BACKGROUND AND NEED

The purpose of the New Jersey Public Employment Relations Commission (PERC) is to promote harmony and stability in public sector labor relations by serving as a neutral third party to minimize the effect of employer-employee disputes. The public sector in New Jersey includes state, county, municipal, and school district employers and employees. The seven member Commission is tripartite, that is composed of two part-time representatives of public employers, two of employee groups, and two representing the public interest. The seventh member, the Chairman, also represents the public but serves full-time as the chief administrative officer with authority over the staff which conducts the day-to-day business of PERC.

PERC was created in 1968 when New Jersey passed an employer-employee relations act. This act was amended in 1974 and again in 1977 to increase the authority of collective bargaining. Seven different types of cases, which are described later, are currently identified.

Since its first full year of operation, the staff has doubled and the number of cases processed has more than tripled.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Cases Closed</th>
<th>Total Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/69-7/70</td>
<td>565</td>
<td>20</td>
</tr>
<tr>
<td>6/77-7/78</td>
<td>1792</td>
<td>44</td>
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</tbody>
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With the increase in number of staff, number of cases, and areas of authority, along with the greater sophistication of employers and employee groups as they have gained experience with public sector labor relations issues and the law, it became obvious that the size and complexity of the caseload had developed to the point where manual retention and retrieval of data was increasingly inadequate for PERC management needs. Additionally, the inadequacies of a manual data system became even more apparent as the Commission staff attempted to develop meaningful measures to meet State reporting requirements, legislative inquiries, and other requests for information.

A further, purely mechanical, problem was also identified on which the Commission staff moved to larger quarters late in 1977, there was still not enough file space. A combination of computerization and microfilming would reduce to a minimum the amount of space needed to store original documents.

In order to meet both its management and statutory obligations, the Commission sought to develop a computerized system to increase efficiency and accuracy of retrieving historical case information located in its files and of maintaining accurate control of currently active cases.

The 1968 Act, in addition to establishing the Public Employment Relations Commission, included a provision establishing a relationship between the Commission and the Institute of Management and Labor Relations, Rutgers University. In part because of the statutory connection, faculty in the Research Department of the institute have conducted research concerning various facets of the Commission's operation since 1969 and had in fact already assembled some of the information necessary for the establishment of a data system. This unique relationship led to a request that the Research Department develop a proposal for a computerized system for retention and retrieval of case information. Staff case research, budget preparation, State reporting requirements and general research needs for all phases of Commission activity.

TYPES OF CASES

Briefly, the seven areas of activity are as follows:

1. Mediation: When an employer and employee representative fail to reach a mutually satisfactory settlement on their own while negotiating a collective bargaining agreement, one or both sides may request that a mediator be sent to help them resolve this impasse. The mediator may either be a member of the staff or from a panel of consultants who are experienced labor relations neutrals and conduct mediations on an "ad hoc" basis.

2. Fact-finding: If the mediator is unable to help the parties reach a settlement, a fact-finder is appointed on the recommendation of the mediator or the request of either or both parties. The fact-finder holds hearings and conducts an investigation to determine the facts of the case and recommends terms of settlement.

3. Grievance Arbitration: The Commission will appoint, from its ad hoc panel, an arbitrator to hear and decide grievances which are still unresolved after the parties have exhausted their internal procedures.

4. Intra-Government Arbitration: Police and fire departments which have failed to reach agreement on a contract after...
mediation and fact-finding are required to proceed to arbitration. The arbitrator's award is final and binding on the parties.

5. Scope of Negotiations: The Commission, on the request of an employer or employee representative, conducts proceedings to determine whether an issue in dispute is within the scope of collective negotiations.

6. Unfair Practices: On the request of an employer, employee organization, or an individual employee, the Commission, through its staff, conducts a series of informal and formal hearings to determine whether an action constitutes an unfair labor practice and, if so, what the remedy should be.

7. Representation: The Commission is empowered on request to conduct elections to certify or decertify an employee organization as the lawful representative of employees.

The same employer and employee unit may appear in cases of all types during the same year. About 100 cases a year go to the Full Commission for decision.

PERC DATA SYSTEM

In the process of designing the case management system for the New Jersey Public Employment Relations Commission, five critical needs had to be met. First, as has been mentioned previously, PERC and the Institute of Management and Labor Relations have a statutory relationship such that, when needed, the Institute provides research support. This meant that if a case management system were to be implemented, its programs would need to meet both data management and social science research needs.

