BULLETIN NO. 1574
MANPOWER PLANNING FOR TECHNOLOGICAL CHANGE
CASE STUDIES OF TELEPHONE OPERATORS
PREFACE

Technological changes are a strategic factor in the growth of the economy. These advances, however, may be accompanied by displacement of labor, shifts in location of jobs, and changes in skill requirements. If efforts are made to manage changes in an orderly way, adverse effects on the status and security of individual employees can be significantly reduced.

This bulletin describes the manpower policies and experiences of several telephone companies in cushioning the impact of technological change on their employees. This account of the benefits and problems of manpower planning by these companies should have value for others who are planning to introduce major changes in their own offices or plants.

This bulletin is one in a series of case studies of manpower planning for technological change. Other studies cover the experiences of a government agency and an electric power company.

This study is based on information collected through interviews with company officials and officers of the employees' union, and on documents and data from company files. The Bureau of Labor Statistics is deeply grateful for their assistance and cooperation.

Data were collected for this study by Richard Riche and Herbert Hammerman, and the report was written by Audrey Freedman, under the supervision of Edgar Weinberg, Chief, Division of Technological Studies. These studies are part of the Bureau's research program on productivity, technology, and growth, under the general direction of Jerome A. Mark, Assistant Commissioner.
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Chapter I. Introduction

In its consideration of the benefits and problems of automation and other technological changes, the President’s Advisory Committee on Labor-Management Policy, a tripartite group of labor, management, and public leaders, unanimously agreed on three general points in 1962: “First, automation and technological progress are essential to the general welfare, the economic strength, and the defense of the Nation. Second, this progress can and must be achieved without the sacrifice of human values and without inequitable cost in terms of individual interests. Third, the achievement of maximum technological development with adequate safeguards against economic injury to individuals depends upon a combination of private and governmental action consonant with the principles of a free society.”

Specifically, the Advisory Committee recommended, among other measures, that serious consideration be given to “acceptance by management of responsibility for taking measures, to the maximum extent practicable, for lessening the impact of technological change, including (a) adequate leadtime, (b) open reporting to the employees involved, (c) cooperation with representatives of the employees to meet the problems involved, (d) cooperation with public employment services, (e) the timing of changes, to the extent possible, so that potential unemployment will be cushioned by expected expansion of operations and normal attrition in the work force (through separations resulting from retirement, quits, and so forth).” The Committee also recommended that “private employers and unions faced with automation or technological changes should make every reasonable effort to enable workers who are being displaced, and who need to be retrained, to qualify for new jobs available with the same employer and to enjoy a means of support while so engaged.”

Following this report, the President’s Committee sponsored several meetings of management and labor representatives to discuss the benefits and problems of private adjustment methods. In a summary of the major conclusions of the discussions, it was stated: “Diversity is the key to any consideration of private adjustment techniques... the private adjustments utilized in any situation are heavily dependent upon the size of the firm, the size of the union, the extent of the organization of the industry or the nature of the labor market. Also, adjustment methods are dependent upon the kind of economic processes that are contributing to the changes that cause displacement as well as the economic health of the industry. Finally, different approaches must be developed to meet the specific demands of the labor force in terms of age, sex, skill level, basic education geographic location, etc.”

The Bureau of Labor Statistics has made case studies in several different industries which describe experiences with manpower planning that follow the Committee’s general guidelines. Additional studies have been recommended by students of labor in the United States and international bodies such as the Organization for Economic Cooperation and Development. In 1966, the National Commission on Technology, Automation and

1/ The Benefits and Problems Incident to Automation and Other Technological Advances, President’s Advisory Committee on Labor-Management Policy, January 11, 1962, 11 pp.

Excerpts from this report appear in the Monthly Labor Review, February 1962, pp. 139-144.

Economic Progress stated “Because of the dearth of available information, we suggest that the Department of Labor and the Department of Commerce systematically investigate and report publicly on successful private adjustment programs developed through either collective bargaining or the unilateral efforts of management. This would not only add to the present store of general knowledge about the adequacy of adjustment coverage, but would also permit more extensive communication about effective adjustment programs among and between employers, employees, and unions.”


This report describes the manpower planning policies of several companies within the Bell Telephone System and the operation and results of these policies in several cases of conversion from manual to long distance dial telephone systems. The companies were selected because they had made deliberate efforts to plan the orderly adjustment of employees.

This bulletin was based on case studies and union contracts records and documents presenting company policies in dial conversions. Four conversions in three states were surveyed: one located in a large city, and three in small towns. Officials of the companies, and unions representing the employees, were interviewed to supplement the information obtained from records and documents.
Chapter II. Summary and Highlights

Over many decades, changing technology has been a major characteristic of the telephone industry. To facilitate the orderly introduction of changes affecting operators, the major telephone companies developed a systematic program to minimize possible adverse affects on employees.

Nature of the Change

Technological change in the four case studies involved the introduction of fully automatic telephone switching equipment, for both long distance and local calls, which drastically reduced the need for local manual telephone operators. All of these employees were women. Engineering and installation of the equipment required several years of advance planning. This long lead-time afforded opportunities for manpower planning, retraining, and application of various adjustment techniques.

Manpower Planning

A formal systemwide policy on manpower planning in dial conversions had existed for several decades prior to the changes. Fairly detailed guidelines for coordinating technical and manpower changes were set forth in a comprehensive policy document. The objectives of manpower planning were: to retain as many employees as possible, to provide "suitable" transfer, to avoid downgrading employees, and to avoid a surplus work force. In practice, local management adapted the general policy guidelines to fit the particular circumstances of the individual town or office.

A major feature in planning these cases was the development, in advance, of estimates of the number of operators who would be needed after the change, and the number of operators for whom some adjustments would be necessary (retirement, transfer, etc.). These estimates were periodically revised as conditions changed. A second major feature was the ability of each office in the study to broaden the scope of its manpower planning to take account of opportunities in other departments and in nearby offices and towns to which displaced employees could transfer.

Advance Notice

The unions and employees were notified many months before the change was scheduled to take place. Employees were informed about transfer and training opportunities, and the number of employees who would continue as operators, several months before the conversion. Personal interviews were then held to inform each employee of options available to her, and to motivate her to plan her own future and determine her choice.

Union-Management Negotiations

Union contracts, in the case study companies, provide for early notice to the union and negotiation of force reduction moves. Union-management meetings held during the preconversion period provided a means for direct communication between employees and management about the change and the employees affected. They also led to discussions of alternative plans for layoffs or part timing. In most cases, the unions were concerned with enforcing the role of seniority in all manpower adjustment measures.

Use of Attrition and Controlled Hiring

In order to reduce employment through attrition, the companies instituted strict control over hiring at an early date. Hiring of permanent employees ceased 1 year or more before conversion. As losses from quits and retirements reduced the regular work force, temporary employees were hired; overtime was scheduled; and vaca-
tions, retirements, and leaves of absence were postponed in order to maintain the level of available man-hours without hiring regular employees. Despite these efforts to retain all employees and a relatively high rate of voluntary turnover among women workers, it was necessary for some employees to transfer or be laid off in each of the offices studied.

Transfer and Reassignment

Transfer to other offices were offered to all regular employees who would not have a job after cutover. Employees who transferred maintained their seniority for purposes of job security and pension and other benefit rights, including vacation length. The transfers were arranged, in most cases, to offices with the same or a higher wage rate. In one case study, both management and the union were concerned that the transfer of a large number of employees, who had a decade or more of seniority, would adversely affect the choice of shift and vacation dates of employees in the receiving offices.

Layoff, Severance Pay, and Rehiring Rights

Because family responsibilities precluded transferring to telephone openings in other towns, some women accepted layoff with severance pay, the only other option open to them. Severance benefits were paid to nearly all of the regular employees who could not transfer. In accordance with the understanding made at the time of hiring, none of the temporary employees who were laid off received severance pay. Contracts covering three of the case study offices provided that regular employees on layoff for less than a year should receive preference, in order of seniority, if additional hiring should take place in jobs for which they qualify. Some laid-off operators were rehired under this provision, as business increased and/or turnover created vacancies.

Training and Retraining

The manual telephone operators who were displaced by new equipment were most easily retrained to long distance, information, or intercept operating. All were offered this retraining, and all but a few were able to learn the new procedures. Some retraining was also given in clerical jobs in other departments but none for outside jobs.

