	46.1 *	7.7 *	7.7 *	23.1 *	--	15.4 *

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments preparing employment projections and those not providing information.

^bIncludes government and finance, insurance, and real estate.

Table 12 - 4

Methods Used by Survey Establishments to Prepare
Projections of Future Employment Levels --
Bay Area Employer Policy Survey, 1967

All establishments ^a	
Number	167
Per cent	100.0
Projection is based primarily on estimates of future work load, i.e., products, contract, sales or service potential	41.2
Projection is based on a combination of factors, i.e., population, share of market, future building program, product planning, product research, future business conditions, future usage of certain equipment or procedures	25.1
Projection is part of regular planning procedures	12.6
Projection is based on scheduling the manpower requirements of a known work load (e.g., contract work load)	6.7
Projection is part of budget procedure with constraints external to the forecast imposed initially or after review, by size of the budget allocation	4.8
Projection is based primarily on population forecast with emphasis on demographic or economic characteristics	4.2
Projection is based primarily on past trends in industry or in establishment as extrapolated into future	3.0
Projection is prepared in connection with training needs or personnel replacement studies	1.2
Projection is a "guesstimate"	1.2

^aThe total excludes employers that did not regularly prepare projections of future employment and employers that did not provide information.

Short-term forecasts, chiefly for a period of one year, were predominant, but five-year forecasts were made by nearly three-tenths of the establishments preparing such projections, while even longer-term projections were prepared by some (Table 12-5).

Among the respondents preparing projections for one year or more, the great majority (82 per cent) indicated that these projections were reviewed to determine their accuracy. Moreover, in the case of one-year forecasts, the degree of reliability reported by our respondents was quite high (Table 12-6), with nearly two-fifths of those that reviewed one-year forecasts indicating a lower level of reliability of 95 per cent and about three-fifths claiming 90 per cent or more or "excellent" reliability. The results of the longer-term forecasts (here the responses related chiefly to five-year forecasts) were considerably less reliable, with only 18 per cent of the responses indicating a lower level of reliability of 95 per cent and only three-tenths reporting "excellent" or 90 per cent or more.

This pronounced difference between the reliability of short-term and longer-term forecasts was to be expected in the light of what other studies have shown. In a review of the literature on this subject, a Canadian analyst summarized the situation as follows:

On balance, the following remarks seem pertinent. The difficulties and limitations of the survey method, as a technique for forecasting long-term manpower requirements, outweigh its merits to an extent of rendering such forecasts highly dubious. As a short-term forecasting tool, it provides useful information regarding conditions in the labour market in the near future. The degree to which training and education programmes will be influenced in the light of future

Table 12 - 5

Length of the Forecast Period Used
by Survey Establishments
in Preparing Projections
of Future Employment Levels --
Bay Area Employer Policy Survey, 1967

All establishments ^a	
Number	166
Per cent	100.0
Less than 6 months	4.8
6 months and less than 1 year	4.8
1 year	43.5
2 to 4 years	6.0
5 years	29.5
6 to 9 years	0.6
10 years	7.2
Other	3.6

^aThe total excludes employers that did not prepare projections of future employment levels and employers that did not provide information.

Table 12 - 6

Levels of Reliability of Projections of Future Employment Levels
Prepared by Survey Establishments by Length of Forecast Period --
Bay Area Employer Policy Survey, 1967

Levels of reliability	Forecast period		
	All periods	One year	Two years or more ^b
All establishments ^a			
Number	163	113	50
Per cent	100.0	100.0	100.0
Lower level of reliability 95%	32.6	38.9	18.0
Consistently excellent reliability (no percentage given)	4.9	4.4	6.0
Lower level of reliability 90%	23.9	27.4	16.0
Lower level of reliability 80%	11.0	11.5	10.0
Consistently good reliability (no percentage given)	4.9	4.4	6.0
Lower level of reliability 70%	6.7	4.4	12.0
Consistently fair reliability (no percentage given)	3.7	2.7	6.0
Lower level of reliability 60% and below	6.7	1.8	18.0
Consistently poor reliability (no percentage given)	3.1	1.8	6.0
Wide variations in the reliability of individual forecasts	2.5	2.7	2.0

^aThe total excludes employers that did not regularly prepare projections of future employment levels and employers that did not provide information. The number of periods exceeds that of establishments as some employers mentioned more than one period.

^bAmong these responses, seven-tenths related to five-year forecasts.

manpower requirements forecast by the survey is practically nil. Thus, as Harbison and Myers argue, forecasts made by individual establishments are essentially part of an assessment of the present situation rather than a practical means of making long-run forecasts.¹

Where the projections did not yield particularly reliable results, unforeseen factors relating to the employer's work load or production or to changing business conditions were often held to be responsible (Table 12-7). Other elements explaining poor projections were numerous and varied, including the weather (mentioned by some of the food processors), changing consumer tastes, the Vietnam conflict, and many others.

Our respondents were well aware of the relatively greater problems involved in long-term employment forecasts, as was clearly indicated in the pattern of their responses to another question:

Do you believe your establishment can prepare reasonably accurate projections of its own employment under stated economic assumptions for a two, five, or ten year period?

Nearly three-fourths of those prepared to express an opinion (only 20 did not reply) answered this question in the affirmative with respect to two-year forecasts, indicating that a good many of those that were not regularly preparing employment projections felt reasonably confident that their establishments were capable of preparing short-term projections. (It will be recalled that 55 per cent of the establishments were regularly preparing such projections -- Table 12-1).

However, only about a third of the respondents felt confident that their establishments could prepare reasonably accurate five-year projections,

Table 12 - 7

Unforeseen Factors Responsible for Inaccurate Projections of
Future Employment Levels Prepared by Survey Establishments --
Bay Area Employer Policy Survey, 1967

All establishments ^a	
Number	61
Per cent	100.0
Factors relating to employer's work load or production	32.7
Factors relating to changing business conditions	16.4
Factors relating to weather	11.5
Factors relating to changing consumer tastes or buying habits	6.6
Factors relating to Vietnam	6.6
Factors relating to uncertainty of government orders (other than Vietnam) or to government regulations or policies	6.6
Factors relating to management decisions affecting establish- ment's structure	4.9
Factors relating to population forecasts	3.3
Factors relating to budget constraints	3.3
Factors relating to shifts in demographic or economic character- istics of population	1.6
Factors relating to product innovations	1.6
Factors relating to technological change in production process or procedures	1.6
Other factors	3.3

^aThe total excludes employers that did not regularly prepare projections of future employment, employers that reported no gross inaccuracies in projections, and employers that did not provide information.

while about a tenth answered the question in the affirmative with respect to ten-year projections.

Size of the establishment appeared to be a significant determinant of confidence in the feasibility of making reliable two-year projections, for the proportion of affirmative responses (omitting those without an opinion) varied fairly consistently from seven-tenths of those in the smallest size group to over nine-tenths of those in the largest.

Among the major industry groups, construction stood out as the group least prepared to make two-year forecasts, with only a fourth of the respondents expressing confidence that their establishments could successfully prepare such projections. The proportion of affirmative responses was also slightly below average in retail trade.² Variations with respect to five-year projections were more pronounced, with government agencies leading in the proportion expressing confidence in the feasibility of such projections (57 per cent), while at the opposite extreme, very few construction establishments (only 8 per cent) considered such projections feasible.

Although we hypothesized that establishments with comparatively stable employment in the 1960-1967 period (Table 2-2) would be more likely to consider reasonably accurate employment projections feasible than those that had experienced pronounced changes in employment, the differences associated with the employment experience of the establishment in the 1960-1967 period turned out to be relatively slight, except for the fact that employers that had experienced employment that "fluctuated, with little net change" considered themselves relatively incapable of making reasonably accurate employment forecasts. Less than half of this group answered the question in the affirmative with respect to two-year forecasts and only

about an eighth with respect to five-year projections.

Projections of the Establishment's Occupational Distribution

Projections of the establishment's future occupational distribution were considerably less likely to have been made than employment projections, with less than a third of the establishments indicating that they had attempted predictions of their occupational structures (Table 12-8). Variations by major industry group in the relative extent of this type of experience were quite substantial and, for the most part, resembled the variations relating to the preparation of employment projections. Although we attempted to obtain information on the reliability of these projections, not enough of our respondents were in a position to provide information on this question to justify analysis of the results.

Interestingly, although some of our employers had been included in surveys of anticipated occupational changes conducted by government agencies, and we had been inclined to anticipate that most of these projections had been made in connection with such surveys, it turned out that about half of the establishments preparing occupational forecasts did so for their own use (data not shown). Among the other respondents, the majority (about three-fifths) indicated that the information had been provided to the California Department of Employment, presumably for the latter's Occupational Guide program in most cases,³ although a few were alluding to their participation in the East Bay Manpower Survey.⁴ Considerably less frequent were references to data prepared for the U.S. Bureau of Labor Statistics in connection with the biennial revisions of its Occupational Outlook Handbook,⁵ while much smaller proportions of employers mentioned having supplied

Table 12 - 8

Extent of Preparation of Information on Occupational Distribution of
Future Employment by Survey Establishments, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Does prepare future occupational distribution information	Does not prepare future occupational distribution information
	Number	Per cent		
All establishments ^a	302	100.0	32.8	67.2
Mining and construction	25	100.0	20.0	80.0
Manufacturing				
Durable	56	100.0	48.2	51.8
Nondurable	60	100.0	23.3	76.7
Transportation and utilities	27	100.0	29.6	70.4
Trade				
Wholesale	13	100.0	38.5*	61.5*
Retail	32	100.0	31.3	68.7
Finance, insurance, and real estate	25	100.0	36.0	64.0
Services	34	100.0	17.6	82.4
Government	30	100.0	50.0	50.0

* Percentages based on fewer than 15 cases.

^aThe total excludes employers that did not provide information.

occupational projections or descriptive material relating to probable occupational developments to various organizations concerned with minority hiring and to the schools.

In an attempt to learn employers' opinions as to the occupations for which the most and least accurate projections of employment could be made, whether or not they had had experience with such projections, we asked all respondents the following questions:

If you could be given a projection of your firm's production schedule for two years hence, for which specific occupations could you prepare the most accurate two-year employment projections?

For which specific occupations would your projections likely be least accurate?

Not surprisingly, approximately a fifth of our respondents did not feel that they could answer either of these questions. Another group (nearly three-tenths) thought that their projections would be about equally accurate for all occupation groups.

Even the replies that did mention specific occupations or occupation groups (nearly half of the respondents mentioned specific occupations or groups of occupations in replying to the first question and a slightly smaller proportion in responses to the second question) were not very helpful, since there was clearly little agreement among our respondents as to the relative ease or difficulty with which projections could be made for the various occupation groups (Table 12-9). About as many mentioned professional and technical workers as a group for which the most accurate projections could be made as indicated that this was a group for which the least accurate projections

Table 12 - 9

Employers' Assessments as to the Occupation Groups for Which
the Most Accurate and the Least Accurate
Two-Year Employment Projections
Could be Prepared by Their Establishments --
Bay Area Employer Policy Survey, 1967

(On the assumption that the production schedule for the two years is known)

Occupation groups	Most accurate	Least accurate
All responses ^a (number)	195	155
White-collar groups	101	89
Professional and technical	31	30
Managerial	12	4
Clerical	31	28
Sales	19	16
White-collar in general	8	11
Blue-collar groups	85	56
Skilled	32	10
Semi-skilled	20	6
Unskilled	11	28
Blue-collar in general	22	12
Service workers	5	4
Other specific occupations	4	6

^aTotal responses of the 146 establishments mentioning specific occupation groups for which the most accurate employment projections could be made and of the 137 establishments mentioning occupation groups for which the least accurate projections could be made. Some respondents mentioned more than one occupation group. Omitted from this table are establishments indicating that projections would be about equally accurate for all occupation groups (see text) and those not providing information.

could be made, and so on down the line for a number of the other occupation groups. (Incidentally, the responses to these questions have been presented in terms of numbers rather than percentages to facilitate comparisons between the number of "most accurate" responses and "least accurate" responses for the various occupation groups.)

The responses with respect to blue-collar groups were somewhat more illuminating than those relating to white-collar groups, for it came out rather clearly that the number of responses singling out blue-collar groups as those for which the most accurate projections could be made exceeded by an appreciable margin those mentioning blue-collar groups as probably involving the least accurate predictions. Moreover, this contrast would have been more pronounced had we eliminated the unskilled group from the total relating to blue-collar workers, since the pattern of responses with respect to the unskilled was in the reverse direction--for very good reasons, there was a tendency for employers to question how accurately they could forecast the rapidity with which demand for unskilled workers was likely to decrease in response to changing technology or operating methods.

In assessing these responses, it must be kept in mind that some of the occupation groups, and particularly the professional and technical group, are quite heterogeneous. For example, the responses of some of our employers made specific reference to the fact that they had had previous experience with underestimating their needs for engineers, or for the technical workers required for data processing installations. On the other hand, one would suspect that the problem of estimating the number of teachers needed by a local school district, say two years or five years hence, would be less tricky, at least in a community with a comparatively stable population. Such differences

probably helped to account for the lack of agreement with respect to major occupation groups, and yet we did not have enough responses referring specifically to more detailed occupations, e.g., engineers, to justify presenting the results in that form.

Willingness to Confer and to Release Results

One of the problems that has been widely recognized in connection with the use of projections developed at the level of the firm has been the indication that many employers would be wary of participating in industry-wide conferences relating to such forecasts or to release the results to public or private agencies for fear of giving their competitors information about trends in their individual enterprises. The results of our survey appeared to indicate that this would not be much of a problem. Among the interviewees (all but 18) who felt that they could respond to the relevant question, about three-quarters indicated that their establishments would be willing to participate in industry-wide conferences at which those present would discuss future expectations as to production, employment, technological developments, and other factors which would influence the future course of employment and occupational changes within the industry. Only a sixth answered that their establishments would not be willing to participate, while approximately 8 per cent suggested that the decision would have to be made at a higher level or that they felt undecided on the issue.

For the most part, major industry group variations in the pattern of these responses were not very pronounced, although government agencies were especially likely to indicate a willingness to participate (93 per cent). This was doubtless explained in part by the absence of the types of competitive

concerns which were important to the private employers, but also by the fact that a number of school districts and several colleges -- with mutual problems of shortages of qualified teachers -- were included in our sample.

The proportion of positive responses (87 per cent) was also high in the service industries. Here again, there were schools and colleges represented -- this time private -- and also a large contingent of hospitals facing serious problems of recruitment and labor utilization. The services group also included hotels which, like the restaurant segment of retail trade, had profited from an outstanding local college program for hotel and restaurant occupations.

On the other hand, the proportion of respondents in transportation and utilities indicating willingness to participate in such conferences was somewhat below average but nevertheless constituted a clear majority (60 per cent). It was also below average in retail trade.

Interestingly, there were no consistent variations by size of establishment in the pattern of responses to this question, although the proportion indicating willingness to participate was very slightly below average in the two smallest size groups.

In their responses to a question relating to the extent of the geographical coverage of such conferences, about a half of those willing to participate said that they would like to see the conferences confined to the Bay Area, while most of the others thought they should be held either at the state level or at both the Bay Area and state levels. Very few

indicated that the conferences should be held on a Western States or national basis. For the most part, the replies seemed to be influenced chiefly by considerations as to how large an area would be required to bring in a representative group of employers.

Some of the comments of employers who were enthusiastic about the concept of such conferences indicated that they would expect some return for their efforts. This quid pro quo was likely to take the form of an expectation that "school people" would be present to whom they could provide information as to their labor requirements and suggestions about modifications in school curricula. In this connection, the indications in Section XI that employers felt they had little influence on school curricula will be recalled.

Also of interest was the fact that an appreciable proportion of the respondents made comments to the effect that their employer, trade, or professional associations were already holding meetings, more or less regularly, that provided valuable opportunities for discussion of the type of problem to which our question related. The fact that they were involved in such meetings, however, did not seem to dampen their enthusiasm for the more structured type of meeting which our question contemplated. The opportunity to participate in conferences, not only with school officials, but also with representatives of government agencies concerned with manpower problems, appeared to be welcome.

It will be recalled that about three-fourths of the employers thought that their establishments could prepare reasonably accurate two-year employment projections, even though they might not now be doing so. Nearly three-fourths

of this group in turn expressed willingness to release their employment projections, in response to the following question:

If Yes /in response to the question as to whether the establishment could prepare reasonably accurate employment projections/, for any of these periods, would you be willing to release projections of your establishment's total number of employees for purposes of Bay Area or State employment forecasting under conditions where a strict confidentiality of individual data would be maintained?

Among those that could not give a clear "yes" in answer to the above question, the majority indicated that the decision would have to be made at a higher level, while about 10 per cent of all the employers who thought they could prepare such projections indicated a definite unwillingness to release them.