Secondly, prior to 1976, the data which had been collected by several faculty members regarding mediation and fact-finding cases at the Institute, had been analyzed using the Statistical Package for the Social Sciences, or SPSS. Thus, a convert procedure with this package would save over seven years of case information and reduce significantly the time and budget needed to computerize the remaining three years.

Thirdly, as a corollary to providing more efficient case management, staff time allocated for routine clerical tasks such as alphabetizing, sorting and charting information for agency, state, and ad hoc reports, needed to be reduced significantly and in some instances, eliminated entirely. The overall objective in this regard, therefore, was to design programs which put data in report written format or, at the very least, would provide a framework from which such reports could be easily generated.

Fourth, in order to improve the efficiency and effectiveness of neutral caseload assignments, it is important to determine the average amount of time which elapses between significant dates. Since over ninety percent of the numeric data in the PERC Data System are significant dates, it would be necessary to have programs written which would determine these intervals.

Fifth, and finally, since the staff of the Commission would benefit greatly from having a working knowledge of the way in which computer assistance could improve and complement agency management, what seemed to be needed was a language that could be readily learned, even by those unfamiliar with computer programming.

In discussions held with the staff of the Center for Computing and Information Sciences, Rutgers University, the Statistical Analysis System was recommended as the best package available which would meet these needs. To date, the sort, frequency and chart procedures have been used extensively and it is anticipated that reports generated using these procedures will have a significant impact, not only in the reduction of clerical functions previously described, but in the overall management of the Commission. However, to understand fully the impact upon case management per se, it is necessary to describe briefly the coding scheme which has been developed specifically for the PERC Data System and the kinds of information which is being codified, in some instances, for the first time.

THE MASTER CODE AND SYSTEM VARIABLES

In analyzing the case filing and docketing procedures, and in discussions with the Commission staff, it became apparent that certain data elements were common and essential for case management purposes. Hence, the primary goal was the need to enhance the capability of retrieving and tracing the extent to which PERC had given assistance to any bargaining unit relationship by fiscal year. In the past, cases were assigned unique chronological codes by filing date, e.g., docket numbers, which also determined the order in which these cases were manually stored. In the event a case went through all seven levels of assistance, it would be assigned seven different docket numbers and thus, there existed no one code nor file which formed a link between these various levels. The master code, by combining fiscal year, unit composition, employer and employer type provides a numerical index for retrieving information across all possible levels of
agency involvement. Should the Board of Education and teachers in Bergenfield, for example, reach an impasse this year and require PERC assistance, the code is assigned on the basis that it is fiscal year 1979 (the first two digits of the code), that it is a teachers' unit (the second two digits of the code), and that it is a Bergenfield board of education (the last four digits of the code).

Overall, twenty-two unit types and fifteen employer types are identified.

In addition to the master code, the following data elements are being entered into the system: docket numbers, county designations, significant dates, names of neutrals, reports of actions or awards, requesting or complaining party designations, size of bargaining units, number of sessions, staff and ad hoc expenditures and statutory provisions. In addition, the New York State School of Industrial and Labor Relations at Cornell University has compiled a national index of labor relations issues. This index will be incorporated into the system as soon as it is available.

To conclude, it is anticipated that this combination of master codes and system variables will contribute in a positive way to Commission management and activity in at least four areas:

1) **Staff Training and Assignment.** Agency management will be able to pinpoint those neutrals who are particularly skilled in certain areas of operation—both to use for assignments and to assist in the training of others. By providing ready access to current cases, the system will allow for anticipation of potential problem issues which demand neutrals who have experience in the resolution of these issues.

2) **Fiscal and ad hoc Reports.** Reports can be generated on a regular or an as-needed basis covering any period of time from 1969 to the present. Reports which will be generated on a regular basis include summaries of case and staff activity and expenditures, comparisons of current and past activity and summaries of case demographics on any included variable correlated with staff activity.

3) **Legal Research.** Through identification of past cases and Commission decisions with similar issues, the system can assist hearing officers and mediators in planning and decision-making concerning new requests for intervention by the Commission staff. The ability of the staff to obtain complete and timely information on previous case activity and Commission decisions may frequently permit more rapid settlement or settlement at a lower level, thereby saving both the Commission and the parties involved time and money.

4) **University Research.** The system will provide ready access to relevant data in a timely manner by university staff. It will also encourage the development of decision models based upon systematic occurrences in the past history of the Agency.

Further plans also call for exploring the feasibility of adding to the system CRT terminals which will permit instantaneous inquiries on the status of a case in a critical situation.

4 Professional and clerical staff, excluding Commissioners.
5 N.J.S.A. 34:13A-8.3.