Older Workers

Individual interviews and advance notice were particularly helpful to older employees, by allowing sufficient time for individual adjustment to occur. Training, also, was flexible enough to permit the older worker to learn more slowly, or to take less demanding intercept positions. Since severance pay was based on length of service, older workers who could not retire were given a relatively large lump sum at layoff. This proved important to the older worker who was unable to relocate.

Coordination With Public Agencies

Although, in one case, the company attempted to obtain jobs in another plant for some employees who were laid off, none of the case study offices notified or worked with public agencies in advance or during the changeover. The offices acted to minimize employee adjustment problems through internal planning, but their greatly reduced operator requirements reduced openings in each community for young, unskilled, female high school graduates. To this extent, the problems of vocational guidance, placement counseling, and job creation were increased for public agencies in these communities.
Chapter III. Manpower and Telephone Technology

This chapter describes the telephone industry, its work force, and the types of technological change which affect telephone operators. It presents the background from which the manpower policy (described in Chapter IV) has been developed.

Employment in the Industry

The telephone communication industry employed over 800,000 persons in mid-1967, making it one of the largest industries in the Nation. Although employment has increased since 1964, the trend in employment between 1957 and 1963 was downward. Future prospects are for a stable or slightly rising level of employment over the next decade.

Employment in a typical company may be classified into five broad groups: About 40 percent are employed in the Plant Department, which installs and maintains wire, cable, telephones, and maintains central office equipment; one-third are in the Traffic Department, which provides service to customers placing calls; one-tenth are in the Commercial Department, which handles sales and collections; less than one-tenth are in the Accounting Department; and about one-tenth are in the managerial and professional group.

Women constitute over half of the work force. They are concentrated in the Traffic Department and in clerical jobs in Plant, Commercial, and Accounting Departments. The Traffic Department hires young girls mostly from high school, trains them as operators, and promotes some to service assistant, assistant chief operator, and chief operator. Turnover is high among telephone operators, particularly in the first 2 years of service. After the second year of service, the proportion of women who remain in the company for very long periods rises sharply.

Today, telephone operators make up close to 200,000 employees or about 28 percent of the industry’s work force. About two-thirds handle toll calls exclusively; about a fifth provide information on all types of calls; and the rest handle intercept calls (wrong number, number changed, etc.) and other types of special services.

Collective Bargaining

Most of the workers in the industry are covered by collective bargaining agreements, negotiated company by company. Although there are about 2,500 operating companies in the industry, about 85 percent of all employees work for the Bell System of 23 companies, each of which provides service to one State or more. The leading union is the Communications Workers of America, AFL-CIO, which encompasses all crafts and departments and represents a majority of nonsupervisory workers in the industry. The International Brotherhood of Electrical Workers, AFL-CIO, represents selected departments in some companies. A large number of independent unions typically represent one department in one company. Some have formed federations or alliances.

Union locals may be organized along departmental lines, i.e., separate plant, traffic, commercial, and accounting locals in each town. In some companies, all workers in one town may belong to the same local.

Contract provisions about wage rates, call-in pay, night-work differentials, termination pay, and holidays vary among companies. The noncontributory retirement and disability plan, however, is the same throughout the Bell System.

Technological Changes Affecting Operators

The telephone industry has undergone several major technological changes in over
75 years of its history. These changes have emerged from extensive research and development programs and long-term technical planning that are characteristic of the industry. Rapid expansion of service also has taken place; between 1920 and 1966, the number of telephones operated by the largest system increased tenfold, the number of calls increased ninefold.

One of the first major changes was local dial conversion. First introduced in the 1920's, dial conversions were made gradually, central office by central office. By 1930, nearly a third of all Bell telephones were equipped for local dialing; by 1940, about 60 percent were dial. At the present time, virtually all United States telephones are dial.

As operator handling of local calls was eliminated, a series of changes also reduced the amount of operator time required for long distance toll service. First, during the late 1940's toll operators began to dial the long-distance telephones rather than make connections manually connecting with numerous other long-distance operators and tying together a route to the distant city. Because of operator long-distance dialing, the originating operator could handle the call more quickly. For many calls (depending upon the route and traffic conditions), the assistance of other operators along the call's route was eliminated.

The second innovation in toll call handling, "mark-sensing," not only saved operator time, but also saved clerical man-hours in the Traffic and Accounting Departments. The toll operator rapidly marked punch cards (to indicate calling number and called number) rather than prepare a time-consuming, handwritten record. Clerical time was saved because the marked card could be machine-read ("sensed") and tabulated. Mark-sensing required the retraining of tens-of-thousands of toll operators.

The third toll innovation, automatic customer distance dialing eliminated all operator handling on dialable station-to-station calls. Because the great bulk of all telephone calls--distant as well as local--were being made without any operator assistance, some special services--person-to-person, credit card, and collect calls, information and intercept--still require human intervention. For each of these types of calls, operator man-hours are being reduced by installation of semiautomatic, sometimes computer-assisted, equipment. All of the changes in operating methods drastically reduced man-hours per call but made no change in the industry’s practice of hiring untrained women.

Manpower Outlook

In the future, very rapid expansion is expected in data transmission utilizing telephone company facilities. Overseas and domestic toll calls will grow rapidly, as will special services to business users.

The relative proportion of telephone operators in the industry's employment will probably continue to decline over the next decade. Local- and long-distance dialing have already reduced the proportion of operators from over half of total telephone employment in 1945 to 28 percent in 1966. By 1975, operators may constitute a little over one-fifth of total employment. Although employment will also be lower, the industry will need to hire many women to replace operators who quit or retire and, in some areas, to meet growing demand for services.

By 1975, most telephone operators will be working at new, desklike equipment which switches all calls automatically. With the aid of special purpose computers, the operator will handle person-to-person, credit card, collect, third-number charge, pay-station, and time-and-charges calls with only momentary intervention. Moreover, information operating and intercept calls may be totally or partially computerized.

In summary, the telephone industry has a long history of planned technological change, with each development preparing the way for the next. The problems of human adjustment and manpower planning for these innovations are discussed in the following chapters.
Chapter IV. Manpower Planning Policy

Although dial conversion of the entire telephone system was “gradual,” spanning several decades, the change in any one town or exchange was fairly abrupt. Technical preparations are extensive and prolonged. However, the moment its telephone system begins operating automatically, a whole town’s requirements for operators might be reduced from several hundred to a few dozen. Some offices built exclusively for local manual operations might be shut down permanently at the cutover hour.

To cope with the human problems of this extensive changeover, companies comprising the Bell Telephone System developed at an early stage a detailed statement of manpower policy which provided for close coordination of personnel with technical planning in all cases of dial conversion. The objectives of this manpower planning policy are set forth in the system’s manual describing the procedures to be followed by local offices, as follows:

1. “To retain as many as possible of those who wish to continue to work.
2. “To place in suitable positions those whom it is necessary to transfer.
3. “To avoid reducing in rank any regularly appointed nonmanagement employee with a title above that of operator.
4. “To avoid a surplus after the cutover.”

This policy has been applied in thousands of conversions over the past several decades in all parts of the country. Although some of it has been modified by union contract provisions relating to seniority rights and layoffs, it remains substantially intact. This chapter presents a generalized version of the policy and program. The next chapter describes how it was carried out in four specific cases of dial conversion during the late 1950’s and early 1960’s.

Advance Planning

Planning for the change involved both technical and personnel phases. Technical preparations for dial conversions require about 3 or 4 years of complex engineering work, from the decision to install the dial system to the moment of cutover, when all calls are routed through the dial system. Switching equipment for automatic dial offices must be planned, engineered, manufactured, and (until recently) installed on a custom basis. Current and future communications needs of the community must be surveyed, decisions made with the equipment manufacturer about type of equipment to be used, and tentative installation schedules established. These technological and organizational necessities create a long leadtime which the operating company can use to plan its manpower adjustment steps.

The specific circumstances of each cut-over influences the particular emphasis to be followed in planning manpower policy. If the conversion affects only one office of a large city, the emphasis of planning is on transferring employees elsewhere within the city. There is a wider choice of jobs in other departments available to employees who must leave the operating force. If the cut-over is in a small, single-office city (or encompasses many exchanges in a larger city), fewer local opportunities are available and wider transfer areas must be considered.

Timing of the conversion is also critical. A cut-over scheduled just before the busy season (usually June through September) will leave fewer redundant workers immediately after the cutover because of the seasonally heavy traffic load. Other special circumstances which planners must take into account are: the age distribution of employees; nearness to other towns (and their operator surplus or shortage status); the union contract clauses which deal with seniority; and layoff and transfer actions.