There was no consistent tendency for the pattern of responses to this question to vary by size of establishment, and differences among the major industry groups were not very pronounced, although it is noteworthy that government agencies stood out with a considerably higher proportion (88 per cent) expressing willingness to release their projections than among the private major industry groups.

Moreover, our interviewees did not tend to express a bias in favor of releasing such projections to private rather than to public agencies. On the contrary, three-fourths of those providing an answer to the relevant question indicated that they would be prepared to release the data to either a public or a private agency, and of the remaining fourth, the

proportion specifying a public agency was more than double that favoring a private agency.

Concluding Remarks

Our results indicate, as have those of other studies bearing on this question, that a substantial proportion of employers can prepare reasonably accurate short-term employment forecasts but that long-term forecasts tend to be of dubious reliability. When our inquiries went beyond projections of total employment to inquire about forecasts of occupational changes, we obtained findings that were not very conclusive. Although some of the establishments had had experience with such forecasts, few were able to provide information on their reliability, and there was no consistent pattern in employer responses with respect to the occupation groups for which the most reliable or least reliable projections could be made, except for some indication that projections relating to skilled and semi-skilled blue-collar workers would be relatively likely to yield accurate results.

On the issues of willingness to participate in conferences at which manpower trends in the employer's own industry would be discussed or willingness to release the results of the establishment's employment projections, our findings were perhaps more positive than might have been expected. A distinct majority of the employers expressed willingness to participate in such conferences, and, indeed, a number made statements indicating that the opportunity to "sit down" with school officials, for example, would be decidedly welcome. Moreover, among the employers that felt their establishments could prepare reasonably accurate employment

projections, at least on a short-term basis, there was quite widespread willingness to release such projections either to public or private agencies.

Footnotes to Section XII

1. Ozay Mehmet, Methods of Forecasting Manpower Requirements, A Study Prepared for the Ontario Department of Labour and the Centre for Industrial Relations, University of Toronto (Toronto: 1965), p. 33.

2. Actual results for these two industry groups, interestingly, were relatively poor in a New Jersey study, in which two-year employment forecasts were compared with actual changes in employment over the two-year period. See Manpower Forecasting Through the Occupational Needs Survey, Research Section, Institute of Management and Labor Relations, University Extension Division, Rutgers--The State University (New Brunswick, N.J.: 1966).

3. See Occupational Guide Index, California Department of Employment (Sacramento). This index contains approximately 450 titles of specific occupations, the Guides for which are being continuously revised.

4. See East Bay Manpower Survey, Alameda County, 1966-1971, California Department of Employment, Coastal Area (San Francisco: 1967).

5. See Occupational Outlook Handbook: Employment Information on Occupations for Use in Guidance, 1958-59 Edition, Bulletin 1550, U.S. Bureau of Labor Statistics (Washington, D.C.: 1968).

Appendix A

Additional Details Relating to the Sample and Methodology

In connection with the decision to include the six counties of the San Francisco-Oakland and San Jose metropolitan areas in our survey, we also considered but rejected the possibility of including Solano, Napa, and Sonoma counties, to the north of the five counties of the San Francisco-Oakland Area. These three counties are included in the so-called "Greater Bay Area," which consists of the nine counties around the Bay. However, these northern counties are small in population and have experienced relatively little industrial development in comparison with what has been happening in Santa Clara County. To include them would have increased the complexity of sample design and the overall costs of the survey.

Inclusion of Santa Clara County added 30 establishments to the sample, a relatively smaller overall sampling ratio than was used in San Francisco-Oakland. This ratio could legitimately be smaller because, in many industry groups, firms in the San Francisco-Oakland Area had San Jose branches whose employment was included when the headquarters offices were surveyed. Moreover, our San Jose sample did give full weight to firms in the aerospace industries which are not well represented in the San Francisco-Oakland Area, even though we may have slighted certain other San Jose establishments whose counterparts were to be found in the former area.

The California Department of Industrial Relations, whose cooperation we obtained in designing the sample, produces jointly with the California Department of Employment all officially released state and area estimates of employment in California. Since the Department of Industrial Relations holds the Bureau of Labor Statistics contract to administer the Cooperative Employment Statistics Program in California, it has access to the data needed to draw a sample of establishments in a given size class that are covered by unemployment insurance, as well as those which are not. Because of the confidentiality of individual establishment data, employees of the Institute did not have access to much of the data used in identifying the universe of establishments to be covered by the survey nor to the individual firm listings from which establishments were selected on a probability basis.

Planning of the sample design proceeded concurrently with development of the questionnaire to be used in the study. In view of our desire to gather information on many aspects of employer policies, the questionnaire rather quickly became a lengthy and formidable document. We decided that the prospect of participation in the study and of relatively reliable responses would be more favorable if we adopted the procedure of personal interviews with employer representatives rather than a mailed questionnaire. In view of the far greater average cost per establishment of an interview survey, as compared with a mailed questionnaire survey, it became necessary to give very careful consideration to the number of establishments to be included. Resources available for the study permitted the inclusion of approximately 300 establishments in the sample. Moreover, there appeared

to be a strong case for restricting the sample to employers with 100 or more employees. In this way, our 300 establishments would represent a larger volume of employment than if smaller employers were included. In addition, there is considerable evidence that the larger firms are the pacemakers in terms of employer policies, and that exclusion of small firms would not seriously impair the significance of our results.

In both San Francisco-Oakland and San Jose, the relationship of establishment size to proportion of work force employed follows the pattern typical of metropolitan areas. Some 20 per cent of all establishments in these areas employ approximately 80 per cent of all wage and salary workers. Conversely, about 80 per cent of all employers account for only about 20 per cent of all such workers. These contrasts are even more pronounced at the upper end of the size class scale. The number of San Francisco-Oakland and San Jose Area employers with 100 or more employees does not exceed 2 per cent of all employers. Yet these establishments, together, have on their payrolls slightly more than one-half of all workers.

The sample included 18.3 per cent of the establishments and 31.9 per cent of the workers in the universe of establishments with 100 or more employees (Table A-1). The number of workers in each major industry group in September 1966 differs somewhat from the number reported by the employers in our interviews, since the interview period covered a considerable time span. However, the relationships between sample coverage and universe presented in Table A-1 are essentially the same as for July 1967, the month to which our employer-reported data were adjusted for purposes of assigning the size classes shown in the tables based on our survey.

On the average, establishments in our sample exceeded by about 300 employees the average for all Bay Area firms with 100 or more employees. This difference is explained to some extent by occasional departures from the legal definition of an establishment. In contrast with the usual practice, interviewers were instructed to include as the employment of a single establishment all of a firm's employment located in any of the six Bay Area counties provided that the personnel policies affecting the included work force were homogeneous and that accurate information on these policies could be obtained from the particular representative or representatives of the establishment who were interviewed or were otherwise involved in supplying information.

On the other hand, although not as frequently, branches or sections of firms that would be considered part of the establishment for such purposes as reporting employment and wage data to a government agency were sometimes excluded because their policies and practices differed from those of the unit involved in the interview or because the interviewee did not consider himself qualified to provide information on certain units of his organization in the requested detail. Thus, some of our "establishments" were really multi-establishment organizations, whereas a few represented only a part of the total establishment.

A detailed industrial distribution of the sample is presented in Appendix Table A-2.

Appendix Table A-1

Number, by Major Industry Group, of Establishments and Workers in Universe and Sample of Employers with 100 or More Workers in the San Francisco-Oakland and San Jose Metropolitan Areas in September 1966, and the Per Cent of Establishments and Workers Sampled

Industry	Universe of establishments of 100 or more workers		Sample of establishments of 100 or more workers		Per cent sampled	
	Number of establishments	Number of workers	Number of establishments	Number of workers	Establishments	Workers
Total	1,690 ^a	873,837	309	279,123	18.3	31.9
Mining and construction	127	29,311	26	6,550	20.5	22.3
Manufacturing	523	255,068	119	95,113	22.8	37.3
Transportation, communication, electric, gas and sanitary services	147	114,586	27	41,538	18.4	36.3
Trade	335	97,061	46	34,556	13.7	35.6
Finance, insurance and real estate	152	51,470	25	28,177	16.4	54.7
Services	247	67,442	36	20,829	14.6	30.9
Government	159	258,899	30	52,360	18.9	20.2

Source: Unpublished tabulation of the Division of Labor Statistics and Research of the California Department of Industrial Relations.

^aThe total of 1,690 establishments comprising the universe includes the 1,525 firms employing 100 or more workers that were subject to the provisions of the California Unemployment Insurance Code in September 1966.

Appendix Table A-2

Establishments by Industry --
Bay Area Employer Policy Survey, 1967

Industry	
All establishments	
Number	309
Per cent	100.0
Mining and construction	8.4
Manufacturing	38.5
Durable goods	18.4
Stone, clay, and glass products	1.0
Primary metal industries	2.3
Fabricated metal products except ordnance, machinery, and transportation equipment	5.0
Machinery, except electrical	2.9
Electrical machinery, equipment, and supplies	3.2
Ordnance and transportation equipment	2.6
Other durable goods ^a	1.6
Nondurable goods	20.1
Food processing	9.1
Textiles and apparel	1.0
Paper and allied products	2.6
Printing, publishing, and allied industries	3.2
Other nondurable goods ^b	4.2
Transportation, communication, electric, gas, and sanitary services	8.7
Motor freight transportation and warehousing	3.2
Water transportation	1.6
Transportation by air	1.0
Other transportation and public utilities ^c	2.9
Wholesale and retail trade	14.9
Wholesale trade	4.2
Retail trade	10.7
General merchandise	2.9
Food	2.3
Apparel and accessories	1.0
Furniture, home furnishings, and equipment	1.0
Eating and drinking places	1.2
Other retail stores ^d	2.3

Table A-2, Establishments by Industry, continued.

Finance, insurance, and real estate	8.1
Finance	3.2
Banking	1.9
Other finance ^e	1.3
Insurance and real estate	4.9
Services	11.7
Hotels, rooming houses, camps, and other lodging places	1.0
Personal services	1.0
Miscellaneous business services	2.9
Medical and other health services	3.2
Educational services	1.3
Other services ^f	2.3
Government	9.7
Federal government	2.9
State government	1.3
Local government	5.5
City, county, special districts	3.2
School districts	2.3

^aLumber and wood products; furniture and fixtures; professional and scientific instruments; and miscellaneous manufacturing industries.

^bChemicals and allied products; petroleum refining and related industries; rubber and related miscellaneous plastics products; and leather products.

^cRailroads; local and suburban transit; transportation services; communications; and electric, gas, and sanitary services.

^dBuilding materials, hardware, and farm equipment; automotive dealers; and miscellaneous retail stores.

^eCredit agencies other than banks; and security and commodity brokers.

^fAmusement and recreation services; legal services; nonprofit membership organizations; and miscellaneous services.

Realization of the fact that we were placing a heavy burden on executives led us to plan our approaches to the establishments with considerable care. Our first step was to direct a letter, signed by the Director of the Institute of Industrial Relations, to the establishment's chief executive (except in a few cases in which some other executive seemed more appropriate, generally because of previous contacts with him). The letter was followed within a few days by a telephone call from the Project Director or another member of the Institute staff, who explained the survey's content; attempted an estimate of the time the interview would probably take; mentioned our desire to obtain supplementary statistical information; and answered any questions that were asked.

Among the establishments included in "Sample A," our first sample, 79 per cent consented to be interviewed. Not all of the other 21 per cent, however, refused to be interviewed. Refusals accounted for 15.7 per cent of the total, while 5.3 per cent were not interviewed for "other reasons." Establishments included in the other reasons category included those that could not be or were not contacted for an interview, those that were not asked for an interview after we contacted them, and those that expressed willingness to participate but offered an interview appointment, for good reason, beyond the closing date for interviewing employers in their industry (Appendix Table A-3).

Situations typical of "other reasons" included the following: the firm could not be located; was in bankruptcy proceedings; was in actual process of moving; was being sold or entering under new management; was undergoing a prolonged labor dispute; or was part of a multi-establishment enterprise, one or more of whose units we had already included and which we believed it would be redundant in certain policy areas to interview.

The sample of employers finally selected was larger by nine establishments than the original sample size of 300. Two of these added firms reflect instances where a "Sample A" establishment was handled as two firms because meaningful information could not be obtained on a single schedule by reason of the firm's complexity. Some of the remaining seven additions reflect over-scheduling. So that we could utilize the interviewer staff properly by avoiding dead-time, we often contacted a small number of employers in "Sample B," our second sample, as insurance against refusals from "Sample A" employers when mailing our request letter to the latter. Although this practice did lead to smoother scheduling than the time-consuming alternative of waiting for final decisions from all "Sample A" employers before turning to those in Sample B," we occasionally underestimated the favorable response we were ultimately to receive from the former. In those cases where interview appointments could not be cancelled, the "surplus" schedules were added to our collected data. A very few additions were made to the first sample from "Sample B" in order to give weight, within a specific 2-digit industry group, to some important activity or form of organization or to enrich the sample by adding representation from a specific part of the Bay Area. Such supplementation occurred in those infrequent instances where we believed the strictly random method employed in selecting firms had resulted in the omission of establishments typifying significant facets of the Bay Area labor market.

Appendix Table A - 3

"Sample A" of Bay Area Establishments by Major Industry Group with Number and Per Cent of Establishments Included or Not Included by Type of Response

Industry group	"Sample A"		Included		Total		Refusals		Other Reasons	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
All establishments	300	100.0	237	79.0	63	21.0	47	15.7	16	5.3
Mining and construction	25	100.0	16	64.0	9	36.0	4	16.0	5	20.0
Manufacturing	117	100.0	92	78.6	25	21.4	21	18.0	4	3.4
Transportation, communi- cation, electric, gas and sanitary services	24	100.0	19	79.2	5	20.8	4	16.7	1	4.1
Trade	45	100.0	35	77.8	10	22.2	7	15.5	3	6.7
Finance, insurance, and real estate	23	100.0	20	87.0	3	13.0	3	13.0	0	0.0
Services	36	100.0	28	77.8	8	22.2	6	16.7	2	5.5
Government	30	100.0	27	90.0	3	10.0	2	6.7	1	3.3

The interview period for the Bay Area Employer Policy Survey extended from August 1966, the month the first pilot interview occurred, until January 1968 when appointments with the last few stragglers among the 309 establishments included in this study were completed. Actually, very few employer contracts were made prior to February 1967 or subsequent to mid-December of that year. The great bulk, or 84 per cent of the 309 respondent establishments, were interviewed from April through December 1967, and the largest number of interviews given in any three-month period took place in the fourth quarter of that year. The pattern of our scheduling is shown in Appendix Table A-4.

It is almost exclusively the 1967 Bay Area labor market situation that is reflected in the employer responses covered by the survey. Interviews with establishments in any specific industry group, however, were concentrated as nearly as possible into limited time periods so that the statements of similar employers would be recorded while they were reacting to essentially the same external circumstances. Further, the employment figures on which our size intervals are based were adjusted to July 1967 (except for the schools which were covered after the fall 1967 school year began) so that seasonal and longer-term employment changes would not affect the comparability of interfirm size relationships.

Information on the number of establishments returning Part II schedules, partially or fully completed, is presented in Table A-5.

Appendix Table A - 4

Interviews Administered in Reporting Establishments
by Specified Time Periods, 1966 to 1968--
Bay Area Employer Policy Survey, 1967

Time period	
All interviews:	
Number	309
Per cent	100.0
1966	1.6
First quarter of 1967	12.9
Second quarter of 1967	25.2
Third quarter of 1967	27.3
Fourth quarter of 1967	31.4
First quarter of 1968	1.6

Appendix Table A - 5

Number of Establishments for Which Part I Schedules Were Completed
and Part II Schedules Were Wholly or Partially Completed,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

	Part I Schedules	Part II Schedules	Per cent of sample returning Part II schedules
All establishments	309	174	56.3
Mining and construction	26	16	61.5
Manufacturing			
Durable	57	30	52.6
Nondurable	62	32	51.6
Transportation and utilities	27	11	40.7
Trade			
Wholesale	13	7	53.8
Retail	33	20	60.6
Finance, insurance, and real estate	25	20	80.0
Services	36	17	47.2
Government	30	21	70.0

Appendix B

Employment Conditions at the Time of the Survey

As in the nation, 1967 was a year of expanding employment and decreasing unemployment in the San Francisco-Oakland and San Jose labor market areas. Joblessness in certain of the core city districts of these areas continued to be about three times as large as the unemployment characterizing these areas in their entirety. As in other of the nation's metropolitan complexes, the problems of finding jobs for the residents of these districts or for the lesser skilled in general were accompanied by mounting shortages of workers in many professional, technical, and skilled categories. The impact upon them and their reactions to these "two worlds" coexisting in one labor market caused most Bay Area employers to couch their replies to our questions in the now familiar dichotomies related to skill level and type of worker, thus adding immensely to the bulk and complexity of our data.

Employment movements in the various industries of the two labor market areas, on the other hand, were sufficiently diverse during the interview period that no general state of mind, neither the euphoria born of "good times" nor the pessimism characterizing "hard times" was uniformly reflected throughout the employer group contacted. The diversity of their attitudes towards then current business conditions was marked and these differences usually appeared more related to the fortunes of their particular establishments or to their personal biases when appraising any business scene. One factor contributing to the diversity of employer situations and attitudes encountered was the fact that crops were both late and poor in the summer of 1967. Employers in the various activities affected by this development, therefore, were showing less employment expansion in the San Francisco-Oakland and San Jose areas than would have been usual for them. Also, they were not then enjoying the generally flourishing situation being experienced by almost all other industries, particularly those in aerospace and those influenced by rising population and an expanding economy.

In Appendix Tables B-1 and B-2 following, total employment figures by major industry groups and seasonally adjusted unemployment rates are given for the San Francisco-Oakland and San Jose Metropolitan Areas as of selected months. Figures for the months -- January 1967, July 1967, and January 1968 -- bracket the heaviest period of interviewing and also provide data at the midpoint. The months January 1966, July 1966, and January 1967 permit comparisons with the previous year.

Appendix Table B - 1

Total Employment by Major Industry Group and Seasonally
Adjusted Unemployment Rates in the San Francisco-Oakland
Labor Market Area for Selected Months, January 1966 to January 1968
(In thousands)

Major industry group	January 1967	July 1967	January 1968	January 1966	July 1966
Total employment	1,276.3	1,312.4	1,312.8	1,229.0	1,281.4
Agriculture	9.0	11.1	9.5	8.9	11.6
Construction	63.2	70.4	64.4	72.4	76.2
Manufacturing	203.0	207.6	200.6	200.5	213.9
Durable goods	105.6	106.8	106.0	103.0	109.5
Nondurable goods	97.4	100.8	94.6	97.5	104.4
Transportation, communication, electric, gas and sanitary services	123.5	129.1	127.7	112.1	116.3
Trade	274.5	279.3	281.7	266.1	273.6
Finance, insurance, and real estate	88.5	91.3	91.2	86.5	88.6
Services	261.1	268.3	269.8	248.7	259.1
Government	249.3	251.0	263.7	229.5	237.4
All other ^a	4.2	4.3	4.2	4.3	4.7
Total unemployment	64.7	61.9	62.7	68.0	58.9
Seasonally adjusted unemployment rate	4.3	4.4	4.0	4.6	4.3

Source: Estimated Total Employment, Unemployment and Labor Force, San Francisco-Oakland Standard Metropolitan Area - 1958-1967 (Revised Series of March 1967, prepared 1968), California Department of Employment, Coastal Area Research and Statistics Section, San Francisco, except for January 1968 figures which are from the San Francisco-Oakland Bay Labor Market Area Bulletin, for that month, as published by the same agency.

^aIncludes mining, forestry, and miscellaneous agricultural services.

Appendix Table B - 2

Total Employment by Major Industry Group and Seasonally Adjusted
Unemployment Rates in the San Jose Labor Market Area for
Selected Months, January 1966 to January 1968

(In thousands)

Major industry group	January 1967	July 1967	January 1968	January 1966	July 1966
Total employment	352.7	381.3	378.8	319.3	360.9
Agriculture	5.5	12.6	5.4	5.4	13.8
Construction	16.2	19.4	17.8	17.7	20.4
Manufacturing	110.8	123.5	121.4	90.9	112.7
Durable goods	90.8	98.2	100.6	72.6	85.4
Nondurable goods	20.0	25.3	20.8	18.3	27.3
Transportation, communication, electric, gas and sanitary services	14.4	15.1	15.1	13.1	14.5
Trade	63.4	65.3	67.5	59.0	61.6
Finance, insurance, and real estate	12.9	13.1	13.2	12.5	12.8
Services	79.2	82.8	84.7	74.2	78.3
Government	49.6	48.8	52.5	45.7	45.9
All other ^a	.7	.7	1.2	.8	.9
Total unemployment	19.0	16.8	17.6	21.1	16.2
Seasonally adjusted unemployment rate	4.3	4.7	3.7	5.2	4.7

Source: Estimated Total Employment, Unemployment and Labor Force, San Jose Metropolitan Area, 1949-1967 (Revised Series of March 1967 prepared 1968), California Department of Employment, Coastal Area Research and Statistics Section, San Francisco, except for January 1968 figures which are from the San Jose Labor Market Area Bulletin for that month, as published by the same agency.

^aIncludes mining, forestry, and miscellaneous agricultural services.

Appendix Table B - 3

Changes in Number of Employees, 1960-1967, by Number
of Employees and Type of Organization --
Bay Area Employer Policy Survey, 1967

Number of employees and type of organization	Change in employment							
	Total		In- creased substan- tially	In- creased slightly	De- creased substan- tially	De- creased slightly	Re- main- ed rela- tively stable	Fluctu- ated -- little net change
	Num- ber	Per cent						
All establish- ments ^a	307	100.0	49.2	16.6	10.7	3.6	13.9	5.9
Less than 250	129	100.0	37.9	23.3	10.9	6.2	15.5	6.2
Single unit	31	100.0	35.5	35.5	3.2	3.2	19.4	3.2
Branch unit	42	100.0	33.4	21.4	11.9	7.1	14.3	11.9
Headquarters	56	100.0	42.8	17.9	14.3	7.1	14.3	3.6
250 to 499	73	100.0	50.6	13.7	15.1	--	15.1	5.5
Single unit	22	100.0	50.0	27.3	--	--	13.6	9.1
Branch unit	24	100.0	33.3	16.7	25.0	--	20.8	4.2
Headquarters	27	100.0	66.7	--	18.5	--	11.1	3.7
500 to 999	50	100.0	62.0	8.0	10.0	4.0	12.0	4.0
Single unit	10	100.0	70.0 [*]	20.0 [*]	--	--	10.0 [*]	--
Branch unit	12	100.0	41.7 [*]	--	16.7 [*]	8.3 [*]	25.0 [*]	8.3 [*]
Headquarters	28	100.0	67.9	7.1	10.7	3.6	7.1	3.6
1,000 and over	55	100.0	63.7	10.9	5.5	1.8	14.5	3.6
Single unit	6	100.0	66.7 [*]	33.3 [*]	--	--	--	--
Branch unit	20	100.0	65.0	--	15.0	--	10.0	10.0
Headquarters	29	100.0	62.1	13.8	--	3.4	13.8	6.9

^aTotal excludes establishments not reporting change in employment.

Appendix Table B - 4

Negroes as Per Cent of Total Employees of Establishments,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967,
Part II Data

Negroes as per cent of total employees	Manufacturing			Retail trade	Finance, insurance, and real estate	Ser- vices and govern- ment	All other indus- tries
	Total	Durable	Non- durable				
All responding establishments ^a							
Number	115	23	23	15	16	20	18
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No negroes	3.5	8.7	--	--	--	5.0	11.1
0 to 2.4	26.9	34.9	34.9	13.3	37.5	25.0	16.7
2.5 to 4.9	25.2	21.7	21.7	33.4	37.5	5.0	38.8
5.0 to 9.9	17.4	26.1	13.0	20.0	18.8	10.0	11.1
10.0 to 14.9	11.3	--	21.7	13.3	6.2	20.0	--
15.0 to 19.9	6.1	4.3	--	13.3	--	20.0	--
20.0 to 29.9	3.5	4.3	--	6.7	--	--	16.7
30.0 per cent or more	6.1	--	8.7	--	--	15.0	5.6
Negroes as per cent of total employees reported	8.1	3.0	5.5	6.3	5.1	23.1	6.4

^aTotal includes all establishments providing information on the racial composition of their employment on Part II schedules.

Appendix Table B-5

Reasons for Using Temporary Staff Agencies, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

(Data relate to first reasons given by the respondent)

Reasons	Total	Construction	Manufacturing	Transportation and utilities	Trade	Finance, insurance, and real estate	Services
All establishments ^a							
Number	209	15	95	19	33	20	23
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Short-term or seasonal work load	34.9	6.7	30.5	52.6	48.5	25.0	47.8
Staff emergencies (vacations, illnesses, other absences)	32.1	53.3	37.9	31.6	27.3	20.0	13.0
Emergencies, not specified	19.6	33.3	15.8	15.8	18.2	30.0	21.7
Convenience, as opposed to process of hiring permanent employees	4.3	--	6.3	--	6.1	5.0	--
Use of temporary employment period as means of screening for permanent employees	3.3	--	2.1	--	--	5.0	8.7
Immediate availability of workers	3.3	--	4.2	--	--	10.0	4.3
Availability of trained personnel	2.9	6.7	3.2	--	--	5.0	4.3

^aTotal includes all establishments giving a first reason for using temporary staff agencies, except for those that gave miscellaneous reasons. Government agencies are included in the total but are not shown separately, since very few used temporary staff agencies.

Appendix Table B-6

Nature of Union Influence Over Subcontracted Activities
Bay Area Employer Policy Survey, 1967

All establishments ^a	
Number	64
Per cent	100.0
Subcontracted work must be given to union workers and/or paid for at union wage rates	40.5
Union restricts or prohibits subcontracting	21.9
Union requires notification of any planned subcontracting and/or has the right to restrict or prohibit	9.4
Activities customarily conducted by establishment cannot be subcontracted	10.9
Potential jurisdiction claims by union over activities subcontracted	6.3
Union influences availability of licenses and/or workers for activities sometimes subcontracted	6.3
Full employment must be given establishment's employees before work can be subcontracted	4.7

^aTotal includes all establishments reporting that union influenced subcontracting, except for two that did not provide information.

Appendix Table C-1
Manufacturing Employment in the Bay Area,
by County, 1939-1965

County	Wage- earners 1939	Production workers 1947	All employees				Percentage change 1947 - 1965
			1947	1954	1958	1963	1965
Total			180.9 100.0	199.2 100.0	227.5 100.0	290.9 100.0	288.4 100.0
Number (000) Per cent	85.7 100.0	145.7 100.0					57.9%
Alameda	31.6	37.1	36.7	34.4	30.1	25.8	27.5
Contra Costa	16.1	13.8	13.4	14.1	11.6	9.9	9.4
Marin	0.3	0.4	0.4	0.6	0.8	0.7	1.0
San Francisco	37.1	32.8	34.0	28.4	24.5	20.8	19.7
San Mateo	4.1	5.3	5.2	8.5	10.5	10.2	10.4
Santa Clara	10.9	10.7	10.2	14.0	22.6	32.6	32.0
							397.1

Source: Computed from data in U. S. Census of Manufactures, 1947, 1954, 1958, and 1963; and U. S. Annual Survey of Manufactures, 1964-1965.

Appendix Table C - 2

Production Workers as Per Cent of All Employees
in Manufacturing, by County, Bay Area,
1947 and 1963

County	1947	1963
Bay Area (six counties)	<u>80.5</u>	<u>59.6</u>
Alameda	81.5	69.2
Contra Costa	82.6	64.7
Marin	79.8	70.4
San Francisco	77.6	58.3
San Mateo	81.2	60.2
Santa Clara	83.7	49.9

Source: Computed from data in U. S. Census of
Manufactures, 1947 and 1963.

Appendix Table C - 3

Negroes, Other Nonwhites, and Persons With Spanish Surnames
as Per Cent of Total Population, by County,
and Selected Sub-Areas, Bay Area, 1960

County and sub-area	Per cent of total population		
	Negro	Other nonwhite	Persons with Spanish surnames
Alameda	12.3	3.1	7.5
Oakland-Berkeley area	21.3	4.4	n.a.
Southern Alameda area	1.4	1.4	n.a.
Contra Costa	6.2	1.2	6.1
Marin	2.8	1.0	3.8
San Francisco	10.0	8.3	7.0
San Mateo	2.4	1.9	4.4
Santa Clara	0.7	2.6	12.1

Sources: U.S. Census of Population, 1960, Vol. I, Part 6,
Tables 25 and 28; Final Report, PC(2) - 1B.

Appendix Table C - 4

Negroes as Per Cent of Total Employees of Establishments,
 Manufacturing and Nonmanufacturing,
 Central Cities and Outer Ring --
 Bay Area Employer Policy Survey, 1967,
 Part II Data

Negroes as per cent of total employees	Total	Manufacturing		Nonmanufacturing	
		Central cities	Outer ring	Central cities	Outer ring
All responding establishments ^a					
Number	115	22	23	51	19
Per cent	100.0	100.0	100.0	100.0	100.0
No negroes	3.5	--	8.7	2.0	5.3
0 to 2.4	27.8	22.7	47.8	23.5	21.1
2.5 to 4.9	24.3	4.5	34.8	23.5	36.7
5.0 to 9.9	18.3	36.5	8.7	19.6	5.3
10.0 to 14.9	10.4	18.2	--	11.8	10.5
15.0 to 19.9	6.1	4.5	--	9.8	5.3
20.0 to 29.9	3.5	4.5	--	2.0	10.5
30.0 per cent or more	6.1	9.1	--	7.8	5.3
Negroes as per cent of all reported employees	8.1	6.9	2.3	11.4	5.8

^aTotal includes all establishments reporting the racial composition of their employment on Part II schedules.

Appendix Table C - 5

Industrial Distribution of Manufacturing Employees, by County, 1950,
and Percentage Changes by Industry, Bay Area, 1950-1966

(Data for Marin County not shown separately; percentages underlined if proportion for county exceeds that for area)

Industry	Bay Area	Alameda County	Contra Costa County	San Francisco County	San Mateo County	Santa Clara County	Percentage changes, six-county area, 1950-1966
All employees in manufacturing (000)	185.4	60.4	27.2	65.1	10.7	21.3	64%
Per cent a	100.0	100.0	100.0	100.0	100.0	100.0	
Nondurable goods	55.4	44.4	53.3	65.2	35.9	27.4	16
Food and kindred products	24.4	22.0	11.3	24.5	19.1	49.7	(9) (-) ^b
Textile mill products	1.3	2.8		1.2			(-18)(-27) ^b
Apparel	4.7	0.9		12.2			8
Paper and allied products	2.4	3.0		1.9			127
Printing, publishing, and allied products	9.0	6.2	1.2	16.0	6.6	5.5	37
Chemicals and allied products	6.2	8.1	10.2	3.4	10.2	2.2	16
Petroleum refining and related industries	6.9	0.9	30.6	6.0			(18) (-11) ^b
Rubber and miscellaneous plastic products	0.5	1.0					(67) (22) ^b
Durable goods	42.3	61.0	39.8	28.4	54.7		127
Lumber and wood products	2.1	2.5		1.0		2.4	- 24
Furniture and fixtures	3.0	3.6		4.8			- 9
Stone, clay, and glass products	3.8	4.2	5.1	1.5	6.6	6.6	52
Primary metal industries	6.9	6.4	19.6		24.3		(-11)(7) ^b
Fabricated metal products	9.3	8.9	7.8	11.4	6.4	6.3	42
Machinery, except electrical	7.4	12.7	1.3	5.3	4.2	7.6	(62) (51) ^b
Electrical machinery	3.5	3.0		2.0	7.5		669
Transportation equipment	5.8	11.3	6.0	2.4	5.7		63
Ordinance instruments	0.5	0.9					300

Sources: California Statistical Abstract; Handbook of California Labor Statistics, 1949-50 and 1955-56, California Department of Industrial Relations (San Francisco: 1951, 1957); Aerospace Employment: California and Metropolitan

(Continued)

Appendix Table C - 5, continued

Areas, 1949-1967, California Department of Industrial Relations (San Francisco: 1968); and California Employment and Payrolls, 1950 and October-December 1966, Supplement, Report 127, Nos. 13 and 29d, California Department of Employment (Sacramento: 1952 and 1967).

^aThe percentages of employees in nondurable and durable goods manufacturing do not add to 100.0, because miscellaneous and "other" categories have been excluded from the table. This procedure was followed because the composition of the "other" category varied from county to county. If a blank appears for a given industry in a given county, this does not necessarily mean that there was no employment in that industry, since the small number of employees in the industry may have been included in the "other" category.

^bThe industry was affected by classification changes in 1966; thus a percentage change cannot be computed for the entire period because of lack of comparability. The figures in percentages refer to changes from 1950 to 1956 and from 1958 to 1966 for slightly differing categories.