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Estimate of Work Force Requirements

Planners need basic information about total traffic man-hours required before cut-over, immediately after cutover, and for several months thereafter, so that normal operations can continue while personnel changes take place. Operator man-hour requirements are calculated by dividing the expected volume of calls which require operator attention by average operator time per call. This figure is estimated long before cutover and covers the precutover period plus several months thereafter. It is adjusted if new information indicates a change in circumstances.

The calculations are complicated by such elements as peak periods, lower average operator speeds with a predominantly inexperienced work force (or the converse), and estimates about call volume which extend 2 or 3 years into the future. Such forecasts are developed from company information concerning community growth and are updated regularly at management forecasting conferences attended by all departments of the operating company. Changes in traffic volume, changes in work per call, and changes in the installation schedule may require review of the entire work force estimate. The program is usually reviewed at 3-month intervals until a year before the cutover. During the last year, the plan is usually reviewed monthly.

The estimated operator man-hour requirements after cutover are subtracted from the precutover requirements. After an adjustment for hours consumed by vacations, leaves of absence, and training time, this yields an estimate of the number of operators who will no longer be needed in this office after conversion.

Next, the company estimates normal attrition in the work force (by applying the office's turnover rate to the current operator totals). If this attrition, over the 1 or 2 year preconversion period, will reduce the current work force to the estimated postcutover requirements, the company knows that layoff of the specific operators then working may not be necessary. It will then stop hiring "regular" employees. From this point on, the employees who leave through normal attrition are replaced with temporary or term employees, who are told that their jobs will probably not extend beyond the cutover date. The company often recruits former operators for these temporary positions in order to avoid training an inexperienced new employee who would be on the job for only a year or less.

Despite planned reduction by attrition, a number of regular employees may not be needed after cutover because automatic dialing reduces operator requirements so drastically. Using the same methods as above, the company can calculate in advance how many of these regular employees would no longer be needed in the office; and, moving down the seniority roster, the company can then identify these operators. Thus, a year or two in advance of the cutover, the company knows, relatively accurately, who will be required to transfer or retrain. It is then in a position to plan transfer actions, schedule training, and develop other means of retaining workers who want to continue working in the industry.

Advance Notice and Consultation

When the company has developed its estimates to this point—where the seniority date for retention in the office is known—it informs the union and the employees. The union is informed in advance of employees and public, "so that there will be no misunderstanding and so that questions or discussions among the employees, if taken to the union, may be given answers in accordance with the facts." (From company policy document.) The company may give the union its estimate of work force to be retained— which also indicates the required seniority for an employee to be sure that she will be retained. The company also may describe its planned adjustment steps with the union at this time, usually 1 or 2 years before conversion. Conferences with the union may continue with regularity throughout the period prior to cutover.
The collective bargaining agreement in some companies provided for a 30-day period (from the date of notification of the decision to install new equipment) to negotiate any special arrangement for manpower changes which departs from the written contract provisions. If special procedures are not negotiated during this period, the general contract provisions usually require that layoffs be made in inverse order of seniority within the Bell Systems.

The employees are notified immediately after the union, and given the same information about the change. They are told how much seniority will be required to remain in the office (if this estimate has been developed). This serves to help the less senior operators to plan for possible transfer.

Later, a management official holds individual conferences with each employee to determine her wishes as to retirement, retraining, transfer, and other options available in this office’s plan. This information, together with data on work experience, seniority, and other personnel information, is used in planning the adjustments necessary to assure individual placement after conversion. The company policy manual states:

“It is well to keep in mind in this connection, that in addition to the effect on the general employment situation, it is better from a service and cost standpoint to retain in the System experienced employees for whom a considerable investment for training has already been made, than to engage and train new people in some places while laying off experienced employees in others.”

Application of Attrition

A variety of methods is used to avoid adding permanent employees to the work force during the period immediately prior to conversion and to maximize the effect of attrition after the cutover. These are:

1. Postponing retirements, vacations, and leaves of absence.
2. Postponing some training.
3. Postponing other company activity which can be performed later.
4. Reducing work time per call.
5. Borrowing operators from other offices.
6. Curtailing absences.
7. Scheduling regular overtime tours of duty.
8. Hiring temporary or term employees.

These measures result in temporarily increasing the number of man-hours available for operations, without hiring additional permanent employees. The artificial stretching of man-hours involved in the first method results in a spurt of retirements, vacations, and leaves of absence among regular employees immediately after cutover. Deferred training is undertaken now, overtime is stopped, borrowed employees are returned, and postponed miscellaneous projects are begun. All of these measures reduce available operator man-hours after conversion, thus permitting some regular employees to be retained who might otherwise have been laid off. In effect, the man-hours that were “artificially” expanded just prior to conversion are now contracted suddenly, in order to retain as many permanent employees as possible.

Transfers and Reassignment

A frequently-used method of retaining employees is to transfer them to other offices in the same city, or to other departments, or to other cities. The system tries to preserve its investment in training (several hundred dollars per operator) by using experienced employees, wherever possible, to fill operator vacancies. Opportunity for transfer is particularly good in a steadily growing system which employs nearly 200,000 operators; has offices in most of the cities, suburbs, and small towns of the United States; and has a turnover rate which generates many thousands of new vacancies each year. Transfers are not prevented by union barriers between craft or departmental lines.

An effort is made to create local transfer possibilities in advance of cutover. Traffic Department jobs to which displaced employ-
Employees may be reassigned include information, intercept, and toll operator positions, either within the same office or in another exchange. Where other central offices are within the same commuting area as the affected office, the man-hour "stretching" procedures described on page 9 may be applied to another office in order to create openings for incoming transfers at cutover. This procedure would be most likely when one exchange, in a city of several exchanges, is switched to dial.

Seniority, qualifications, home address, and transportation availability are all considered in determining who should be transferred. Transfers to nonoperator jobs (such as clerk) in the traffic and other departments also may be made. Other departments may become part of the manpower plan. They also may be asked to lower their age requirements in order to accept the operators for training. Operators may consider such transfers as advantageous because they may carry a better work schedule or higher wage rates.

The company's policy may involve arranging transfers to distant cities for employees for whom no local positions can be found. This is particularly necessary when a whole town is converted to dial at one time. Such transfers are usually arranged far in advance of the conversion.

If the number of surplus employees in the town to be cut over is expected to be large, the statewide operating company may institute a work force planning program in one or more distant cities in order to create vacancies into which surplus operators can transfer. The distant office selected for intransferring will also postpone vacations, leaves of absence, and retirements until the cutover date. It may even hire temporary employees. At cutover, this distant office will then have vacancies for the incoming transferees.

It appears, from the pattern of transfer offers in the case studies, that the system usually offers transfers into jobs and into areas where the new wage rate will be about the same as the operator's present wage. The policy document does not suggest that transportation or moving expenses be paid.

Employees who transfer within the system generally retain their system seniority for purposes of job security (layoff order), relative pay level, pension and sickness benefits, and length of vacation. Seniority for choice of shift and choice of vacation may be suspended until the next regular rescheduling, so that the incoming transferee does not bump numerous other employees from their regular shift and their planned vacation. Shift choice is important to an operator because some tours of duty occur during evening and night hours and on weekends.

**Retirement Programs**

Older employees are encouraged to retire after the cutover, if they are eligible for pensions. Precutover interviews, in which various alternatives are offered, include a discussion of retirement benefits with the employees whose age and service were sufficient to qualify.

Pensions are available to all system employees on the same basis and are not vested. They are granted automatically to women employees at age 65 if they have 15 years of system service; or at ages 55 to 65 upon employee's request, if they have 20 years of service. At the discretion of the management-operated Employees' Benefit Committee, pensions may be granted to women with 25 years of service if they have reached the age of 50, or with 30 years of service at any age. Monthly pension payments are 1 percent of the employee's average pay during his last 5 years of service, multiplied by total years of service. When the retiree is eligible for social security, an amount equal to one-quarter of the social security benefit is deducted from the system pension payment.

**Severance Pay**

If a regular employee is unable to transfer and is laid off and is not eligible for a
pension, she may be given severance pay. Severance pay and pension benefits cannot both be collected. Severance pay provisions are common in the communications industry (telephone and telegraph). Of the 81 "major" agreements (those which cover 1,000 workers or more) in the industry, all but 5 specifically provide some type of severance payment. In contrast, in the electric and gas utility industry, only 21 of the 86 major agreements provide severance or layoff benefits. In the telephone industry, payment amounts depend on the worker's weekly wage, multiplied by a length of service factor. All but two of the agreements in this industry have a minimum service requirement, usually between 6 months and 1 year.