Appendix Table C - 6

Primary Advantage of Present Location,
by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967

Primary Advantage	Total	San Francisco County	Oakland-Berkeley Area	Southern Alameda County ^b	Northern San Mateo County	Southern San Mateo County	Santa Clara County	Contra Costa and Marin Counties
All establishments								
Number ^a	301	111	60	38	19	22	23	28
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proximity of markets	37.5	39.6	30.0	44.7	31.6	40.9	39.1	35.7
Advantages relating to land, space for expansion, etc.	6.6	4.5	8.3	7.9	10.5	9.1	4.3	7.1
Proximity to materials	4.7	--	6.7	7.9	--	--	4.3	21.4
Desirable site re immediate neighborhood	8.3	9.9	3.3	7.9	5.3	13.6	17.4	3.6
Good quality labor	5.3	5.4	1.7	5.3	5.3	13.6	18.7	3.6
Access to transportation	8.6	8.1	16.7	10.5	5.3	.4	--	7.1
Reasonably priced land	1.3	2.7	--	--	5.3	--	--	--
Proximity to educational research institutions	3.0	--	1.7	5.3	--	4.6	17.4	3.6
Other	18.6	20.7	23.3	7.9	36.7	9.1	8.7	17.9
No advantages	6.0	9.0	8.3	2.6	--	--	--	--

^aTotal excludes establishments not reporting a primary advantage.

^bFor definitions of these areas, see footnotes to Table 3-3.

Appendix Table C - 7

Most Important Factor in Determination of Optimal Location,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Most important factor	Total	Mining and con- struc- tion	Durable	Non- durable	Trans- porta- tion and utili- ties	Trade	Finance, insur- ance, and real estate	Ser- vices	Govern- ment
Total	297 ^a	26	54	61	27	43	24	35	27
Number	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent									
Space for expansion	4.4	3.8	-	6.6	-	2.3	-	11.4	11.1
Reasonably priced land	2.4	3.8	-	3.3	3.7	-	-	2.9	7.4
Proximity to markets	50.3	46.4	48.0	49.1	48.2	81.4	66.6	31.4	22.3
Proximity to materials	7.7	7.7	5.6	23.0	3.7	4.7	-	-	3.7
Proximity to educational/research institutions	1.7	-	7.4	-	-	-	-	-	3.7
Availability of labor	11.1	-	22.2	4.9	7.4	2.3	12.5	20.0	18.5
Wage rates	2.7	-	7.4	3.3	-	-	-	5.7	-
Prestige of location	1.3	3.8	-	-	7.4	-	-	2.9	-
Centrality in community	4.0	7.7	-	1.6	3.7	2.3	4.2	5.7	14.8
Centrality <u>re</u> own operations	4.0	3.8	1.9	-	11.1	-	4.2	5.7	14.8
Access to transportation	7.4	11.5	5.6	8.2	14.8	4.7	4.2	8.6	3.7
Other	3.0	11.5	1.9	-	-	2.3	8.3	5.7	-

^aTotal excludes establishments not mentioning most important factor.

Appendix Table C - 8
 Second Most Important Factor in Determination of Optimal Location,
 by Major Industry Group --
 Bay Area Employer Policy Survey, 1967

Second most important factor		Mining and construction		Durable		Non-durable		Transportation and utilities		Trade		Finance, insurance, and real estate		Services		Government	
Total		259 ^a		53		57		20		38		20		30		27	
Number		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0	
Per cent		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0	
Space for expansion		12.0	21.4*	1.9	19.3	5.0	5.3	5.0	5.0	5.0	5.0	5.0	5.0	16.7	26.0	18.5	26.0
Reasonably priced land		11.6	7.1*	9.4	5.3	5.0	18.4	5.0	20.0	13.3	18.5	20.0	13.3	20.1	18.5	3.7	18.5
Proximity to markets		13.5	14.3*	13.2	12.3	35.0	7.9	35.0	10.0	20.1	3.7	10.0	20.1	7.4	3.7	7.4	3.7
Proximity to materials		10.8	35.8*	9.4	21.0	5.0	7.9	5.0	-	-	7.4	-	-	-	7.4	7.4	7.4
Proximity to educational/research institutions		1.9	-	3.8	-	-	-	-	-	3.3	7.4	-	3.3	3.3	7.4	7.4	7.4
Availability of labor		14.7	14.3*	15.1	10.5	15.0	13.2	15.0	30.0	20.0	7.4	30.0	20.0	20.0	7.4	7.4	7.4
Wage rates		6.2	-	17.0	3.5	-	7.9	-	5.0	3.3	-	5.0	3.3	-	-	-	-
Prestige of location		1.5	-	-	-	-	5.3	-	10.0	-	-	10.0	-	-	-	-	-
Centrality in community		1.5	-	-	1.8	-	-	-	5.0	-	-	5.0	-	-	-	7.4	7.4
Access to transportation		22.1	7.1*	26.4	21.0	35.0	31.5	35.0	5.0	20.0	14.8	5.0	20.0	20.0	14.8	14.8	14.8
Taxes		1.9	-	3.8	3.5	-	-	-	-	-	-	-	-	-	3.7	3.7	3.7
Other		2.3	-	-	1.8	-	2.6	-	10.0	3.3	3.7	-	3.3	3.3	3.7	3.7	3.7

*Percentages based on fewer than 15 cases.

^aTotal excludes establishments not mentioning second most important factor.

Appendix Table C - 9
Third Most Important Factor in Determination of Optimal Location,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Third most important factor	Total	Mining and con- struc- tion	Durable	Non- durable	Trans- porta- tion and utili- ties	Finance, insur- ance, and real estate	Ser- vices	Govern- ment
Total	211 ^a	12	47	52	14	15	19	20
Number	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent								
Space for expansion	20.9	25.0*	17.0	5.8	35.8	39.9	15.8	20.9
Reasonably priced land	8.1	8.3*	8.5	13.5	7.1*	-	5.3	8.1
Proximity to markets	5.2	8.3*	4.3	9.6	-	-	10.5	5.2
Proximity to materials	4.7	-	10.6	1.9	14.3	-	-	4.7
Availability of labor	17.1	16.7*	19.2	19.2	21.4*	26.7	5.3	17.1
Wage rates	9.5	8.3*	19.1	3.8	7.1*	6.7	10.5	9.5
Access to transportation	26.5	33.4*	14.9	36.6	14.3*	20.0	36.8	26.5
Taxes	4.7	-	4.3	9.6	-	-	-	4.7
Other	3.3	-	2.1	-	-	6.7	15.8	3.3

C-10

*Percentages based on fewer than 15 cases.

^aTotal excludes firms not mentioning third most important factor.

Appendix Table C - 10

Major Occupation Group of Employed Male Residents,
Counties and Selected Sub-Areas,
Bay Area, 1960

Major occupation group	Total	Oakland and Berkeley	Southern Alameda County	Contra Costa County
All male employed residents	100.0%	100.0%	100.0%	100.0%
White-collar workers	46.6	45.8	40.4	42.6
Professional, technical, and kindred workers	15.9	16.0	12.8	15.6
Managers, officials, and pro- priators, except farm	12.9	11.6	12.1	12.7
Clerical and kindred workers	8.9	9.3	7.6	6.2
Sales workers	8.9	8.3	7.9	8.1
Blue-collar workers	43.3	45.0	52.1	49.7
Craftsmen, foremen, and kindred workers	21.0	18.4	26.7	23.4
Operatives and kindred workers	15.5	16.9	19.0	19.6
Laborers, except farm and mine	6.8	9.7	6.4	6.7
Service workers	8.3	8.9	5.5	5.5
Private household workers	0.2	0.2	0.1	0.1
Service workers, except private household	8.1	8.7	5.4	5.4
Farm workers	1.8	0.9	2.0	2.2
Farmers and farm managers	0.9	0.4	0.9	0.9
Farm workers and foremen	0.9	0.5	1.1	1.3

(continued on next page)

Appendix Table C - 10 (continued)

Major occupation group	Marin County	San Francisco County	San Mateo County	Santa Clara County
All male employed residents	100.0%	100.0%	100.0%	100.0%
White-collar workers	60.4	46.4	51.9	46.8
Professional, technical, and kindred workers	20.9	12.8	16.5	20.0
Managers, officials, and pro- prietors, except farm	19.4	12.0	15.9	11.8
Clerical and kindred workers	7.6	12.7	8.5	7.1
Sales workers	12.5	8.9	11.0	7.9
Blue-collar workers	30.3	39.0	40.1	43.1
Craftsmen, foremen, and kindred workers	17.3	17.1	22.7	22.2
Operatives and kindred workers	8.0	14.4	12.2	15.1
Laborers, except farm and mine	5.0	7.5	5.2	5.8
Service workers	6.5	14.2	6.8	6.1
Private household workers	0.2	0.4	0.2	0.1
Service workers, except private household	6.3	13.8	6.4	6.0
Farm workers	2.8	0.4	1.4	4.0
Farmers and farm managers	1.2	0.2	0.8	1.9
Farm workers and foremen	1.6	0.2	0.6	2.1

Source: U. S. Census of Population, 1960, Vol. I, Part 6, Tables 74 and 84.

Appendix Table D-1

**Number of Years Since Union (or Unions) Was First
Recognized as a Bargaining Agent, by Major Industry Group --
Bay Area Employer Policy Survey, 1967**

Major industry group	Total		Number of years					
	Number	Per cent	Less than 5	5 to 10	10 to 25	25 to 35	35 to 50	50 or more
All establishments ^a	222	100.0	4.5	5.4	28.3	46.4	8.6	6.3
Mining and construction	24	100.0	4.2	--	20.8	50.0	16.7	8.3
Manufacturing								
Durable	48	100.0	2.1	8.3	41.6	41.7	4.2	2.1
Nondurable	58	100.0	--	1.7	27.6	53.4	12.1	5.2
Transportation and utilities	25	100.0	8.0	8.0	16.0	36.0	8.0	24.0
Trade								
Wholesale	11	100.0	9.1*	--	36.3*	27.3*	9.1*	18.2*
Retail	26	100.0	--	7.7	19.2	69.3	3.8	--
Finance, insur- ance, and real estate	4	100.0	--	--	50.0*	50.0*	--	--
Services	23	100.0	13.0	8.7	34.8	34.8	8.7	--
Government	3	100.0	66.7*	33.3*	--	--	--	--

*Percentages based on fewer than 15 cases.

^aTotal excludes establishments not covered by a collective bargaining agreement and those not reporting number of years since union was first organized.

Appendix Table D-2

**Leading Unions Represented in Establishments, Ranked
by Estimated Total Members Represented --
Bay Area Employer Policy Survey, 1967**

Union ^a	Rank
International Association of Machinists and Aerospace Workers (AFL-CIO)	1
International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers (Ind.)	2
Retail, Wholesale, and Department Store Union (AFL-CIO)	3
Retail Clerks International Association (AFL-CIO)	4
United Steel Workers of America (AFL-CIO)	5
Building Service Employees International Union (AFL-CIO)	6
International Brotherhood of Electrical Workers (AFL-CIO)	7
United Automobile, Aerospace, and Agricultural Implement Workers (Ind.)	8
United Brotherhood of Carpenters and Joiners (AFL-CIO)	9
International Brotherhood of Boilermakers, Iron Shipbuilders, Blacksmiths, Forgers, and Helpers (AFL-CIO)	10
International Union of Hotel and Restaurant Employees and Bartenders (AFL-CIO)	11
Laborers' International Union (AFL-CIO)	12
Seafarers' International Union (AFL-CIO)	13
International Union of Operating Engineers (AFL-CIO)	14
International Longshoremen's and Warehousemen's Union (Ind.)	15
Oil, Chemical, and Atomic Energy Workers' Inter- national Union (AFL-CIO)	16
Amalgamated Meat Cutters and Butchers Workmen (AFL-CIO)	17
National Association of Letter Carriers (AFL-CIO)	18
California State Nurses' Association (Ind.)	19

^a A few unions have been omitted from this list for reasons associated with the confidentiality of the interviews.

Appendix Table D-3

Per Cent of the 309 Establishments in Which Leading Unions
Represent Groups of Employees --
Bay Area Employer Policy Survey, 1967

Union	Per cent of all establishments in which union is represented
International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America (Ind.)	40.8
International Association of Machinists and Aerospace Workers (AFL-CIO)	24.3
International Union of Operating Engineers (AFL-CIO)	19.4
United Brotherhood of Carpenters and Joiners of America (AFL-CIO)	12.9
Building Service Employees International Union (AFL-CIO)	11.0
International Brotherhood of Electrical Workers (AFL-CIO)	8.4
International Union of Hotel and Restaurant Employees and Bartenders (AFL-CIO)	7.4
Office and Professional Employees International Union (AFL-CIO)	7.4
Laborer's International Union of North America (AFL-CIO)	6.8
International Longshoremen's and Warehousemen's Union (Ind.)	5.5
International Printing Pressmen and Assistants Union of North America (AFL-CIO)	5.5
United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada (AFL-CIO)	5.2
Brotherhood of Painters, Decorators, and Paperhangers of America (AFL-CIO)	5.2
Retail, Wholesale, and Department Store Union (AFL-CIO)	4.5
Retail Clerks International Association	4.2

Appendix Table D-4

Per Cent of the 309 Establishments Belonging to
Leading Employer Associations --
Bay Area Employer Policy Survey, 1967

Association	Per cent belonging
Federated Employers of the Bay Area	12.0
California Metal Trades' Association	6.1
Associated General Contractors	5.5
California Trucking Association	3.2
United Employers, Inc.	2.6
California Processors and Growers	2.3
National Association of Manufacturers	2.3
Food Employers Labor Relations Association	1.9
Industrial Employers and Distributors' Association	1.6
San Francisco Retailers' Council	1.6
Pacific Maritime Association	1.6
Western Electronics Manufacturers' Association	1.3

Appendix Table D-5

Relations of Association to Establishment, for Establishments
Belonging to Employer Associations, by Number of Employees --
Bay Area Employer Policy Survey, 1967

Number of employees	Total		Negotiates agreements	Negotiates grievances	Affects employment policy	May limit non-wage benefits	Training program activities	Provides information	Other
	Number	Per cent							
All responses ^a	360	100.0	33.9	26.1	6.1	6.1	11.1	11.9	4.7
Less than 250	97	100.0	55.7	44.3	6.2	9.3	18.6	17.5	11.3
250 to 499	102	100.0	33.3	27.5	9.8	6.9	11.8	9.8	1.0
500 to 999	48	100.0	35.4	29.2	6.2	4.2	8.3	10.4	6.2
1,000 to 1,999	30	100.0	33.3	20.0	6.7	10.0	13.3	16.7	--
2,000 or more	22	100.0	31.8	13.6	4.5	4.5	9.1	27.3	9.1

^aThe data include all the responses of the 161 establishments represented in Table 6-9.

Appendix Table D-6

Relations of Association to Establishment, for all Establishments
Belonging to Employer Associations, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Negotiates agreements	Negotiates grievances	Affects employment policy	May limit non-wage benefits	Training program activities	Provides information	Other
	Number	Per cent							
All responses	360	100.0	33.9	26.1	6.1	6.1	11.1	11.9	4.7
Mining and construction	57	100.0	36.8	24.6	5.3	8.8	17.5	5.3	--
Manufacturing	66	100.0	21.2	15.2	6.1	3.0	18.2	27.3	9.1
Durable	74	100.0	39.2	31.1	5.4	5.4	5.4	8.1	5.4
Nondurable									
Transportation and utilities	35	100.0	37.1	28.6	2.9	8.6	14.3	8.6	--
Trade									
Wholesale	17	100.0	41.2	29.4	11.8	5.9	--	5.9	5.9
Retail	50	100.0	42.0	30.0	6.0	4.0	8.0	2.0	8.0
Finance, insurance, and real estate	15	100.0	13.3	13.3	6.7	--	20.0	46.7	--
Services	46	100.0	32.6	30.4	8.7	10.9	4.3	8.7	4.3
Government	0	100.0	--	--	--	--	--	--	--

^aThe data include all the responses of the 161 establishments represented in Table 6-9.

Appendix Table D-7

Per Cent of Unionized Private Establishments Belonging to
Employer Associations, and Role of Employer Associations,
in Relation to Collective Bargaining Negotiations,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Belongs to employer associa- tion	Employer association		Does not belong to employers associa- tion
	Number	Per cent		Negotiates CBA's	Advises on negotia- tions	
All establish- ments ^a	234	100.0	73.2	49.8	2.6	26.8
Construction	25	100.0	88.0	80.0	4.0	12.0
Manufacturing						
Durable	52	100.0	80.8	26.9	3.8	19.2
Nondurable	57	100.0	63.2	45.6	5.3	36.8
Transportation and utilities	26	100.0	61.5	50.0	--	38.5
Trade						
Wholesale	12	100.0	83.3 [*]	58.3 [*]	--	16.7 [*]
Retail	29	100.0	75.9	72.4	--	24.1
Finance, insur- ance, and real estate	6	100.0	50.0 [*]	33.3 [*]	--	50.0 [*]
Services	27	100.0	77.8	51.9	--	22.2

* Total excludes establishments not covered by a collective bargaining agreement, those not providing information, and government establishments.

Appendix Table E - 1

Types of Separations of Skilled Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Types of separations					
	Total		Primarily quits	Primarily layoffs	Few of either	Quits and layoffs about equal
	Number	Per cent				
All establishments ^a	247	100.0	69.2	13.8	16.2	0.8
Mining and construction	24	100.0	8.3	83.4	8.3	--
Manufacturing						
Durable goods	54	100.0	72.2	14.8	11.1	1.9
Nondurable goods	60	100.0	61.7	3.3	33.3	1.7
Transportation and utilities	24	100.0	79.1	4.2	16.7	--
Trade	29	100.0	75.9	10.3	13.8	--
Services	23	100.0	87.0	--	13.0	--
Government	29	100.0	96.6	--	3.4	--

^aTotal excludes establishments not employing skilled workers and those not providing information. Only a few establishments in finance, insurance, and real estate employed skilled workers. They are included in the total but are not shown separately.

Appendix Table E - 2

Types of Separations of Semi-skilled Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Types of separations ^a			
			Primarily quits	Primarily layoffs	Few of either	Quits and layoffs about equal
	Number	Per cent				
All establishments ^a	238	100.0	57.9	32.8	7.6	1.7
Mining and construction	24	100.0	4.2	91.6	4.2	--
Manufacturing						
Durable goods	54	100.0	50.0	44.4	1.9	3.7
Nondurable goods	61	100.0	54.1	31.1	11.5	3.3
Transportation and utilities	24	100.0	70.9	20.8	8.3	--
Trade	28	100.0	67.9	21.4	10.7	--
Services	18	100.0	72.2	11.1	16.7	--
Government	26	100.0	96.2	--	3.8	--

^aTotal excludes establishments not employing skilled workers and those not providing information. Only a few establishments in finance, insurance, and real estate employed semi-skilled workers. They are included in the total but are not shown separately.

Appendix Table E - 3

Types of Separations of Unskilled Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Types of separations					
	Total		Primarily quits	Primarily layoffs	Few of either	Quits and layoffs about equal
	Number	Per cent				
All establishments ^a	246	100.0	52.4	37.0	6.1	4.5
Mining and construction	24	100.0	4.2	91.6	4.2	--
Manufacturing						
Durable goods	53	100.0	43.4	50.9	--	5.7
Nondurable goods	60	100.0	35.0	46.7	8.3	10.0
Transportation and utilities	22	100.0	59.1	18.2	18.2	4.5
Trade	39	100.0	69.2	20.5	7.7	2.6
Services	19	100.0	79.0	10.5	10.5	--
Government	26	100.0	100.0	--	--	--

^aTotal excludes establishments not employing unskilled workers and those not providing information. Only a few establishments in finance, insurance, and real estate employed unskilled workers. They are included in the total but are not shown separately.

Appendix Table E - 4

Types of Separations of Service Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Types of separations			
			Primarily quits	Primarily layoffs	Few of either	Quits and layoffs about equal
	Number	Per cent				
All establishments ^a	203	100.0	74.4	13.3	11.3	1.0
Manufacturing						
Durable goods	47	100.0	61.7	23.4	12.8	2.1
Nondurable goods	38	100.0	60.6	18.4	18.4	2.6
Transportation and utilities	13	100.0	92.3 [*]	--	7.7 [*]	--
Trade	35	100.0	80.0	11.4	8.6	--
Finance, insurance, and real estate	11	100.0	100.0 [*]	--	--	--
Services	27	100.0	88.9	3.7	7.4	--
Government	25	100.0	92.0	--	8.0	--

^{*} Percentages based on fewer than 15 cases.

^a Total excludes establishments not employing service workers and those not providing information. Only a few construction establishments employed service workers. They are included in the total but are not shown separately.

Appendix Table E - 5

Major Occupation Groups Mentioned as Having
 "Higher Than Average Voluntary Quit Rates,"
 by Major Industry Group --
 Bay Area Employer Policy Survey, 1967

(Data relate to the first occupation group mentioned by the respondent.)

Major industry group	Total		Profes- sional and techni- cal	Cleri- cal	Sales	Skilled	Semi- skilled	Un- skilled	Ser- vice
	Num- ber	Per cent							
All establish- ments ^a	231	100.0	13.4	47.5	6.5	4.8	8.7	12.6	6.5
Mining and construction	12	100.0	16.7*	83.3*	--	--	--	--	--
Manufacturing									
Durable goods	44	100.0	9.1	34.1	--	15.9	18.2	22.7	--
Nondurable goods	46	100.0	6.5	39.1	6.5	6.5	10.9	28.3	2.2
Transportation and utilities	19	100.0	5.2	47.5	5.2	--	21.1	15.8	5.2
Trade	34	100.0	--	47.0	32.4	2.9	--	5.9	11.8
Finance, in- surance, and real estate	24	100.0	--	95.8	--	--	--	--	4.2
Services	28	100.0	42.9	32.1	--	--	10.7	--	14.3
Government	24	100.0	37.5	41.6	--	--	--	4.2	16.7

* Percentages based on fewer than 15 cases.

^aTotal excludes establishments not mentioning any occupational group with higher than average voluntary quit rates and employers that could not provide information.

Appendix Table E - 6

Most Important Factors as to Effectiveness in Reducing Voluntary Quits,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Job security	Seniority	Encouragement of promotion	Higher wage rates	Pension, other fringe benefits	Working conditions, environmental, factors, etc.
	Num-ber	Per cent						
All responses ^a	713	100.0	24.3	16.7	15.6	15.0	8.1	20.3
Mining and construction	38	100.0	23.7	13.2	15.8	18.4	5.3	23.7
Manufacturing								
Durable	146	100.0	23.3	17.8	12.3	15.8	5.5	25.3
Nondurable	149	100.0	28.2	18.8	13.4	12.8	8.1	18.8
Transportation and utilities	67	100.0	19.4	26.9	20.9	11.9	7.5	13.5
Trade								
Wholesale	25	100.0	36.0	16.0	16.0	24.0	--	8.0
Retail	86	100.0	18.6	10.5	20.9	11.6	5.8	32.7
Finance, insurance, and real estate	68	100.0	16.2	11.8	23.5	16.2	4.4	28.0
Services	81	100.0	21.0	16.0	4.9	12.3	13.6	32.0
Government	79	100.0	27.8	10.1	13.9	7.6	15.2	16.5

^aTotal includes all responses of the 277 establishments that provided information on at least one "most important factor."

Appendix F

Additional Information on Employer Wage Policies

Correction of Individual Inequities

Employers were also asked what policies were followed to correct individual inequities if the establishment's wage classification structure got out of line because wage increases had been given to specific individuals, occupations, or groups of workers. Nearly 30 per cent of the employers indicated that they did not have a general policy for meeting this situation. Moreover, there were some significant variations by major industry group in this respect. Nearly half of the construction employers, for example, indicated that they did not have such a policy, probably reflecting the fact that, among the smaller construction establishments with very few white-collar employees, this type of problem would be unlikely to arise. Approximately two-fifths of the establishments in the finance group also indicated that they did not have a specific policy for correcting individual inequities. Here the explanation was doubtless quite different. Since relatively few firms in this industry group granted general wage increases, individual inequities would be unlikely to arise as a result of increases granted to groups of workers. In addition, nearly two-fifths of the government establishments indicated that they did not have such a policy, but in this case the explanation doubtless lay in the fact that most of the government agencies granted their general increases to all employees.

Adjustment by management on an individual basis was by far the most common method of correcting individual inequities within establishments, accounting for nearly half of the responses relating to this question (Appendix Table F-3). A policy of periodic wage and salary review was also of some importance, accounting for about a quarter of the responses, while job evaluation and/or position reclassification represented about 10 per cent of the replies and adjustment on the basis of surveys of prevailing wages in the area about 8 per cent.

Here, again, there were consistent variations by size of establishment, with the relative importance of adjustments on an individual basis declining consistently with increasing numbers of employees, whereas a policy of periodic wage and salary review increased fairly consistently in relative importance with increasing size of the firm, as did policies of job evaluation and/or position reclassification.

Appendix Table F - 1

Types of General Wage Increases^a Granted, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Major industry group	Total		Flat percentage increase	Flat dollar and cents increase	Range increase	Does not grant general increases
	Number	Per cent				
All responses ^a	367	100.0	25.4	53.9	12.0	8.7
Mining and construction	34	100.0	17.6	73.6	8.8	--
Manufacturing						
Durable	64	100.0	21.9	59.3	9.4	9.4
Nondurable	75	100.0	26.7	64.0	9.3	--
Transportation and utilities	35	100.0	34.3	57.1	5.7	2.9
Trade						
Wholesale	15	100.0	6.7	79.9	6.7	6.7
Retail	38	100.0	15.8	73.7	7.9	2.6
Finance, insurance, and real estate	26	100.0	--	--	19.2	80.8
Services	47	100.0	29.8	44.7	23.4	2.1
Government	33	100.0	60.6	18.2	18.2	3.0

^aBased on the sum of the first and second responses by establishments.

Appendix Table F - 2

**Salary Structure Adjustment Policies for Nonexempt
White-Collar Employees, by Number of Employees--
Bay Area Employer Policy Survey, 1967**

Salary structure adjustment policies	Total	Less than 250	250 to 499	500 to 999	1,000 to 1,999	2,000 and over
All responses^a						
Number	378	145	88	64	41	40
Per Cent	100.0	100.0	100.0	100.0	100.0	100.0
Individual adjustments	32.3	38.7	31.8	31.2	24.5	20.0
At the discretion of management	20.1	27.7	21.6	15.6	9.8	7.5
Timed for anniversary hiring dates	9.0	6.2	10.2	12.5	9.8	10.0
Timed for selected dates other than anniversary hiring dates	3.2	4.8	--	3.1	4.9	2.5
Pegging increases to general wage increases under collective bargaining agreements	10.6	14.4	5.7	4.7	12.2	15.0
Formal periodic review	44.4	28.2	52.2	51.6	60.9	57.5
Based on merit	33.6	23.4	35.2	37.5	48.7	45.0
Based on other factors	10.8	4.8	17.0	14.1	12.2	12.5
Informal review	9.8	16.6	8.0	9.4	--	--
Incentive award program involving quality step increases	2.4	0.7	2.3	3.1	2.4	7.5
Other policies	0.5	1.4	--	--	--	--

^aTotal excludes 26 establishments that did not have adjustment policies other than general wage or range increase policies and those that did not provide information. The total exceeds the number of establishments reporting, since some gave more than one response.

Appendix Table F - 3

Methods of Wage or Salary Adjustment Used by Establishments
to Correct Individual Inequities by
Number of Employees --
Bay Area Employer Policy Survey, 1967

Methods to correct individual inequities	Total	Less than 250	250 to 499	500 to 999	1,000 to 1,999	2,000 and over
All responses ^a						
Number	221	83	54	39	22	23
Per Cent	100.0	100.0	100.0	100.0	100.0	100.0
Adjustments on an individual basis	45.8	55.5	42.5	43.6	36.5	30.4
Periodic wage and salary review	25.3	22.9	24.1	20.5	31.8	39.2
Adjustment on the basis of surveys of prevailing wages and salaries in the area	8.1	6.0	13.0	7.7	13.6	--
Job evaluation and/or position reclassification	10.4	6.0	9.3	12.8	13.6	21.7
Other methods	10.4	9.6	11.1	15.4	4.5	8.7

^aTotal excludes 91 establishments that did not have policies of correcting individual inequities and those that did not provide information. The total exceeds the number of establishments reporting since some establishments reported more than one method.

Appendix Table F - 4

Types of Increases in Employee Compensation Necessitated by Shortages
of Specific Categories of White-Collar Workers and
Blue-Collar Workers, by Major Industry Group --
Bay Area Employer Policy Survey, 1967

Types of increases	White-collar workers			Blue-collar workers			
	Total	Private em- ployers	Govern- ment	Total	Strongly union- ized indus- tries ^b	Less strongly unionized indus- tries ^c	Govern- ment
All responses ^a							
Number	518	430	78	169	69	28	72
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Raised wage level for group (no union agreement prevailed)	44.6	43.5	53.9	34.3	20.3	32.1	48.6
Granted individual wage increases (no union agree- ment prevailed)	37.8	43.6	11.5	11.2	7.2	21.4	11.1
Raised wage level for group beyond union rates (union agree- ment prevailed)	2.3	0.8	--	16.0	33.3	10.7	1.4
Added a premium to union rate for individual workers	--	--	--	9.5	21.8	3.6	--
Offered other inducements	15.3	12.1	34.6	29.0	17.4	32.2	38.9

^aTotal excludes establishments that did not find it necessary to increase employee compensation to attract or retain workers in specific occupations and those that did not provide information. Total exceeds number of establishments reporting, since some establishments reported more than one type of increase.

^bIncludes construction, manufacturing, transportation and utilities, and whole-sale trade.

^cIncludes retail trade; finance, insurance, and real estate; and services.

Appendix Table F - 5

Employers' Assessments of Their Relative Wage Rates for Typist A
as Compared With the Relative Level of the Same Employers'
Rates Reported on Part II Schedules --
Bay Area Employer Policy Survey, 1967

Relative level of lowest rates ^a	Total		Employers' assessments of relative rates		
	Number	Per cent	Higher	Lower	About the same
All establishments ^b	48	100.0	33.3	2.1	64.6
Lowest rate at least two class intervals below the median rate	14	100.0	28.6*	--	71.4*
Lowest rate within range of one class interval above or below the median	22	100.0	31.8	4.5	63.6
Lowest rate at least two class intervals above the median	12	100.0	41.7*	--	58.3*

* Percentages based on fewer than 15 cases.

^aThe employer's relative rate was determined on the basis of comparison with the median rate for the same major industry group -- not on the basis of comparison with the median rate for all establishments reporting typist A wages. Four major industry groups, for which at least ten establishments reported typist A rates, were used in this analysis -- durable goods manufacturing, nondurable goods manufacturing, government, and finance, insurance, and real estate.

^bTotal includes all establishments in the four major industry groups listed in footnote A, for which comparisons could be made between the lowest rate reported by the establishment and the respondents assessment of his relative rates for white-collar workers in comparison with those of other establishments engaged in similar activities.

Appendix Table F - 6

Median Hourly Wage Rates Paid to Workers in Selected Occupations and Interquartile Range -- Bay Area Employer Policy Survey, 1967^a, and BLS Area Wage Survey, San Jose Metropolitan Area, September 1967^b, and San Francisco-Oakland Metropolitan Area, January 1968^c

Occupation	Bay Area Employer Policy Survey	BLS San Jose Survey	BLS San Francisco- Oakland Survey
Typist A			
Median	\$ 2.45	\$ 2.82	\$ 2.28
Interquartile range	2.25 - 2.57	2.44 - 2.96	2.20 - 2.50
Janitor ^d			
Median	2.75	2.58	2.76
Interquartile range	2.50 - 3.00	2.52 - 2.75	2.57 - 2.93
Laborer			
Median	3.13	2.84	3.33
Interquartile range	2.79 - 3.32	2.66 - 3.11	3.19 - 3.81
Maintenance mechanic			
Median	3.81	3.68	3.85
Interquartile range	3.78 - 4.02	3.63 - 3.83	3.56 - 3.98
Draftsman A			
Median	3.98	3.56	4.44
Interquartile range	3.54 - 4.41	3.28 - 3.82	4.11 - 4.62
Truck driver			
Median	3.76	3.83	3.86
Interquartile range	3.54 - 3.94	3.63 - 4.05	3.78 - 4.01

^aPart II data.

^bBulletin No. 1575-15, U. S. Bureau of Labor Statistics (Washington, D.C.: U. S. Government Printing Office, 1968).

^cBulletin No. 1575-37, U. S. Bureau of Labor Statistics (Washington, D.C.: U. S. Government Printing Office, 1968).

^dBLS data relate to janitors, porters, and cleaners.

Appendix Table F - 7

Relationship of Lowest White-Collar Wage Rates in Establishments
to Median of Lowest Rates in the Same Major Industry Group,
by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967
Part II Data

Main address of establishment	Total		Well below median	Not far from median ^b	Well above median
	Number	Per cent			
All establishments ^a	65	100.0	27.7	44.6	27.7
San Francisco County	19	100.0	36.8	42.1	21.1
Oakland-Berkeley area	12	100.0	33.3 *	33.4 *	33.3 *
Southern Alameda County	16	100.0	18.8	25.0	56.2
San Mateo and Santa Clara counties	14	100.0	21.4 *	71.4 *	7.1 *

* Percentages based on fewer than 15 cases.