One system contract states:

"Each regular employee laid off as a result of force surplus, other than employees who are offered and refuse employment in a related or reasonably equivalent occupation and within reasonable commuting distance of their then place of employment, will be paid a layoff allowance."

If the operating company has been able to carry out all aspects of its manpower plan, and has been hiring temporary or term employees to fill vacancies over the last year or more before the cutover, the number of termination payments which must be made may be quite small.

Assistance in Finding a Job Outside the Telephone Industry

The system policy document provides that any office that must layoff employees should take steps to help surplus operators find jobs in other industries "because of possible hardship, possible unfavorable public reaction, and possible impairment of the company's reputation as an employer." It also recommends that the operating company contact "other likely employers (especially those who have private branch exchange switchboards) either directly or through the Chamber of Commerce." If any job openings are located, the company informs operators who were looking for work directly. The company policy also states: "Granting employees time off to seek other positions may be considered." No explicit mention is made about contacting the State Employment Service as a means of assisting employees to find jobs.

Training and Retraining

In a typical dial conversion, the operators who are no longer needed are those skilled only in local switchboard operations. Since these employees are already familiar with basic operating practice and the general functioning of switchboards, they are more easily retrained to operate toll boards or to handle information or intercept positions than any other position in the company.

Since toll service accounts for most of the operator positions, it provides most of the openings available to transferees. Toll operating is the most complicated operator position, requiring the operator to respond to a wider variety of requests and service conditions. Therefore, toll training generally requires 3 weeks; information training takes 1 week; intercept training a few days.

Highly developed training programs exist for nearly all jobs in the system, even at the nonmanagement supervisory level. Therefore, retraining can be accomplished relatively smoothly by assigning a surplus operator to any one of a number of courses already being given in many departments and occupations. This policy enables some operators to remain at work without relocating to another town.

Rehiring Rights

Union contracts often provide that laid off employees are to be rehired in inverse order of seniority before new employees can be hired. The rehiring rights may be limited

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to employees who have been laid off for less than 1 or 2 years and are qualified for the type of job which is being filled. Payment of severance benefits does not affect recall rights. Employees on layoff keep the company informed of their address so that they may be contacted when hiring takes place. If they are recalled in fewer weeks than the number paid for by a separation allowance, employees repay the difference between the allowance and their wage rate for the period laid off.
Chapter V. Manpower Planning in Operation: Four Case Studies

The case studies presented in this chapter describe the application of the general policy of the Bell System in four instances of conversion from manual equipment to automatic dialing for local and long-distance service combined. These dial conversions were unusual in the industry’s technological history, since most exchanges had been converted to local dial many years before long-distance dialing was installed. Thus, three of the case studies represented an extreme telescoping of change for the type of small town affected. The fourth case study was a conversion of one manual exchange in a large city where all other exchanges had already been converted to dial.

The long-distance dial equipment installed was the most advanced type in use at the time of the case studies. It contained automatic number identification equipment, which permits dialed toll calls to go through without the operator’s intervention to determine the calling number.

Labor requirements were reduced drastically: In office A, by 40 percent; office B, by 47 percent; office C, by 85 percent; and office D was closed down. The employees directly affected were operators, service assistants, assistant chief operators, and chief operators. All of these employees were women. Although this type of dial conversion also affected some plant and accounting jobs, such jobs were not studied.

Three of the offices affected (described in text and tables as A, B, and C) were located in towns of 40 to 50,000 in the Appalachian region. Unemployment was relatively high, ranging from 5 to 13 percent, during the cutover period. The fourth office (D) was the last manual central office in a large Eastern city. Because of its size, the city had many central offices to which employees could be transferred.

The operators in two offices (B and C) were represented by the Communications Workers of America; in the other two offices (A and D), by a statewide independent union. All offices had been represented by the same union for at least a decade prior to the conversion.

The age distribution of employees varied among the four offices; office B had the youngest work force (about 75 percent had less than 10 years of service), and office D, the oldest (44 percent of the work force had less than 10 years service). In fact, a number of operators in office D had transferred to the office as manual operators when other offices in that city had been converted to dial. Table 1 indicates the seniority level of employees in each office.

<table>
<thead>
<tr>
<th>Years of company service at cutover</th>
<th>Office A</th>
<th>Office B</th>
<th>Office C</th>
<th>Office D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>30 and over 5.5</td>
<td>6.2</td>
<td>5.4</td>
<td>49.7</td>
<td>19.1</td>
</tr>
<tr>
<td>25 - 29 3.4</td>
<td>1.7</td>
<td>.8</td>
<td>3.0</td>
<td>4.2</td>
</tr>
<tr>
<td>20 - 24 1.4</td>
<td>3.9</td>
<td>2.3</td>
<td>17.5</td>
<td>8.4</td>
</tr>
<tr>
<td>15 - 19 9.7</td>
<td>1.1</td>
<td>11.5</td>
<td>23.0</td>
<td>9.6</td>
</tr>
<tr>
<td>10 - 14 9.0</td>
<td>12.4</td>
<td>18.5</td>
<td>36.8</td>
<td>15.1</td>
</tr>
<tr>
<td>5 - 9 29.7</td>
<td>37.1</td>
<td>40.0</td>
<td>27.3</td>
<td>15.7</td>
</tr>
<tr>
<td>Less than 5 41.4</td>
<td>37.6</td>
<td>21.5</td>
<td>28.9</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Because of rounding, sums of individual items may not equal 100.

SOURCE: Company records.

Technical Preparations and Manpower Planning

In all four cases, advance planning of both the technological and personnel adjustments began several years before the cutover. In office B, for example, planning began 2 years in advance; in office C, 3 1/2 years in advance. In both of these offices, a specific management official was put in full charge of cutover arrangements, both personnel and technical. The District Traffic Engineer was in charge of office B’s conversion.
C, a Traffic Supervisor was sent to the town to plan and carry out all aspects of the conversion.

The technical phases of planning involved various time consuming preparatory activities related to purchasing and installing equipment. Preparing the complex specifications for manufacture and assembly of switching equipment in one community, for example, required 5 man-years of engineering work by the equipment manufacturer. Installation took 8 months. During this period, the operating company had responsibility for training operators, instructing customers, compiling and publishing a directory, and making a great variety of community arrangements to minimize customer confusion with the new dial system.

The manpower phases of this planning involved forecasting in advance for employment requirements as described on page 8. For example, 21 months before the cutover, office C estimated turnover rates, retirement rates, and workforce needs for each month over the next 2 years. It also estimated workforce needs after conversion. These data were applied to total employment to estimate the number of employees who would have to transfer or be laid off. This estimate was revised periodically, to take account of changes in turnover rates, call volume, new postcutover workforce estimates, and the results of employee interviews concerning willingness to transfer. The estimate prepared 2 years before cutover proved to be quite inaccurate, chiefly because the necessary postcutover force had been overestimated. The estimates prepared 8 months prior to cutover, however, proved to be very close to the actual result.

Advance Notice

Unions and employees were notified far in advance of the change. In office A, the union and employees were notified about 20 months prior to conversion. A formal union-management meeting was held just prior to employee notification. In offices A and D, meetings began a year prior to cutover; in office C, 17 months prior to cutover. Office B did not carry on formal consultation with the union but notified the local of cutover plans 2 years prior to the date of conversion.

In all offices, the union contracts required that the company notify the union of "an occasion for the adoption of a program of mass or general layoffs or part-timing (less than a normal workweek) or both" for regular employees. (The contract covering office C does not include "part-timing" but is otherwise the same.) All four contracts provide that, within 30 days of such notice, either (1) a special layoff or part-timing arrangement shall have been negotiated, or (2) contract provisions shall apply which require that inverse order of seniority be observed in layoffs. (See appendix A for contracts in the case study offices.)

At the time of notification, planning in all four offices had progressed to the point where management was able to give the union the approximate cutover date, some indication of how many employees would be retained, and transfer information. For example, in office D, management was able to inform the union that all manual operators would be retrained for toll work, that they would be transferred to other offices within the city in advance of cutover (and be replaced by temporary workers), and that the retraining and transfer program would begin 10 months before cutover. In office C, management indicated the seniority date of the least senior employee who could be retained in the office and explained how transfers would be arranged.

Union-Management Negotiations

In office A, management proposed as an alternative to the contract provision regarding layoffs, that the less senior half of the regular employees be given part-time work -- about 2-1/2 days a week -- that they also be offered transfers, and that some special temporary clerical projects be brought into office A to occupy the surplus force immediately after cutover. The union countered-proposed that the workday for all regular office A operators should be cut 1 hour, at no cut
in pay; that employees should be offered expense-paid transfers anywhere in the system, by seniority; and that pensions be provided to all employees with 20 years service. The union was firmly opposed to part-timing, partly because it would reduce the operators' income while preventing them from obtaining unemployment compensation. After three negotiating sessions, the company agreed to pay transportation and moving expenses to transferees. Since the union was opposed to part-timing, the company withdrew this proposal and returned to the contract's layoff procedure.

Union-management meetings in office D, which was to be closed, dealt at length with transfer provisions. All employees had to transfer to other offices in the city. Management proposed that the choice of office to which they would like to be transferred not be offered in order of seniority. Instead, management proposed that the seniority list be split into four groups, and the limited number of transfer openings in each office be apportioned among the four groups. Within each group, choice would be made by seniority. A result of this method would be that the operator, for example, who was 41st in order of seniority could have last choice in transfer opportunities, while the operator who was 42d on the seniority roster could have first choice.
About 20 months prior to cutover

Management informed union local that a dial cutover was being planned. The contract procedure for work force surplus was discussed. Management indicated that an announcement would be made to employees.

16 months prior to cutover

Management informed union of estimated office size after cutover, and explained how it had estimated the seniority date of the least senior operator to remain in office C. (This estimate was revised at a later meeting because turnover had been underestimated slightly.)

Management informed union that each operator would be interviewed next month to determine whether or not she will want a transfer to another exchange elsewhere in the State.

In response to a union question, management said that it “would not use the cutover as a means of getting rid of attendance problems, but attendance will continue to be stressed.”

Union asked if senior operators could bump junior employees in other departments. Management said no.

15 months prior to cutover

The union stated that temporary employees are unhappy with their constantly changing work schedules. It wanted to know how many could be reclassified as regular, so that they could obtain a fixed working tour. Management agreed to find out and inform the union.

The union asked for clarification of the transfer procedure. Management said that it would offer transfers in inverse order of seniority, as close to cutover as possible. Union and management reviewed results of the individual operator interviews concerning their desire to transfer and their choice of locations.

Management agreed to pay a layoff allowance to a regular (not term or temporary) employee who had accepted a transfer, then later decided not to transfer. However, it would not pay a layoff allowance to an employee who refused to transfer to a toll job in the same town as office C.

Union asked that the layoffs be applicable to all departments (to create jobs for senior operators who would otherwise have to move). Management refused.

9 months prior to cutover

Discussed position of employees with enough seniority to remain in town C, but who are on leave of absence at cutover. Union indicated that it would make sure that seniority was strictly observed in offering jobs to employees returning from such leaves. (A grievance later was filed on this issue.)

Management indicated the wage grade which operators and service assistants would be offered if they were hired by the Commercial Department.

Management said that if there were no extenuating circumstances, an operator could be required to work a 6-day week “as a condition of continued employment.” (This scheduling was used to add man-hours before cutover.)
Management answered a union question about employees below the seniority level for retention. About five will be used for a temporary plant job and may be needed again later (by the time the temporary project is completed) as operators.

Management told the union when vacations would begin (a month after cutover). Vacations could be chosen for the following 6 months.

Management altered its earlier position on operators who refuse transfer. If a long-service employee (who could have been retained in office C) accepted a transfer, then later decided not to go, she would not be given a layoff allowance.

Management answered a query about a second layoff subsequent to cutover by stating that this might be a possibility, but that the company was considering scheduling vacations to avoid layoffs. This would help absorb the force during this period in the expectation that traffic growth and force turnover would nullify the surplus.

At early meetings, an international union representative joined the officers of the local. Management was usually represented by the District Traffic Manager, Traffic Manager, and Chief Operator.

Source: Company minutes of meetings.
The union proposed six groups, rather than four groups, since it was concerned that the relative position on the seniority roster of operators in the offices receiving the transferred employees would be lowered by an influx of more senior employees from office D. This would adversely affect the receiving office operators' choice of hours and vacations. The company and union agreed to proceed on the basis of six groups.

Chart I presents a chronological account of meetings between labor and management representatives at office C. These discussions began about 20 months prior to the cutover and dealt with many of the personnel problems of the change.

**Employee Interviews**

Interviews were held with the employees in offices B, C, and D to inform them of the choice in transfers, training, or other adjustments. The interviewer was either the management person in charge of the cutover or one of his staff. This far-in-advance notice and variety of choice were particularly helpful to women workers in preparing their family for the change. Women are not expected to put job or career above family convenience or preference, even if they support the family (as was the case for many of the women operators in these case studies). The following notes made by a personnel interviewer illustrate some of the problems that arose:

"Husband is going to look for work (now unemployed), and if he finds employment, she will want a transfer to that city. Otherwise will work until cutover."

"Will accept transfer to P. City. Prefers to go as close to cutover as possible, since her son is in school and she wants him to finish the year here. Divorced; supports self and child."

"Father will not permit her to transfer anywhere. When she becomes 21 may change her plans."

10 months later:
"Has decided to transfer to Washington, D. C."

"Single; supports parents. Will talk to family and let us know about transfer. Mother's health not good."

9 months later:
"Cannot transfer. Must take layoff."

"Husband's job is not a good one as far as wages. He is trying to find a better job. Car will not be paid for until 7/61."

10 months later:
"Will transfer to W. City at cutover. Husband unemployed."

**Use of Attrition**

In all offices, regular employees who left during the year preceding the cutover were replaced with temporary workers. In addition, in offices B, C, and D, transfers took place during the few months prior to cutover, and the vacancies thus produced were filled with temporary workers. As a result of these measures, temporary employees accounted for over a third of the total operator force in offices C and D, and nearly a fourth of the operating force in office B by cutover time.

Overtime was used in all four case study offices to add to operator man-hours. Usually, operators were scheduled for a 6-day week, rather than a longer day. Table 2 shows that about one-quarter of the total man-hours required to operate office B were obtained through the use of temporary employees and overtime scheduling. The peak in overtime at 11-12 months prior to conversion was due to a seasonal peak traffic. The cutover was planned for 1 year later, when another seasonal peak in traffic would require extra operator man-hours, and therefore would result in fewer layoffs immediately after cutover.

Offices A, B, and C postponed vacations until after the cutover (although two vacations each week were permitted in office A). In office C, this measure added the man-hours equivalent of five workers to the...
operating force during the 3 months prior to conversion. Office C had estimated its turnover during the year of conversion to be 35 percent; during the year preceding conversion, 20 percent. It began filling the vacancies created by this attrition with term employees 2 years before cutover. One year before cutover, vacancies were filled with temporary workers.

**Transfers**

The company arranged to transfer some operators to other offices in all four cases. In offices A, B, and C, jobs in other towns, mostly within the State, were available for some employees; in office D, the jobs were within the city. Nearly all of these moves were to other types of traffic work (usually toll, information, or intercept operating). In all four cases taken together, only five employees were transferred into another department in the same town.

The transfers to other cities and offices did not all take place immediately at the cutover. They were spread out over a period of months preceding cutover, in order to lessen the training load on the receiving office.

Office C, for example, shifted 14 operators to a single small town. After transfer, they had to be trained for toll operations. Therefore, these transfers were spread out over several months to prevent a sudden influx of untrained operators into one office. Similarly, office D moved 132 operators to other offices in the same city over a period of several weeks. All of them had to be retrained for toll work. In both offices, as regular operators moved, their positions were covered either by hiring additional temporary employees or by scheduling overtime.