^aTotal includes all establishments reporting wage rates for typist A and/or draftsman A within major industry groups in which at least seven reports relating to a given occupational class were received. For typists, these included durable manufacturing, nondurable manufacturing, government, and finance, insurance, and real estate. For draftsman, only durable goods manufacturing was included, since insufficient reports were received in other major industry groups. Contra Costa and Marin establishments are included in the total but are not shown separately because of the small number reporting.

^bIn the case of typists, "not far from median" means that the rate for the establishment fell within the \$20 a month class interval in which the median was found or in the class interval just above or below that in which the median fell. In the case of draftsmen, we included two class intervals above and below the median, since the rates were more widely dispersed.

Appendix Table F - 8

Relationship of Lowest Blue-Collar Wage Rates in Establishments
to Median of Lowest Rates in the Same Major Industry Group,
by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967
Part II Data

Main address of establishment	Total		Well below median	Not far from median ^b	Well above median
	Number	Per cent			
All establishments ^a	108	100.0	14.8	66.7	18.5
San Francisco County	17	100.0	--	70.6	29.4
Oakland-Berkeley area	29	100.0	6.9	55.2	37.9
Southern Alameda County	23	100.0	13.0	78.3	8.7
San Mateo and Santa Clara counties	18	100.0	44.4	50.0	5.6
Contra Costa and Marin counties	21	100.0	14.3	80.9	4.8

^aTotal includes all establishments reporting wage rates for maintenance mechanics, truck drivers, and/or laborers within major industry groups in which at least seven reports relating to a given occupational class were received. For maintenance mechanics, these included durable manufacturing, nondurable manufacturing, and government; for truck drivers they included manufacturing (combining durable and nondurable); and, for laborers, they included durable manufacturing, nondurable manufacturing, and retail trade.

^bIn all cases, "not far from median" means that the rate for the establishment fell within the 20¢ an hour class interval in which the median was found or in the class interval just above or below that in which the median fell.

Appendix Table F - 9

Relationship of Lowest Wage Rates for Janitors in Establishments
to Median of Lowest Rates in the Same Major Industry Group,
by Main Address of Establishment --
Bay Area Employer Policy Survey, 1967
Part II Data

Main address of establishment	Total		Well below median	Not far from median ^b	Well above median
	Number	Per cent			
All establishments ^a	62	100.0	17.7	66.2	16.1
San Francisco County	18	100.0	16.7	72.2	11.1
Oakland-Berkeley area	14	100.0	14.3*	64.3*	21.4*
Southern Alameda County	7	100.0	--	57.1*	42.9*
San Mateo and Santa Clara counties	17	100.0	35.3	52.9	11.8
Contra Costa and Marin counties	6	100.0	--	100.0*	--

* Percentages based on fewer than 15 cases.

^aTotal includes all establishments reporting wage rates for janitor A or janitor B within major industry groups in which at least seven reports relating to a given occupational class were received. These included durable manufacturing, nondurable manufacturing, retail trade, services, and government. Wage rates for janitor A and janitor B were almost always identical when both were reported for the same establishment.

^b"Not far from median" means that the rate for the establishment fell within the 20¢ an hour class interval in which the median was found or in the class interval just above or below that in which the median fell.

Appendix Table F - 10

Median of Lowest Wage Rates Paid by Establishments
to Workers in Selected Occupations,
by Major Industry Group --
Bay Area Employer Policy Survey, 1967
Part II Data

(Numbers in parentheses indicate number of reporting establishments)

Major industry group	Typist A (per month)	Janitor (per hour)	Laborer (per hour)	Maintenance mechanic (per hour)	Drafts- man A (per month)	Truck driver (per hour)
Total	\$ 403 (73)	\$ 2.68 (71)	\$ 3.06 (64)	\$ 3.56 (55)	\$ 649 (31)	\$ 3.74 (32)
Manufacturing						
Durable	420 (18)	2.68 (18)	2.94 (18)	3.67 (18)	645* (13)	} 3.66* (13)
Nondurable	400 (15)	2.90 (18)	3.08 (19)	3.55 (23)	--	
Retail trade		2.64* (10)	3.35* (9)	--	--	--
Finance, insurance, and real estate	367* (11)	--	--	--	--	--
Government	420* (10)	2.75* (10)	--	3.60* (8)	--	--

* Median based on fewer than 15 cases.

Appendix G

INSTITUTE OF INDUSTRIAL RELATIONS

201 California Hall
University of California
Berkeley, California 94720

BAY AREA EMPLOYER POLICY SURVEY

Part I - Interview Schedule

All information reported on this interview schedule together with that supplied on the supplementary tables comprising Part II will be held in strict confidence. No information from these sources will be published in such manner that data relating to individual establishments can be identified.

This survey of employer policies conducted by the Institute of Industrial Relations, University of California, Berkeley represents one stage in a comprehensive study of the Bay Area labor market financed in part by the Office of Education, U.S. Department of Health, Education and Welfare.

To supplement the information requested in Parts I and II of the survey schedule the following documents are requested whenever such materials have been prepared and are available.

Annual Report of Establishment covering the years
1960, 1965 and 1966

☐

For government jurisdictions, Budget Reports for
fiscal years 1961, 1966 and 1967

☐

Copies of all current labor management agreements
to which firm is a signatory

☐

Copies of wage and salary schedules, pension plans,
health and welfare plans, apprenticeship agreements
and any studies available covering training plans
or programs with particular emphasis on their costs

☐

Name(s) and Title(s) of Person(s)
Supplying Information

Phone
Number(s)

Name of Interviewer:

Address:

Phone:

PART I - INTERVIEW SCHEDULE

I. EMPLOYER IDENTIFICATION

1. Name _____
2. Address _____
3. Industry _____

(Describe below the principal product or activity of your establishment or agency during the calendar year 1966. If more than one product or activity is listed, supply the approximate percentage sales value to total of each.)

4. Type of organization: Single Unit ☐; Branch Unit ☐; Auxiliary Unit * ☐;
Headquarters Unit ☐; Other ☐ specify _____

5. If your headquarters is elsewhere give,

Name of company or agency _____

Address of company or agency _____

6. "Establishment" as defined for purposes of this survey includes the following employment:

II. LOCATION, PLANT CAPACITY AND CONTRACTS

1. How long has establishment been located in:

a. Bay Area? ** _____

b. This city _____

* The activities of an auxiliary unit are subordinate to and are performed for the use of some other establishment(s) of the same organization, generally at locations separate from the establishment(s) served (e.g., a research laboratory or warehouse operated for manufacturing plants of the same concern).

** Counties of Alameda, Contra Costa, Marin, San Francisco, San Mateo plus Santa Clara.

c. Present premises? _____

(1) If establishment has moved in past five years, give previous location.

City _____ State _____

d. If establishment has moved in past five years, give reasons for move.

2. Which is the smallest area below that accounts for 75 percent or more of the establishment's market?

☐ City of location

☐ Western Region **

☐ Bay Area *

☐ Continental U.S.

☐ California

a. What percent of your total market is overseas? _____%

3. In determining the optimum location of your establishment, how would you rank the following factors in order of importance? (1, 2, 3, only)

☐ Proximity to markets

☐ Reasonably priced land

☐ Proximity to materials

☐ Access to transportation

☐ Wage rates

☐ Tax structure

☐ Good quality labor

☐ Other, specify _____

☐ Space for physical expansion _____

a. What are the primary advantages of your present location? _____

b. What are the chief disadvantages of your present location? _____

* Counties of Alameda, Contra Costa, Marin, San Francisco, San Mateo plus Santa Clara.

** States of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

(TO BE ANSWERED BY MANUFACTURING ESTABLISHMENTS ONLY - PRIVATE OR GOVERNMENT)

4. If establishment is now significantly engaged in defense production,
- Have you prepared plans for conversion to civilian production? Yes ☐ No ☐
 - If Yes, would this production be in the private sector? ☐ In the public sector? ☐
 - If implemented, what would be the effect on your employment?
 No change ☐ Increase ☐ Decrease ☐
 - How would you rank in order of importance to the successful implementation of these plans the following factors? (1, 2, only)
☐ Obtaining new government contracts (nondefense)
☐ Adequate private demand for your product
☐ Early warning of reduced contracts
☐ Government retraining programs
☐ Other, specify _____

(TO BE ANSWERED BY PRIVATE MANUFACTURING ESTABLISHMENTS ONLY)

5. What is your preferred capacity? _____%
- At what percent of capacity are you currently operating? _____%

III. EMPLOYMENT DATA

- How many workers were employed by your establishment at the most recent pay period?
 Number _____ Date _____
 (Interviewer should explain employment tables in Part II at this point.)
 a. Now, we would like to ask you how your total employment has changed since 1960.

<input type="checkbox"/> Has increased substantially	<input type="checkbox"/> Has decreased slightly
<input type="checkbox"/> Has increased slightly	<input type="checkbox"/> Has been relatively stable
<input type="checkbox"/> Has decreased substantially	<input type="checkbox"/> Has fluctuated, but with little net change
- If total employment has changed appreciably in size since 1960, please indicate the main reasons _____

- Have significant changes occurred in the occupational distribution of employment in your establishment since 1960? Yes ☐ No ☐

a. If Yes, what were these changes? _____

b. If Yes, please indicate the main reasons for these changes: _____

4. Are there sharp seasonal fluctuations of employment in your establishment? Yes _____ No _____

a. If Yes, please indicate the main reason(s):

☐ Christmas season

☐ Food processing

☐ Easter trade

☐ Other, specify _____

(If Yes, additional data are requested in Part II concerning the extent and timing of these fluctuations ☐)

5. Is your employment subject to abrupt changes that are unrelated to a regular seasonal pattern?

Yes _____ No _____

a. If Yes, please indicate the main reasons: Availability of work ☐;

Port activity ☐; Government orders ☐; Other ☐ specify _____

6. Does the establishment employ part-time workers, persons regularly working 1 - 34 hours per week? (Disregard workers hired for seasonal reasons, vacation relief or to meet temporary emergencies.) Yes _____ No _____

a. If Yes,

(1) Are these persons characteristically recruited from some specific applicant group as follows:

Youth ☐; Housewives ☐; Dual jobholders ☐; Students ☐;

Retired ☐; Others ☐ specify _____

(2) In what occupations, primarily, do you employ part-time workers? _____

b. What are your reasons for employing ☐ or not employing ☐ regular part-time workers? _____

c. If establishment is unionized does the union have any influence or control over this practice? Yes ☐ No ☐

(1) If Yes, describe _____

7. Are any of your establishment's labor needs met by using temporary staff agencies? (e.g., Kelly Girl Service, Inc., Manpower, Inc., etc.) Yes ☐ No ☐

a. If Yes,

(1) Is this practice followed on a continuing basis ☐ or as need arises? ☐

(2) For which services are such agencies used?

Clerical ☐; Business ☐; Shipping-stock ☐; Building maintenance ☐;

Other ☐ specify _____

(3) What are the specific occupations of the workers who perform these services?

b. What are your reasons for following ☐ or not following ☐ this practice?

c. If establishment is unionized, does the union have any influence or control over this practice? Yes ☐ No ☐

(1) If Yes, describe _____

8. Does the establishment let out subcontracts? Yes ☐ No ☐

a. If Yes, for what activities? _____

b. If Yes, where?

Exclusively within Bay Area ☐; Both within and outside Bay Area ☐; Entirely outside Bay Area ☐

c. Does this practice substantially affect your employment level? Yes ☐ No ☐

(1) If Yes, how is it affected? _____

d. Does this practice substantially affect the occupational composition of your employment?

Yes ☐ No ☐

(1) If Yes, describe _____

e. What are your reasons for subcontracting ☐ or not subcontracting? ☐

f. If establishment is unionized, does the union have any influence or control over this practice? Yes ☐ No ☐

(1) If Yes, describe ☐

IV. LABOR TURNOVER

(Interviewer should explain turnover tables in Part II at this point.)

1. Now, we would like to ask you about the types of separations that occur in your establishment:

Type of Separation	Prof. & Tech.	Mgrs. & Offs.	Clerical	Sales	Skilled	Semi-Skilled	Un-Skilled	Service
Primarily Quits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Primarily Layoffs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. If voluntary quits among certain groups are above the average voluntary quit rate for your establishment, what are these groups and what do you believe are the reasons for their high rate? ☐

2. How would you rank (1, 2, 3, only) the following factors as to their effectiveness in reducing voluntary quits in your establishment?

- | | |
|--|--|
| <input type="checkbox"/> Accumulation of seniority | <input type="checkbox"/> Proximity to residential areas |
| <input type="checkbox"/> Higher than prevailing wage rates for same work | <input type="checkbox"/> Improvement of physical facilities |
| <input type="checkbox"/> Provision of pension plan | <input type="checkbox"/> Availability of training |
| <input type="checkbox"/> Encouragement of promotion from within | <input type="checkbox"/> Other, specify <input type="checkbox"/> |
| <input type="checkbox"/> Job security | <input type="checkbox"/> |

3. Does the establishment have any programs directed to reducing the number of voluntary quits?

Yes ☐ No ☐

- a. If Yes, describe _____
- b. If No, what are your reasons? _____
4. Does the establishment take any actions to minimize the need for layoffs? Yes _____ No _____
- a. If Yes, describe _____
- _____
- b. If No, what are your reasons? _____
- _____
5. Does the establishment have a pension plan? Yes _____ No _____
- a. If Yes, does this plan include:
- | | |
|---|---|
| <input type="checkbox"/> All employees | <input type="checkbox"/> Blue collar workers |
| <input type="checkbox"/> White collar workers | <input type="checkbox"/> Other, specify _____ |
- _____
- b. If Yes, does the plan affect the voluntary quit rate? Yes _____ No _____
- (1) If Yes, how? _____
- c. If Yes, have vesting or early retirement provisions been adopted or liberalized within the past five years? Yes _____ No _____
- (1) If Yes, did the quit rate rise after the change(s)? Yes _____ No _____
- (2) If Yes, about how much? _____
6. Does the establishment have a compulsory retirement age for any of the following groups?
- Yes _____ No _____
- a. If Yes, specify the age:
- | | |
|----------------------|------------|
| | <u>Age</u> |
| All employees | _____ |
| White collar workers | _____ |
| Blue collar workers | _____ |
| Other, | |
| specify _____ | _____ |
| _____ | _____ |

<input type="checkbox"/>	Layoffs are made immediately	
<input type="checkbox"/>	Layoffs are made after the workweek has been reduced	
<input type="checkbox"/>	Only the least skilled workers are laid off	
<input type="checkbox"/>	Workers at various skill levels are laid off as required	
<input type="checkbox"/>	Lowest seniority workers are laid off	
<input type="checkbox"/>	Other practices are followed, specify	

Yes _____ **No** _____

(1) If Yes, for which occupation groups? _____

1. Is the establishment covered by collective bargaining agreement(s)? Yes No

b. If No, is there a union (or unions) which "represent" your employees by making wage or other demands? Yes _____ No _____

(1) If Yes, how many employees are so "represented."

c. In either case, please give the names of the unions involved and, if possible, the number of employees in each union. (If many unions, interviewer should ask for typewritten list.)

Number of Employees Covered

[illegible]

d. If no unions are represented in your establishment, are there other employee associations which "represent" your employees by making wage or other demands? Yes _____ No _____

(1) If Yes, please give the name(s) of the association(s), the scope of their activities, and the number of employees in each _____

2. If the establishment is covered by a collective bargaining agreement, when was the union (or unions) recognized as the bargaining agent? _____

a. If a copy of the agreement(s) is available, may we have it (or them)? ☐ If not available, please give:

(1) Name of international union(s) _____

(2) Local number of local(s) signatory to agreement _____

(3) If you are a party to a multi-employer contract, name of employer representative _____

3. Is the establishment a member of an employer association? Yes _____ No _____

a. If Yes, please give the name of the association(s) _____

b. What is the relation, if any, to your establishment of the association working with you in the industrial relations area?

Negotiates bargaining agreements ☐; Negotiates grievances ☐; Has some discretion over your employment policy ☐; May limit the nonwage benefits you offer employees ☐; Pays strike benefits to struck company ☐; Conducts, coordinates, or otherwise participates in training programs ☐ If Yes, for which occupations?

Other ☐ specify _____

4. If the establishment is a branch or subsidiary, does a headquarters office provide services in the industrial relations area? Yes ☐ No ☐

- a. If Yes, which of the following services are provided?

Negotiates bargaining agreements ☐; Interprets agreements ☐; Sets wage rates ☐; Sets hiring standards ☐; Prescribes fringe benefits, including pensions ☐; Controls or determines local work practices ☐; Determines seniority districts ☐; Participates in grievance procedures ☐ If Yes, please describe _____
Other ☐ specify _____

VI. RECRUITMENT PRACTICES

1. Does establishment have a Personnel Department? Yes ☐ No ☐ If Yes,

a. How many employees are in this department? _____

b. To whom is the Personnel Director responsible? _____

(Interviewer should explain recruitment tables in Part II at this point.)