The system usually does not pay moving or transportation costs to employees who are required to transfer. In office A, however, transportation and some moving costs were paid to the 11 employees who moved to another town. Also, at the time office C closed, the telephone company of a large city a few hundred miles away was recruiting high school girls in office C's town because of a serious operator shortage. The company was paying transportation expenses to girls who moved to the city. Therefore, when office C was cutover, the same offer of transportation expenses was

<table>
<thead>
<tr>
<th>Months prior to cutover</th>
<th>Estimated force required</th>
<th>Estimated total number of employees available</th>
<th>Estimated force composition</th>
<th>Estimated overtime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
<td>Percent of total required</td>
</tr>
<tr>
<td>18</td>
<td>218</td>
<td>218</td>
<td>218</td>
<td>100</td>
</tr>
<tr>
<td>12</td>
<td>208</td>
<td>190</td>
<td>185</td>
<td>89</td>
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<td>11</td>
<td>218, 196</td>
<td>183</td>
<td>84</td>
<td>13</td>
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<td>10</td>
<td>225</td>
<td>204</td>
<td>182</td>
<td>81</td>
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<td>9</td>
<td>227</td>
<td>214</td>
<td>181</td>
<td>80</td>
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<td>8</td>
<td>235</td>
<td>218</td>
<td>180</td>
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<td>221</td>
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<td>4</td>
<td>225</td>
<td>221</td>
<td>175</td>
<td>78</td>
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<td>3</td>
<td>226</td>
<td>215</td>
<td>173</td>
<td>77</td>
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<tr>
<td>2</td>
<td>250</td>
<td>209</td>
<td>172</td>
<td>75</td>
</tr>
<tr>
<td>1</td>
<td>225</td>
<td>203</td>
<td>170</td>
<td>76</td>
</tr>
</tbody>
</table>

**Table 2. Office B: Anticipated Use of Regular and Temporary Employees and Overtime Prior to Cutover, by Selected Months**

**NOTE:** Because of rounding, sums of individual items may not equal 100.

**SOURCE:** Derived from company records,
made to any operators in office C who wanted to transfer to the city. In spite of this offer and a higher operator wage scale, only one of the displaced office C operators took a job in the distant city.

Two offices in the same state created openings for 26 operators of office C by planning their hiring during the 3 months prior to cutover. In office A, nonoperating departments of the company (in the same town) restricted hiring in certain occupations for 1 year preceding cutover. However, these measures produced only one opening. Table 3 shows the disposition of affected employees in the four case studies near the cutover date.

**Layoff and Severance Pay**

Estimates of the number of persons who might be without jobs at the cutover dates were made during the pre-cutover period. In office C, these estimates were revised every 6 months or so, taking into account interview results, retirements, and turnover. The actual number laid off was higher than the number estimated 21 months in advance.

All regular employees were offered the option of transferring in the four case studies (although not always to the city of their choice). Nevertheless, layoffs took place because of the inability of some operators to move. Many of these regular employees had families and were homeowners. For these and other personal reasons, transfers were rejected by 142 of the 222 regular employees who would be laid off if they did not transfer. Twenty-eight of the 142 were able to retire because of their length of service or the discretion of the benefit committee. Eighteen took a leave of absence. The remaining 96 operators who could not transfer were laid off; all but 17 received layoff pay.

In office C, which had the largest number of laid-off employees (39), layoff payments ranged from $107 for an employee with 2 1/4 years' service to $1,001 for an employee

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Table 3. Disposition of Affected Employees in Four Case Studies Near the Cutover Date

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Office A</td>
</tr>
<tr>
<td>Total affected</td>
<td>154</td>
</tr>
<tr>
<td>Regular employees, total</td>
<td>126</td>
</tr>
<tr>
<td>Retained, total</td>
<td>103</td>
</tr>
<tr>
<td>Retained in department</td>
<td>91</td>
</tr>
<tr>
<td>Transferred to another department</td>
<td>1</td>
</tr>
<tr>
<td>Transferred to another office in the same city</td>
<td>-</td>
</tr>
<tr>
<td>Transferred to another city</td>
<td>11</td>
</tr>
<tr>
<td>Not retained, total</td>
<td>23</td>
</tr>
<tr>
<td>Leave of absence (may be temporary)</td>
<td>3</td>
</tr>
<tr>
<td>Retired</td>
<td>3</td>
</tr>
<tr>
<td>Resigned (no termination pay)</td>
<td>-</td>
</tr>
<tr>
<td>Laid off (termination pay)</td>
<td>18</td>
</tr>
<tr>
<td>Term, temporary, and occasional employees, total</td>
<td>28</td>
</tr>
<tr>
<td>Retained, total (transferred to another city)</td>
<td>1</td>
</tr>
<tr>
<td>Not retained, total (laid off, no termination pay)</td>
<td>27</td>
</tr>
</tbody>
</table>

1 An estimated 100 temporary employees included in total.
2 No exact data available; about 100 temporary employees were used.
3 Information not available.

SOURCE: Company records and case study interviews.
with 9 years service. The average sever­ance benefit was about $350. (See table 4.) These benefits were calculated on the basis of wages paid in the early 1960’s and do not reflect current higher wage rates. In offices A and C, about a third of these laid-off regular employees were rehired within a year or two after cutover, due to increased business and turnover. Employees probably were eligible for State unemployment insurance in addition to severance pay.

Table 4. Office C: Distribution of Separation Allowances

<table>
<thead>
<tr>
<th>Range in amount of separation allowance</th>
<th>Number of employees receiving allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>39</td>
</tr>
<tr>
<td>$700 and over</td>
<td>5</td>
</tr>
<tr>
<td>$600 - $699</td>
<td>2</td>
</tr>
<tr>
<td>$500 - $599</td>
<td>1</td>
</tr>
<tr>
<td>$400 - $499</td>
<td>1</td>
</tr>
<tr>
<td>$300 - $399</td>
<td>8</td>
</tr>
<tr>
<td>$200 - $299</td>
<td>7</td>
</tr>
<tr>
<td>$100 - $199</td>
<td>15</td>
</tr>
<tr>
<td>Less than $100</td>
<td>-</td>
</tr>
</tbody>
</table>

SOURCE: Derived from company records.

Company Help in Finding Other Jobs

Only office C made contacts with other firms. Here, five production-worker jobs were located in a nearby manufacturing plant. In no case did the operating companies contact the State employment service.

Retraining

Nearly all retraining in the four cases involved training operators to work toll boards. A few were retrained for information and intercept work; only five were trained for jobs in other departments. Toll training took 3 weeks, in most cases, but extra time was given to operators who had difficulty learning toll board procedures. In training, the operators sat at a regular switchboard and handled a variety of simulated calls and signals. This type of training may have been less upsetting to older experienced operators than classroom instruction.

Upgrading and Downgrading

In nearly all cases, transfers were arranged to towns with the same wage scale for operators; some transfers were to larger cities with a higher wage scale. In office B, most of the transfer openings which were available for operator choice were in towns with a wage rate between $0.50 and $7.50 higher a week. In offices A and C, most transfer openings were to towns with the same operator wage scale. In office D, operators shifted within the same town, so their wage scale remained the same.

In office C, downgrading took place, primarily because the position “Service Assistant” was no longer required after cutover. Eleven Service Assistants and one Assistant Chief Operator were downgraded to operator positions, at lower pay rates. One Assistant Chief Operator was moved to another department to prevent her being downgraded to operator.

Older Worker Adjustment

In the case study situations, manual operators who were unfamiliar with toll practice had to be trained on this service for the first time. Older operators who had trouble adjusting to toll work were given more time to learn or were trained for the somewhat less rigorous intercept or information positions. Office C interview notes illustrate the older worker’s problems:

Operator 6 (54 years old, 31 years’ service)

“Still wants to work on. Definitely would not be interested in transfer. Has house to finish paying for. Doesn’t want pension while her health is good. Does not feel she is as efficient as she should be on the toll board. Apprehensive about toll training. Afraid it may be difficult for her in the new office.”

(This operator did remain at work and did adjust to toll operating.)
However, some of the resignations and retirements in office D were due to inability to learn toll work, even though extra training time was given.

Several management steps were particularly helpful to older workers. The advance notice of change, which came 1 to 3 years before cutover, gave older operators time to adjust to the idea that they would have to learn new skills. In addition, the training course was adjusted, to some extent, to the individual student's learning speed. Finally the company benefit Committee appears to have taken the cutover situation into account and granted applications for early retirement to operators who felt that they could not adapt to the new situation (see p. 10 for early retirement terms).
Article V - Seniority

Section 1. It is agreed that work requirements, service conditions, and the ability of the employee developed through previous training and experience in the work involved as determined by Company are the controlling factors in the selection of working tours and vacation periods. If such requirements do not operate to the contrary:

(a) seniority based on net credited service shall govern the selection of vacation periods by all employees (other than Traffic central office operating employees) within each working group in each office, and

(b) except as provided in Section 2 of this Article, seniority based on net credited service shall govern the selection by plant employees working in central offices and Traffic central office operating employees of tours and vacation periods within each working group in each central office unit; provided that in the case of Traffic Service Assistants, Traffic Service Observers, and Senior Central Office Clerks, seniority based on continuous service, including time spent in management positions, since last appointment to this level, less periods of leaves of absence, shall govern prior to October 4, 1953, and commencing October 4, 1953, all periods paid for of one day or more in management positions or within that particular job classification. In the administration of this Section, it is understood that no credit for previous service in any of these positions shall be given upon reappointment if the employee, since, October 4, 1953, has (1) elected to return to a lower rated position in the bargaining unit, or (2) been demoted to a lower rated job in the bargaining unit for any cause other than force surplus. An employee in one of these job classifications returning from a leave of absence after the effective date of this Agreement shall receive credit for all previously accumulated seniority upon reinstatement in the position held before leave of absence began.