Now, we would like to ask about the frequency of your use of certain recruitment channels and your reasons.

2. When you have job vacancies do you use Private Employment Agencies

Frequently ☐ Infrequently ☐ Never ☐

a. What are your reasons for this practice? _____

3. When you have job vacancies do you use the California Department of Employment

Frequently ☐ Infrequently ☐ Never ☐

a. What are your reasons for this practice? _____

4. Do any of your union contracts require you to hire through the union? Yes ☐ No ☐

a. If Yes, please indicate the extent to which you hire through the union(s):

<u>Name of Union</u>	<u>Exclusively</u>	<u>Frequently</u>	<u>Rarely</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- b. Do you have any comments on your experience in hiring through the union(s)?

5. Which channel (whether one of the above or another) do you use most frequently for the occupation groups below and what are your reasons for these choices?

<u>Occupation Group</u>	<u>Channel</u>	<u>Reasons</u>
Prof. & Tech.	_____	_____
Mrgs. & Offs.	_____	_____
Clerical	_____	_____
Sales	_____	_____
Skilled	_____	_____
Semiskilled	_____	_____
Unskilled	_____	_____
Service	_____	_____

6. Have you ever found it difficult to recruit within a reasonable length of time the number of workers you wanted to hire? Yes _____ No _____

- a. If Yes, were any of these unskilled workers? Yes _____ No _____

(1) If so, were selection criteria relaxed? Yes _____ No _____

(2) Were wage rates raised? Yes _____ No _____

- b. If Yes, were any of these semiskilled workers? Yes _____ No _____

(1) If so, were selection criteria relaxed? Yes _____ No _____

(2) Were wage rates raised? Yes _____ No _____

- c. Where you have found it difficult to obtain the number of workers needed within a reasonable length of time, please indicate which of the actions listed below were taken in order to recruit for these "hard-to-fill" vacancies and the occupation groups or occupations of these vacancies.

Actions Taken	Occupation Groups or Occupations
<input type="checkbox"/> Increased number of recruitment channels used	
<input type="checkbox"/> Extended area of recruitment	
<input type="checkbox"/> Gave bonus to own employees to bring in applicants	
<input type="checkbox"/> Raised wage on job offer	
<input type="checkbox"/> Promised overtime or premium pay on job offer	
<input type="checkbox"/> Offered attractive monetary fringe benefits	
<input type="checkbox"/> Made nonwage benefits more attractive on job offer	
<input type="checkbox"/> Diluted job content and recruited for vacancy at lesser skill level	
<input type="checkbox"/> Relaxed specifications not directly related to job performance (e.g., sex, age, race, appearance, etc.)	
<input type="checkbox"/> Lowered educational requirements	
<input type="checkbox"/> Offered training opportunities if job accepted	
<input type="checkbox"/> Offered part-time job opportunities	
<input type="checkbox"/> Other, specify _____	
<input type="checkbox"/> _____	
<input type="checkbox"/> _____	

7. Have you ever found recruitment so difficult you were unable to expand production or services for lack of workers available to you? Yes _____ No _____

a. What goods or services could not be provided? _____

b. In what specific occupations were the job vacancies? _____

c. Can you indicate the steps taken to solve a recruitment difficulty of this intensity.

- ☐ Increased wage in shortage occupations only
- ☐ Initiated general wage increase or more readily agreed to negotiate wage increase
- ☐ Generally stepped-up training program
- ☐ Reorganized duties of job and assigned simpler tasks elsewhere
- ☐ Reorganized work so same volume of output could be achieved with fewer workers
- ☐ Increased investment in labor saving equipment
- ☐ Subcontracted work
- ☐ Called on temporary staff agencies for workers
- ☐ Increased use of part-time workers substantially
- ☐ Gave priorities to preferred customers
- ☐ Diverted orders to other units of organization
- ☐ Substantially reduced specifications for new workers not directly related to job performance
- ☐ Reduced content of entry jobs
- ☐ Raised prices
- ☐ Delayed deliveries
- ☐ Other, specify _____

d. Where you did not increase wage in shortage occupations only, (first option under 7-c above) would you have preferred to have done so instead of or in addition to the steps which were taken? Yes _____ No _____

(1) If Yes, were wages not raised for shortage jobs because

- (a) Prohibited from doing so by union contract? Yes _____ No _____
- (b) Would have had to raise wage for all other workers? Yes _____ No _____
- (c) Did not want to pay higher wages in shortage occupations in case business conditions slackened? Yes _____ No _____

8. Which of the following types of labor market information do you customarily need when deciding to recruit workers and in planning your recruitment efforts?

Information concerning comparative adequacy of labor in various geographic areas ☐;
 General employment trends in this state and the Bay Area ☐; Labor demand/supply developments in specific occupations ☐; Modifications in the qualification standards for specific occupations ☐; Current wage rates ☐

a. Are there any other types of information you need for recruitment? _____

9. What specific sources within your establishment or outside do you find useful in providing needed information? _____

10. In general, how would you classify the success of your recruitment efforts (for occupations other than those chronically in short supply).

☐ Customarily attract far more qualified applicants than needed for satisfactory selection

☐ Customarily a fair balance exists between the number of qualified job applicants and the number of job vacancies

☐ Customarily fewer qualified applicants are attracted than will permit satisfactory selection

What do you think are the main reasons for this experience? _____

VII. SELECTION PRACTICES

1. How in your opinion do the establishment's qualification standards for entry level jobs compare with those of other employers in this area engaged in similar work?

Generally higher ☐

Generally lower ☐

About the same ☐

a. If the establishment's standards are markedly different, what are the reasons?

2. If you adhere to certain standards such as those below in hiring new workers, we would like to ask how rigidly you observe such standards and your reasons.

a. Minimum Age Limits

	<u>Age</u>	<u>Always Observed</u>	<u>Usually Observed</u>	<u>Reasons</u>
All Employees *	_____	_____	_____	_____
Prof. & Tech.	_____	_____	_____	_____
Mgrs. & Offs.	_____	_____	_____	_____
Clerical	_____	_____	_____	_____
Sales	_____	_____	_____	_____
Skilled	_____	_____	_____	_____
Semiskilled	_____	_____	_____	_____
Unskilled	_____	_____	_____	_____
Service	_____	_____	_____	_____

b. Maximum Age Limits

	<u>Age</u>	<u>Always Observed</u>	<u>Usually Observed</u>	<u>Reasons</u>
All Employees *	_____	_____	_____	_____
Prof. & Tech.	_____	_____	_____	_____
Mgrs. & Offs.	_____	_____	_____	_____
Clerical	_____	_____	_____	_____
Sales	_____	_____	_____	_____
Skilled	_____	_____	_____	_____
Semiskilled	_____	_____	_____	_____
Unskilled	_____	_____	_____	_____
Service	_____	_____	_____	_____

* Complete entry opposite "All Employees" when the same standard is observed for all employees and omit subsequent breakdown.

c. Absence of Police Record

	<u>Always Observed</u>	<u>Will Evaluate Record</u>	<u>Reasons</u>
All Employees*	_____	_____	_____
Prof. & Tech.	_____	_____	_____
Mgrs. & Offs.	_____	_____	_____
Clerical	_____	_____	_____
Sales	_____	_____	_____
Skilled	_____	_____	_____
Semiskilled	_____	_____	_____
Unskilled	_____	_____	_____
Service	_____	_____	_____

d. Aptitude or Other Tests

	<u>Give Tests</u>	<u>Do Not Give Tests</u>	<u>Reasons</u>
All Employees*	_____	_____	_____
Prof. & Tech.	_____	_____	_____
Mgrs. & Offs.	_____	_____	_____
Clerical	_____	_____	_____
Sales	_____	_____	_____
Skilled	_____	_____	_____
Semiskilled	_____	_____	_____
Unskilled	_____	_____	_____
Service	_____	_____	_____

* Complete entry opposite "All Employees" when the same standard is observed for all employees and omit subsequent breakdown.

(1) If you give tests, how much weight is given to test results relative to other selection standards? _____

(2) Have you ever considered modifying or eliminating such tests to encourage the employment of persons whose limited or non-English speaking background hampers their test performance? Yes _____ No _____

3. Using the numbers 1 to 6 which correspond to the following list of six levels of education, indicate your minimum educational requirements, if any, for entry jobs in the occupation groups shown under 3-a.

1	Less than high school diploma
2	High school diploma
3	Some college, or junior college diploma
4	Post high school technical or vocational training (include apprenticeship)
5	College degree
6	Graduate degree

a. Minimum Education Requirements

Professional and Technical

Professional ☐

Technical ☐

Managers and Officials

Managers and Officials above
First Line Supervisors ☐

First Line supervisors ☐

Clerical ☐

Sales ☐

Skilled

Skilled other than Foremen ☐

Foremen ☐

Semiskilled ☐

Unskilled ☐

Service ☐

b. If a college degree is required for Managers:

- (1) Do you attempt to select, as potential managers, graduates from any particular colleges, universities, or business or other schools or from any particular types of such schools? Yes _____ No _____

(a) If Yes, describe _____

- (2) Do you attempt to select, as potential managers, applicants with particular majors or courses of study in their educational backgrounds such as business administration, engineering, natural sciences, social sciences or the humanities? Yes _____ No _____

(a) If Yes, describe _____

- c. Of the managers above first line supervision now employed in your establishment approximately what proportion are under 35 years of age? _____

(1) Approximately what proportion are women? _____

- d. If a high school diploma or better is required for unskilled or service workers, what are your reasons for this requirement? _____

4. Do requirements imposed by outside organizations affect the local establishment's selection practices? Yes _____ No _____

a. If Yes, do these represent:

- ☐ Terms of collective bargaining agreement
- ☐ Local or state regulations including licensing
- ☐ Standards of employer associations
- ☐ Standards of professional associations
- ☐ Requirements of headquarters office
- ☐ Other, specify _____

5. Has the establishment made particular efforts to select applicants from any such groups as youth, school dropouts, older workers, racial minorities, etc.? Yes _____ No _____

- a. If Yes, please describe the nature and extent of your efforts to accord such special treatment _____

6. Has the establishment shown a marked reluctance to hire workers from the following groups?
 Long-term unemployed ☐; Employed job seekers ☐; "Job hoppers" ☐; Employees
 of competitors ☐; Physically handicapped ☐; Housewives with child care responsi-
 bilities ☐; Persons living at a distance from the firm ☐, If Yes, how far? _____
 Other ☐ specify _____

- a. If any of these groups is avoided, what are the reasons? _____

VIII. PROMOTION PRACTICES

1. What specific jobs or job classifications are customarily filled by upgrading the establish-
 ment's employees? _____

 a. Reasons? _____

2. Aside from entry jobs, what specific jobs or job classifications are customarily filled from
 outside the establishment? _____

 a. Reasons? _____

3. Do you follow an established promotional policy? Yes ____ No ____
 a. If Yes, what is this policy? _____

 b. If Yes, by which of the following has your promotional policy been specified or influenced?
 Civil Service regulations ☐; Headquarter's office policy ☐; Collective bar-
 gaining agreement ☐; Local establishment's policy ☐; Other ☐ specify

4. If promotional policy is specified by collective bargaining agreement(s), must preference be given to already employed workers for jobs above entry level? Yes ☐ No ☐
- a. If Yes, on what basis do you choose among already employed workers? _____

5. For promotions not affected by collective bargaining agreement(s), what is the rank order of importance (1, 2, 3, only) of the following factors as criteria for promotion?
 Seniority ☐; Demonstrated ability ☐; Ability to pass tests ☐; Potential for continuing advancement ☐; Ability and willingness to undertake training ☐; Other ☐ specify _____
- a. Describe the circumstances in which a junior is promoted over a senior employee

- b. Can you estimate in what percentage of your promotions a junior is promoted over a senior?
 _____%
6. In general, have most employees with at least five years of service been promoted at least once? Yes ☐ No ☐
- a. If No, what are the reasons? _____

- b. In general, which of your jobs are not promotable? _____

7. Do workers who are offered promotions frequently refuse such offers? Yes ☐ No ☐
- a. Which of the following reasons is most often given by those workers who do refuse promotions?
 Reluctance to take training ☐; Reluctance to accept additional responsibility ☐; Pay differential for more responsible jobs not considered adequate ☐; Reluctance to leave area ☐; Other ☐ specify _____

8. Is there a fixed probationary period for entry jobs? Yes _____ No _____

a. If Yes, is this period the same for all jobs? Yes _____ No _____

(1) If Yes, how long is the period? _____

(2) Is it determined by provisions of the collective bargaining agreement(s)?

Yes _____ No _____

b. If there are differing periods for various groups of jobs, how long are they and which of them are determined by collective bargaining agreements? _____

(TO BE ANSWERED BY MANUFACTURING ESTABLISHMENTS ONLY - PRIVATE OR GOVERNMENT)

9. Can unskilled laborers move up to semiskilled jobs? Yes _____ No _____

a. If Yes, how often do they move up? Frequently ☐ Infrequently ☐

b. If Yes, what is the order of importance (1, 2, 3, only) of the following factors as criteria for upgrading?

<input type="checkbox"/> Seniority	<input type="checkbox"/> Discretion of supervisor
<input type="checkbox"/> Completion of training	<input type="checkbox"/> Other, specify _____
<input type="checkbox"/> Demonstrated competence	_____

c. If No, why not? _____

10. Can semiskilled workers move up to skilled jobs? Yes _____ No _____

a. If Yes, how often do they move up? Frequently ☐ Infrequently ☐

b. If Yes, what is the order of importance (1, 2, 3, only) of the following factors as criteria for upgrading?

<input type="checkbox"/> Seniority	<input type="checkbox"/> Discretion of supervisor
<input type="checkbox"/> Completion of training (except formal apprenticeship)	<input type="checkbox"/> Other, specify _____
<input type="checkbox"/> Possession of specific skills	_____

c. If No, why not? _____

IX. WAGES

(Interviewer should explain wage tables in Part II at this point.)

1. Is it the practice of the establishment to give general wage or range increases that affect all or most employees, or a broad category of workers? Yes ____ No ____

a. If Yes, please indicate type of increase:

☐ Flat percentage increase for all employees or all in a given category

☐ Flat dollars and cents increase for all employees or all in a given category

☐ Range increase with one-step raise for all within range

☐ Range increase with individual adjustments

☐ Other, specify _____

b. If Yes, which workers were affected by the most recent increase(s)? _____

2. Do you follow policies other than that of a general wage or range increase (policies such as individual determination of wages, "pegging" the rates of unorganized employees to those granted under collective bargaining agreement) for certain other groups such as exempt employees, salaried clerical workers, hourly-rated workers, etc? Yes ____ No ____

a. If Yes, what policy is followed and what workers are affected? _____

3. If the establishment's wage classification structure gets "out-of-line" because wage increases have been given to specific individuals, occupations, or groups of workers (or it is believed that such an imbalance will occur) do you have processes of wage adjustment within the establishment which act to remedy individual inequities and/or to restore balance in the classification structure? Yes ____ No ____

a. If Yes, describe _____

4. Which of the following factors influenced the establishment's most recent general wage or range increase(s) as defined above? (Please indicate the inclusiveness of the wage increase by identifying the affected workers, (e.g., as "all employees," "all blue collar workers," "all clerical," etc.)

Workers Affected by Wage Increase

- | | |
|--|-------|
| <input type="checkbox"/> Normal process of collective bargaining | _____ |
| <input type="checkbox"/> Desire to avoid strike or organization by union | _____ |
| <input type="checkbox"/> A strike by union | _____ |
| <input type="checkbox"/> Actual or anticipated wage increases by other Bay Area establishments | _____ |
| <input type="checkbox"/> Actual or anticipated wage increases by establishments outside Bay Area | _____ |
| <input type="checkbox"/> Favorable net earnings of own establishment | _____ |
| <input type="checkbox"/> Excessive labor turnover at previous rates | _____ |
| <input type="checkbox"/> Excessive number of job vacancies at previous rates | _____ |
| <input type="checkbox"/> Rising cost of living | _____ |
| <input type="checkbox"/> Other, specify _____ | _____ |

5. Did the establishment in the past five years find it necessary to increase employee compensation in order to attract or retain workers in certain occupations? Yes _____ No _____

a. If Yes, which of the following actions were taken? (Please specify affected occupations.)

Occupations Affected by Wage Increase

- | | |
|--|-------|
| <input type="checkbox"/> Raised wage level for group (no union agreement prevailed) | _____ |
| <input type="checkbox"/> Raised wage level for group beyond union rates (union agreement prevailed) | _____ |
| <input type="checkbox"/> Granted individual wage increases (no union agreement prevailed) | _____ |
| <input type="checkbox"/> Added a premium to union rate for individual workers (union agreement prevailed) | _____ |
| <input type="checkbox"/> Provided or guaranteed overtime, increased overtime rate or reduced straight-time hours | _____ |
| <input type="checkbox"/> Changed shift differential | _____ |
| <input type="checkbox"/> Raised piece rates | _____ |
| <input type="checkbox"/> Offered wage or fringe inducements, specify _____ | _____ |

6. In your opinion, how do the wage rates paid by your establishment compare with those paid by other Bay Area establishments engaged in similar activities or with those of your own organization's branches in other areas?

	a. <u>Other Bay Area Establishments</u>			b. <u>Branches in other Areas</u>		
	<u>White Collar Workers</u>	<u>Blue Collar Workers</u>	<u>Service Workers</u>	<u>White Collar Workers</u>	<u>Blue Collar Workers</u>	<u>Service Workers</u>
Higher	_____	_____	_____	_____	_____	_____
Lower	_____	_____	_____	_____	_____	_____
About the same	_____	_____	_____	_____	_____	_____

- c. If, under b, wage rates are higher for any occupational categories, are the added labor costs offset in whole or in part by:

Higher productivity of Bay Area workers in White Collar jobs ☐; Blue Collar jobs ☐; Service jobs ☐; Lower transportation costs ☐; Lower cost of other items ☐ specify _____

7. Does establishment pay any workers on an incentive basis? Yes _____ No _____

- a. If Yes, for which jobs? _____
- b. If Yes, and your policies on payments have changed in the past five years, give reasons.

8. In Part II, you will be asked additional details concerning your entry jobs ☐ but at this time we would like to ask if you have an entry level job or jobs with at least some promotional potential but requiring no prior work experience and no more than high school graduation? Yes _____ No _____

- a. If Yes, in what occupation(s) and at what wages? _____

9. Do you have entry level jobs with promotional potential and requiring no prior work experience but with such educational qualifications as graduation from Junior College or a College degree? Yes _____ No _____

- a. If Yes, in what occupation(s) and at what wages? _____

X. TRAINING

1. Is it a recognized practice of your establishment to offer
- Informal On-the-Job Training
- ?

Yes ☐ No ☐

- a. If Yes, for which major occupation groups or occupations is such informal instruction relied on
- exclusively
- for training newly hired workers? _____
-
- _____
-
- _____

- b. For which groups or occupations is informal instruction relied on
- exclusively
- to prepare workers for upgrading? _____
-
- _____

(If employer offers no formal training, including apprenticeship, check ☐ and skip to Question 9 of this section. If employer does offer formal training, interviewer should show Part II tables on training detail ☐ and apprenticeship ☐ and complete following questions.)

2. Does establishment offer
- Vestibule Training
- ? (i.e., training given before worker assumes full duties of position.) Yes
- ☐
- No
- ☐
- If Yes,

- a. Is this training given to all new employees? Yes
- ☐
- No
- ☐

- b. To selected employees? Yes
- ☐
- No
- ☐

- c. Are workers paid wages while taking this training? Yes
- ☐
- No
- ☐

- d. Are trainee rates lower than wages paid on the job for which the worker is being trained?
-
- Yes
- ☐
- No
- ☐

(1) If Yes, by what percentage? _____%

3. Excluding Vestibule Training, does establishment offer
- Formal Employer-Supported On-the-Job Training
- ? Yes
- ☐
- No
- ☐

- a. If Yes, are these courses for:

Entry workers ☐; Refresher training ☐; Upgrading ☐; Other, specify _____

4. Is any On-the-Job Training funded under the federal Manpower Training and Development Act being given in the establishment? Yes
- ☐
- No
- ☐
- If Yes,

- a. What is the name of the contracting agency for which the establishment acts as sponsor?
-
- _____
-
- _____

- b. Has the establishment trained workers specifically for other organizations under an MDT-OJT contract? Yes
- ☐
- No
- ☐

(1) If Yes, give particulars _____

5. Excluding MDT training, is establishment offering Other Government-Supported On-the-Job Training? Yes ____ No ____

a. If Yes, give name of agency financing the training _____

6. If the establishment has participated in any government-supported training programs in the last few years, has this participation affected prior policies with regard to the following?

☐ Recruitment

☐ Promotion

☐ Other, specify _____

☐ Selection

☐ Training

a. If any of these policies has been affected, please describe the nature of the change

7. Does the establishment have an Apprenticeship Program? Yes ____ No ____

a. If Yes, describe briefly, giving occupations and approximate numbers of apprentices now enrolled in each _____

8. Does the establishment offer or require any Out-Service Training? Yes ____ No ____ If Yes,

a. What organization gives the course(s)? _____

b. What was the subject matter covered in the course(s)? _____

c. To what extent does the establishment participate in the costs of this training? _____

9. In order to improve the community's basic and vocational education offerings, have any of the establishment's representatives ever worked with:

☐ Officers of local school districts

☐ Local Manpower Advisory Committees (MDT)

☐ State vocational education officials

☐ Local Civil Rights Groups

☐ Occupational or industrial advisory committees

☐ Other, specify _____

- a. Where you have indicated such participation, did it result in any direct or indirect benefits to the establishment? Yes _____ No _____

(1) If Yes, please describe _____

10. To your knowledge, has the establishment hired job applicants who have completed training in such government sponsored programs as the following?

☐ MDT ☐ NYC
☐ Job Corps ☐ Other, specify _____

Yes _____ No _____ If Yes,

- a. Approximately how many were hired? _____
 b. For what jobs were they hired? _____

- c. Would the establishment have hired these applicants without such training?

Yes _____ No _____

- d. Has the establishment found it necessary to provide special training programs, counseling services, or closer supervision for these applicants after they were hired?

Yes _____ No _____

11. If the establishment's work force includes apprenticeable occupations and no apprenticeship program exists, what are the reasons? _____

12. Does the establishment experience a significant loss of personnel trained at considerable cost to the employer? Yes _____ No _____

- a. Does the establishment attempt to "safeguard its training investment?" Yes _____ No _____

(1) If Yes, does the establishment

☐ Ask the employee to sign agreement which limits his freedom to terminate employment after receiving training

☐ Confine the training given where possible, to the company's own specialized requirements

☐ Other, specify _____

XI. TECHNOLOGICAL CHANGE

1. Did the establishment take any of the following actions in the period 1960-1966?

- | | |
|--|---|
| <input type="checkbox"/> Built new plant | <input type="checkbox"/> Significantly changed internal operating procedures |
| <input type="checkbox"/> Remodeled plant | <input type="checkbox"/> Eliminated inefficient working arrangements (e.g., work rules or loose production standards) |
| <input type="checkbox"/> Installed new equipment | <input type="checkbox"/> Changed materials used in production process |
| <input type="checkbox"/> Modernized equipment | |

2. If any of the above actions were taken in this period, please indicate the reasons by completing the following table, using an actual example (or examples) to illustrate each action.
-
- Note: If no such actions were taken, check
- ☐
- and skip the remainder of this section.

Was this Action Taken Because:	ACTIONS TAKEN BY THE ESTABLISHMENT			
	1. Changed plant or equipment	2. Changed operating procedures	3. Eliminated in- efficient working arrangements	4. Changed materials used
	Examples of Above Actions			
	1.	2.	3.	4.
1. Average cost had to be reduced to remain competitive				
2. Production had to be expanded				
3. Service had to be improved to remain competitive				
4. Labor requirements could be reduced (either amount or skill level)				
5. Old process required more equipment hours				
6. Cost of labor under old process had increased				
7. Workers needed for old process not readily available				
8. Old equipment was obsolete, uneconomic or due for replacement				
9. Capital or other nonlabor costs were reduced				
10. Financing was available				
11. Production under old process would not meet standards				
12. New management				
13. Other reasons, specify				
Date Action Taken				

Instructions: Please complete this table by answering "Yes" or "No" in the appropriate spaces to show reasons for specified actions.

3. If your answer to Question 1 above indicated that the establishment built a new plant, remodeled plant, installed new equipment or modernized equipment ☐ or significantly changed internal operating procedures ☐ what was the most important single action of all the actions taken in these two categories (i.e., the action that most significantly changed labor requirements, either as to number employed or skill levels)? _____
- _____
- _____

4. How, in general, did this "most important single action" affect the employment connected with the changed process or procedure?

a. As to the number working: _____

b. As to their skill level: _____

- (1) If employment connected with this process or procedure changed in number or type, did you experience:

☐ Attrition ☐ Reassignments to other units within establishment

☐ Layoffs ☐ Other, specify _____

- (2) Irrespective of the immediate effect on employment, was the longer term result of this action to reduce the number of new hires? Yes _____ No _____

(a) Specifically, were employment opportunities reduced for inexperienced or less skilled workers? Yes _____ No _____

5. Were the establishment's decisions respecting actual or potential labor displacement following this action regulated by collective bargaining agreement? Yes _____ No _____

a. If Yes, describe briefly _____

6. Did this "most important single action" make necessary the training or retraining of workers so that they could handle the new equipment or procedure? Yes _____ No _____

- a. If Yes, how were these workers trained?
 Informal On-the-Job Training ☐; Formal On-the-Job Training ☐; Out-Service Training ☐; Other ☐ specify _____
- b. What length training was required? _____
7. If this "most important single action" resulted in new or substantially changed jobs, how were the wage rates set for these jobs? _____

8. To your knowledge, has the establishment's output per man-hour in the period 1960-1966 most typically
 Risen ☐ Remained about the same ☐ Fallen ☐
 (If yours is a manufacturing establishment, data are requested in Part II which, if available, will provide additional information on your production process. Interviewer should show Part II table at this point.)
9. For the most part, is the establishment now using the most modern plant, operating equipment and operating procedures utilized in your industry? Yes _____ No _____
- a. If No, what are the principal reasons for not using them? _____

10. Are there new items of equipment and new operating procedures (with a significant potential for changing employment) now in the research and development stage, but not yet applied, that you will likely install within the next 10 years? Yes _____ No _____
- a. If Yes, what do you anticipate the effects on your staffing will be? _____

11. If the establishment is part of a larger organization, has the latter built new, major facilities elsewhere in the Bay Area or outside this area in the period 1960-1966? Yes _____ No _____
- a. If Yes, please give
 City _____ State _____

XII. EMPLOYMENT PROJECTION METHODS

1. Does your establishment regularly prepare, for its own purposes,

a. Projections of future output levels? Yes ☐ No ☐

b. Projections of future employment levels? Yes ☐ No ☐

c. If employment projections are not prepared, which of the following reasons apply?

Too costly ☐; Insufficient information ☐; Failure of past attempts ☐;

Do not train own workers ☐; Unnecessary because hiring plans can be adjusted readily ☐; Fear of projected plans becoming known to competitors ☐;

Other ☐ specify _____

d. If employment projections are prepared:

(1) Describe briefly the method used _____

(2) What is the length of the forecast period? _____

(3) If projections of employment levels for one year or longer are prepared, have they been reviewed to determine their accuracy? Yes ☐ No ☐

(a) If Yes, within what percentage range of subsequent actual employment do the projections generally fall?

<u>Forecast Period for Projections</u>	<u>Range of Reliability</u>
<input type="checkbox"/> One Year	_____ %
<input type="checkbox"/> Five years	_____ %
<input type="checkbox"/> Other, specify _____	_____ %

(4) Where specific projections have been particularly far from subsequent actual employment, what unforeseen factors were responsible for the discrepancy?

2. Does your establishment prepare for its own uses, or has it ever given to any private or public organization information concerning the anticipated occupational distribution of its future employment or concerning future job opportunities, in general, for specific occupations? Yes _____ No _____
- a. If Yes, give details _____

- b. If sufficient time has elapsed for their evaluation, how would you appraise these occupational forecasts with respect to the following?
- | | <u>Usually
Correct</u> | <u>Usually
Incorrect</u> |
|--|----------------------------|------------------------------|
| (1) Changing number of workers needed in occupation | _____ | _____ |
| (2) Changing job duties of workers in occupation | _____ | _____ |
| (3) Changing educational requirements for workers
in occupation | _____ | _____ |
| (4) Other, specify _____ | _____ | _____ |
3. If you could be given a projection of your firm's production schedule for two years hence, for which specific occupations could you prepare the most accurate two-year employment projections? _____

- a. For which specific occupations would your projections likely be least accurate?

4. Would your establishment be willing to participate in industry-wide conferences where those present would discuss future expectations of your industry as to production, employment, technological developments and other matters having significance for the making of employment projections by industry and by occupation within industry? Yes _____ No _____
- a. If Yes, should such a conference be held at
- The Bay Area level ☐ The State level ☐

5. Do you believe your establishment can prepare reasonably accurate projections of its own employment under stated economic assumptions for a

Two year period ☐

Five year period ☐

Ten year period ☐

Yes _____ No _____

- a. If Yes, for any of these periods, would you be willing to release projections of your establishment's total number of employees for purposes of Bay Area or State employment forecasting under conditions where a strict confidentiality of individual data would be maintained? Yes _____ No _____

- b. If Yes, would you prefer to release these projections to

☐ A public agency

☐ A private agency

☐ Either a public or a private agency

Part II
(Supplementary Statistical Tables)

Definitions of Occupations for Which
Part II Wage Data Are Reported

DRAFTSMAN, CLASS A

Plans the graphic presentation of complex items having distinctive design features that differ significantly from established drafting precedents. Works in close support with the design originator and may recommend minor design changes. Analyzes the effect of each change on the details of form, function, and positional relationships of components and parts. Works with a minimum of supervisory assistance. Completed work is reviewed by design originator for consistency with prior engineering determinations. May either prepare drawings, or direct their preparation by lower level draftsmen.

TYPIST, CLASS A

Performs one or more of the following: Typing material in final form when it involves combining material from several sources or responsibility for correct spelling, syllabication, punctuation, etc., of technical or unusual words or foreign language material; and planning layout and typing of complicated statistical tables to maintain uniformity and balance in spacing. May type routine form letters varying details to suit circumstances.

MAINTENANCE MECHANIC - repairs machinery or mechanical equipment of an establishment. His tasks involve most of the following: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of hand tools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shop; reassembling machines; and making all necessary adjustments for operation. In general, the work of a maintenance mechanic requires rounded training and experience usually gained through a formal apprenticeship or equivalent training and experience.

Exclude from the occupation workers whose primary duties involve setting up or adjusting machines. Also exclude workers who perform to any appreciable degree such maintenance work as repairing plumbing, electrical fixtures, or brickwork. Such tasks are performed by the Factory or Mill Maintenance Man. The Maintenance Mechanic is concerned with keeping machinery in good repair rather than with changing layouts, setting up or installing machines or working on the plant structure. In general, he works with lighter machinery than does the Millwright.

TRUCK DRIVER - drives a truck within a city or industrial area; transports materials, merchandise, equipment, or men between various types of establishments such as: manufacturing plants, freight depots, warehouses, wholesale and retail establishments, or between retail establishments and customers' houses or places of business. May also load or unload truck with or without helpers, make minor mechanical repairs, and keep truck in good working order. Exclude from this occupation Driver-salesmen (or Routemen) who drive a truck over an established route to deliver, sell, and display products or render services and over-the-road drivers who are engaged in long-distance hauling beyond the immediate city or industrial area.

Include within this occupation only, the TRUCK DRIVER, HEAVY who drives a truck that is over four tons and other than trailer type.

LABORER, MATERIAL HANDLING - a worker employed in a warehouse, manufacturing plant, store or other establishment to handle and transport materials. His tasks involve one or more of the following: Loading and unloading various materials and merchandise on or from freight cars, trucks, or other transporting devices; unpacking, shelving, or placing materials or merchandise in proper storage location; and transporting materials or merchandise by hand-truck, car, or wheelbarrow.

Some workers engaged in warehouse activities engage almost exclusively in moving and transporting materials while for other workers, materials handling is at a minimum and the paper work connected with this activity consumes most of their time. The dividing line for including workers in the materials handling classification rather than excluding them as belonging in a clerical category should be decided by what the worker does primarily. If most of his time is spent in materials handling he should be included under this classification.

Exclude from this occupation Longshoremen who load and unload ships and also Forklift operators.

JANITOR - cleans and keeps in an orderly condition factory production and other areas, or premises of an office, apartment house, or commercial or other establishment. Janitors' duties involve a combination of the following: Sweeping, mopping or scrubbing, and polishing floors; removing chips, trash and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; providing supplies and minor maintenance services; and cleaning lavatories, showers and restrooms. Exclude workers who specialize in window washing.

JANITOR, CLASS A

Performs above duties of JANITOR except in production area of a factory.

JANITOR, CLASS B

Performs above duties of JANITOR in production area of a factory.

SAN FRANCISCO BAY REGION
COMMUNITY LABOR MARKET AREA BOUNDARIES