Section 2. Traffic central office operating employees who are transferred from an office within Company’s territory or from another Bell System Company into a new location within Company’s territory, and employees transferred from other departments of Company into Traffic central office operating job classifications, shall be assigned whatever vacant tour remains on the schedule at the time of transfer without depriving any present employee of the tour she then is entitled to. As vacancies occur through resignation, promotions, transfers out, or other causes, the employee shall step into such vacancies on the seniority list until she has attained her proper place in the schedule in accordance with her seniority, but not later than the starting date for the first selection of tours on the basic schedule after the employee transfers to the office involved.

Section 4. It is agreed that Traffic central office operating employees shall normally be allowed to select working tours, generally not less than every 90 days nor more than 120 days; provided, however, that such selections may be made more or less frequently when Company determines that force and service conditions require.
Article VII - General Layoffs and Part-Timing

Section 1. Whenever, in the judgment of Company, there exists an occasion for the adoption of a program of mass or general layoffs or part-timing (less than a normal work week) or both, of regular full-time and regular part-time non-supervisory employees of Company, Company agrees before proceeding with such program, in the following sequence, to:

(a) Lay off all occasional and temporary employees engaged within the job classifications and exchanges affected in a sequence to be determined by Company.

(b) Notify Union of its intention to introduce such program and negotiate with Union in regard to the method or methods to be employed.

Section 2. Company shall determine the extent of the reductions required, the effective date or dates thereof, the exchanges, and the job classifications involved.

Section 3. If an agreement as to the method or methods to be employed in introducing such program is not reached by Company and Union within thirty days from the date of such meeting, Company may then proceed as hereinafter outlined.

Section 4. The order of layoff within job classifications and exchanges selected shall be by length of service groups and in the sequence outlined below, provided that all employees shall be laid off in the inverse order of their seniority:

(a) Employees with less than two years of net credited service.

(b) Employees with two or more but less than three years of net credited service.

(c) Employees with three or more but less than four years of net credited service.

(d) Each subsequent group after the third length of service group specified above shall be composed of employees in each next successive year of net credited service.

Section 5. Each regular employee with one or more years of net credited service laid off under the provisions of Section 4 of this Article (including those laid off in accordance with the terms of any further agreements reached with Union) shall receive, in addition to any vacation payment to which he may be entitled, a layoff allowance in accordance with the following:

<table>
<thead>
<tr>
<th>Completed Net Credited Service</th>
<th>Weeks’ Basic Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>1</td>
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<tr>
<td>2 years</td>
<td>2</td>
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<tr>
<td>3 years</td>
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<td>4 years</td>
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<tr>
<td>5 years</td>
<td>5</td>
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<tr>
<td>Years, Months</td>
<td>Page</td>
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<tr>
<td>5 years, 6 months</td>
<td>6</td>
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<td>6 years</td>
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<td>6 years, 6 months</td>
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<td>7 years, 6 months</td>
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<td>8 years</td>
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<td>8 years, 6 months</td>
<td>12</td>
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<td>9 years</td>
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<td>9 years, 6 months</td>
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<td>10 years</td>
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<td>10 years, 4 months</td>
<td>16</td>
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<td>10 years, 8 months</td>
<td>17</td>
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<td>11 years</td>
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<td>11 years, 4 months</td>
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<td>11 years, 8 months</td>
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<td>12 years</td>
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<td>12 years, 4 months</td>
<td>22</td>
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<td>12 years, 8 months</td>
<td>23</td>
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<td>13 years</td>
<td>24</td>
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<tr>
<td>13 years, 4 months</td>
<td>25</td>
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<td>13 years, 8 months</td>
<td>26</td>
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<td>14 years</td>
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<tr>
<td>14 years, 4 months</td>
<td>28</td>
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<tr>
<td>14 years, 8 months</td>
<td>29</td>
</tr>
<tr>
<td>15 years</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: For each completed four months of net credited service beyond 15 years, one additional week's basic wages will be added to the above. In cases where an employee has more than fifteen years of net credited service, Company may, in its discretion, make payments in addition to those provided above; such additional payments to be determined by Company on an individual basis. It is understood that Company may in its discretion pay a layoff allowance in any of the above situations in an amount greater than that provided for herein.

If an employee receives a layoff allowance and is subsequently reengaged by Company, and the number of weeks since the date of his layoff is less than the number of weeks' basic pay received as a layoff allowance, the amount paid to the employee for the excess number of weeks shall be refunded to Company through payroll deductions in each payroll period at the rate of ten per cent of the employee's basic weekly wage.

An employee reengaged and again laid off after having former service accredited shall be paid the difference between the amount of the layoff allowance computed under the above schedule, and any former layoff payment which he may have received as a result of the previous layoff and not refunded.

**Section 6.** The provisions of this Article shall not be construed to prevent Company at any time from:

(a) Transferring employees from one job classification to another (either at the same location or in another location) or transferring employees from one location to another without change in job classification.
(b) Making layoffs or part-timing in any job classification and exchange on account of the normal fluctuations of the business because of minor readjustments of forces or because of changes in practices, types of equipment, or methods of operation.

(c) Engaging line construction or tree trimming crews on an independent contractor relationship or engaging any person on a temporary or occasional basis.

(d) Making layoffs or part-timing within any job classification, working force, or exchange because of reductions in work volumes or force requirements caused directly or indirectly by conditions resulting from a labor dispute.

(e) Retaining necessary employees in those job classifications requiring specialized pre-employment training.

Section 7. Section 5 of this Article shall also apply to regular full-time and regular part-time employees in cases of individual layoffs because of lack of work.

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Article X - Termination Allowances

Section 1. Termination allowances in amounts computed in accordance with Section 3 of this Article will be paid to regular full-time employees having three (3) or more years of net credited service whose service is terminated by Company under any of the following conditions as determined by Company:

(a) Dismissed (except for misconduct) - employees having completed three (3) or more years of net credited service at the time of dismissal.

(b) Retired at the age of 65 without a pension.

Section 2. Termination allowances will not be paid to employees who are dismissed for misconduct, resign, or receive a Company pension, or who otherwise leave the service under conditions not specified in Section 1 of this Article.

Section 3. The amount of the termination allowances paid in accordance with this Article will be computed as follows:

<table>
<thead>
<tr>
<th>Completed Net Credited Service</th>
<th>Weeks' Basic Pay</th>
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<tbody>
<tr>
<td>3 years</td>
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<td>4 years</td>
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<tr>
<td>7 years</td>
<td>9</td>
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<tr>
<td>7 years, 6 months</td>
<td>10</td>
</tr>
</tbody>
</table>
Note: For each completed four months of net credited service beyond 15 years, one additional week’s basic wages will be added to the above.

An employee qualified to receive a termination allowance under this Article who leaves the service before receiving a vacation which he is eligible to receive at the time of his separation shall receive vacation pay in addition to the termination allowance.

Company may in its discretion pay termination allowances in amounts greater than those provided in this Section 3, such amounts to be determined by Company on an individual basis.

Section 4. If an employee received a termination allowance and is subsequently reengaged by Company, and the number of weeks since the date of his separation is less than the number of weeks’ basis wages received by the employee as a termination allowance, the amount paid to the employee for the excess number of weeks shall be refunded to Company through payroll deduction in each payroll period at the rate of 10 percent of the employee’s basic weekly wage.

An employee reengaged and again separated from the payroll after having former service credited shall be paid the difference between the amount of the termination allowance computed in accordance with the provisions of this Article and any former termination allowance which he may have received as a result of a previous separation and not refunded to Company.

* * * * * * *

Section 3. “Regular employees” are persons whose employment is reasonably expected to be permanent at the time they are engaged although it may be terminated subsequently by action on the part of the Company or the employee.
Section 4. "Temporary employees," as used in this agreement, shall be deemed to mean those employees whose employment is intended to last more than three (3) weeks but not more than one (1) year. Such employees shall be reclassified as "regular employees" if their employment exceeds one (1) year of continuous service since date of last engagement.

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Section 6. The term "Traffic central office operating employees" shall be deemed to mean Traffic operators and employees engaged in the Traffic Department as Service Assistants, Service Observers, Senior Central Office Clerks, and Central Office Clerks.

* * * * * * *

Section 14. The term "net credited service" shall mean Bell System net credited service as determined by Company and shown on Company's records.

Union Contract Provisions at Office C.

Article 25 - General Layoffs and Rehiring

Section 1. Whenever, in the judgment of the Company, there exists an occasion for the adoption of a program of mass or general layoffs of regular full-time nonsupervisory employees of the Company, the Company agrees before proceeding with such program to:

(a) In a sequence to be determined by the Company, lay off all occasional and temporary employees and all regular employees with less than one (1) year's net credited service engaged within the job classifications and exchanges affected.

(b) Notify the Union of its intention to introduce such program and negotiate with the Union in regard to the method or methods to be employed.

Section 2. The Company shall determine the extent of the reductions required, the effective date or dates thereof, the exchanges, and the job classifications involved.

Section 3. The Union agrees to meet with the Company and if an agreement as to the method or methods to be employed in introducing such program is not reached by the Company and the Union within thirty (30) days from the date of notification referred to in Section 1 (b), the Union agrees that the Company may then proceed as hereinafter outlined in this Article.

Section 4. The order of layoff within any job classification and exchange selected shall be by the length of service groups and in the sequence outlined below, provided that all employees shall be laid off in the inverse order of their seniority.

(a) Employees with more than one (1) but less than two (2) years of net credited service.
Each subsequent group shall be composed of employees in each next successive year of net credited service.

Section 5. Each regular full-time employee with one (1) or more years of net credited service laid off under the provisions of Section 4 of this Article (including those laid off in accordance with the terms of any further agreements reached with the Union) shall receive, in addition to any vacation payment to which he may be entitled, a layoff allowance in accordance with the following:

(a) One (1) week’s basic pay for each completed year of net credited service up to and including five (5) years.

(b) One (1) week’s basic pay for each completed six (6) months of net credited service beyond five (5) years and up to and including ten (10) years.

(c) One (1) week’s basic pay for each completed four (4) months of net credited service beyond ten (10) years.

(d) In cases where an employee has more than fifteen (15) years of net credited service, the Company may, in its discretion, make payments in addition to those provided under (a), (b), and (c) above, such additional payments to be determined by the Company on an individual basis.

It is understood that the Company may, in its discretion, pay a layoff allowance in any of the above situations in an amount greater than that provided for herein.

If an employee receives a layoff allowance and is subsequently reengaged by the Company, and the number of weeks since the date of his layoff is less than the number of weeks’ basic pay received as a layoff allowance, the amount paid to the employee for the excess number of weeks shall be refunded to the Company through payroll deductions in each payroll period at the rate of 10 percent of the employee’s basic weekly wage.

An employee reengaged and again laid off after having former service accredited shall be paid the difference between the amount of the layoff allowance computed under the above schedule and any former layoff payment which he may have received as a result of the previous layoff and not refunded.

Section 6. The provisions of this Article shall not be construed to prevent the Company at any time from:

(a) Transferring employees from one job classification to another (either at the same location or in another location) or transferring employees from one location to another without change in job classification;

(b) Making incidental layoffs in any job classification and exchange on account of the normal fluctuations of the business or because of minor readjustments of force;

(c) Engaging line construction or tree trimming crews on an independent contractor relationship or engaging any person on a temporary or occasional basis;
(d) Laying off employees engaged for a definite time or for the duration of a specific project or condition without regard to their Company service, even though such employees may have been carried on the payroll as regular employees;

(e) Retaining necessary employees in those job classifications requiring specialized pre-employment training.

Section 7. If, after a period of layoff, the Company again desires to increase the number of its regular nonsupervisory employees within a job classification and exchange in which there has been a mass or general layoff, the Company agrees to offer reemployment, under the conditions hereinafter provided, to former regular employees previously engaged in such job classification and exchange. Such reemployment shall be offered to employees in the inverse order in which they were laid off, subject to the following conditions:

(a) The former employee had one (1) year or more of net credited service at the time he was laid off.

(b) The period of time since the layoff of the former employee has not exceeded one (1) year.

(c) The former employee is qualified, in the judgment of the Company, to perform the available work at the time the offer of reemployment is made.

(d) The former employee shall accept and be available for reemployment within seven (7) days after the date of the mailing by the Company of the offer of reemployment. It shall be the obligation of former employees to keep the Company advised of their home addresses, and the Company shall be deemed to have complied with the provisions of this Paragraph upon mailing the offer of reemployment to the last known address of the former employee.

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Article 27 - Termination Allowances

Section 1. Termination allowances in amounts computed in accordance with Section 3 of this Article will be paid to regular full-time employees having three (3) or more years of net credited service whose service is terminated by the Company under any of the following conditions as determined by the Company:

(a) Dismissed (except for misconduct), for employees having completed three (3) or more years of net credited service at the time of dismissal.

(b) Retired at the age of sixty-five (65) without a pension.

Section 2. Termination allowances will not be paid to employees who are dismissed for misconduct, resign, or receive a Company pension, or who otherwise leave the service under conditions not specified in Section 1 of this Article.

Section 3. The amount of the termination allowances paid in accordance with this Article will be computed as follows:
(a) One (1) week's basic wages for each completed year of net credited service up to and including five (5) years.

(b) One (1) week's basic wages for each completed six (6) months of net credited service beyond five (5) years and up to and including ten (10) years.

(c) One (1) week's basic wages for each completed four (4) months of net credited service beyond ten (10) years.

An employee qualified to receive a termination allowance under this Article who leaves the service before receiving a vacation, which he is eligible to receive at the time of his separation, shall receive vacation pay in addition to the termination allowance.

The Company may, in its discretion, pay termination allowances in amounts greater than those provided in this Section, such amounts to be determined by the Company on an individual basis.

Section 4.

(a) If an employee receives a termination allowance and is subsequently reengaged by the Company, and the number of weeks since the date of his separation is less than the number of weeks' basic wages received by the employee as a termination allowance, the amount paid to the employee for the excess number of weeks shall be refunded to the Company through payroll deduction in each payroll period at the rate of 10 percent of the employee's basic weekly wage.

(b) An employee reengaged and again separated from the payroll after having former service credited, shall be paid the difference between the amount of the termination allowance computed in accordance with the provisions of this Article and any former termination allowance which he may have received as a result of a previous separation and not refunded to the Company.

Section 5. Questions arising under this Article may be referred to the grievance procedure, but neither the interpretation nor the application of the provisions of this Article shall be subject to arbitration.

* * * * * * *

Section 3. "Regular employees" are persons whose employment is reasonably expected to be permanent at the time they are engaged although it may be terminated subsequently by action on the part of the Company or the employee.

Section 4. "Temporary employees" are persons whose employment is intended to last more than three (3) weeks but not more than one (1) year. Such employees shall be reclassified as "regular employees" if their employment exceeds one (1) year continuous service since date of last engagement.

Section 5. "Occasional employees" are persons whose employment is intended to last for a single period of three (3) weeks or less, or intermittently for periods of three (3) weeks or less.
Section 7. The term "Traffic central office operating employees shall be deemed to mean Traffic operators and employees engaged in the Traffic Department as Service Assistants, Service Observers, and Routine Clerks.

Section 15. The term "net credited service" shall mean Bell System net credited service as determined by the Company and shown on the Company's records.
Appendix B. Selected Bibliography on Adjusting to Technological Change

I. Publications Dealing Specifically with the Telephone Industry

Automation: Impact and Implications, prepared by the Diebold Group Inc., for the Communications Workers of America, AFL-CIO, April 1965.


II. Publications Dealing with Technological Change and Adjustment in a Variety of Industries

Adjusting to Technological Change, Edited by Gerald G. Somers and others, Harper and Row, 1963.


Seminars on Private Adjustments to Automation and Technological Change, President's Advisory Committee on Labor-Management Policy, May-June, 1964. (Various pagings)


III. Bureau of Labor Statistics Publications


