# FEASIBILITY OF EARLY RETIREMENT INCENTIVES IN THE PUBLIC SECTOR

**PUBLIC EMPLOYEE RETIREMENT COMMISSION**

**Commonwealth of Pennsylvania**

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Public Employee Retirement Commission
Commonwealth of Pennsylvania
March, 1995

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Executive Director: Anthony W. Salomone

Commission Office: 117-B Transportation and Safety Building
P.O. Box 1429
Harrisburg, PA 17105-1429

(717) 783-6100

COMMONWEALTH OF PENNSYLVANIA
PUBLIC EMPLOYEE RETIREMENT COMMISSION
HARRISBURG
17120

March, 1995

To: Governor Ridge
and Members of the General Assembly

Under Act 66 of 1981, the Public Employee Retirement Commission is directed to monitor and evaluate all the laws and systems that relate to public employee retirement in the Commonwealth. Pursuant to that responsibility, the Commission undertook a study of the feasibility of early retirement incentive programs in the public sector. The study has now been completed, and the enclosed report is hereby submitted for your information.

The enclosed report provides general information on the effectiveness of early retirement incentive programs, discusses the technical aspects of early retirement incentive programs, and analyzes the Commonwealth's experience with them to date. The report also provides specific recommendations with respect to the design and implementation of any future early retirement incentive programs at the state level.

On behalf of the members of the Commission, I express our hope that this report will be of assistance to you in any future considerations of this significant and complex issue.

Sincerely,

Dale D. Stone

Dale D. Stone
Chairman

# EXECUTIVE SUMMARY

In both the private and public sectors, early retirement incentive programs (ERIPs) have become a popular means to achieve long term work force reductions for strategic reasons or short term payroll reductions for budgetary reasons. When analyzed in terms of meeting their stated objectives, the ERIPs offered in the private sector have been successful, while those offered in the public sector have not been. The differing success with ERIPs between the private and public sectors primarily results from differences in the identification of clear objectives, the mechanics of policy development, and the responsibility for policy monitoring and adherence over a long term.

The savings potential directly attributable to an ERIP occurs only during the period that begins the day the employee retires and ends the day the employee would have retired had the incentive not occurred. In most instances, the total savings potential directly resulting from an ERIP occurs within no more than three to five years after the ERIP. Any indirect savings that occur in the longer term because of a permanent reduction in the work force could be achieved through a policy of attrition without the added pension costs of the ERIP.

Because the direct savings attributable to an ERIP occur rapidly and the costs are recognized slowly, budgetary savings frequently occur for a short period of time immediately after implementation of an ERIP. However, those short term savings may be less than the pension costs incurred, particularly when amortization costs are considered. The net financial impact of an ERIP is largely determined by the number of vacated positions that are filled and the differential between the salaries of the retirees and the replacement employees. *These two factors, the replacement rate and the salary differential, must be effectively controlled for an ERIP to have the potential to result in a net cost savings.*

There is a well documented need for careful design and evaluation of ERIP proposals. To ensure that the policy makers of the Commonwealth have the advantage of the information necessary to make sound decisions regarding future ERIPs, the Commission recommends:

- That proposed ERIP legislation clearly set forth the specific purpose of the ERIP as being either a permanent work force reduction to achieve long term savings, a temporary work force reduction to achieve short term budgetary reductions or a means to achieve a restructuring of the work force at its current level;

- That proposed ERIP legislation specify complement control mechanisms and that the complement control mechanisms include the assignment of maximum replacement rates and total complement parameters to be applied on an agency by agency basis for at least ten years following implementation of the ERIP;

- That proposed ERIP legislation specify the amortization period and methodology for the ERIP pension liabilities and that the amortization period be no more than ten years and the amortization methodology be level dollar;

- That prior to final consideration in either House of the General Assembly an analysis of the proposed ERIP legislation be conducted by the Office of Administration producing both the estimated pension liability and the estimated net costs or savings impact upon the Commonwealth budget and disclosing the assumed replacement ratios, the assumed average replacement salary differential and the total outlay required to amortize the pension liabilities; and

- That the Office of Administration monitor the replacement ratios, the replacement salary differentials and the overall costs or savings of the ERIP and issue periodic reports on its findings to the Governor and the General Assembly.

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PART I

# INTRODUCTION

In both the public and private sectors, early retirement incentive programs (ERIPs) have become a very popular tool among employers searching for ways to achieve long term work force reductions or to cut payroll costs for short term budgetary reasons. This report is intended to provide assistance in the development of policy guidelines that will aid in the design and administration of any future ERIPs enacted in the Commonwealth of Pennsylvania.

In the last decade in the Commonwealth, the State Employes' Retirement System and the Public School Employes' Retirement System, as well as local government employers, have administered ERIPs. While the increased pension plan liability resulting from a public sector ERIP is almost always calculated and reported to the governing body or to plan managers, the total budgetary impact, which may continue for many years and may use very large amounts of future revenues, is calculated and disclosed very infrequently. There is growing evidence that the overall success of ERIPs in the public sector may be limited due to factors unique to government.

Despite the financial uncertainties, ERIPs continue to be popular. In the last three years, almost 40% of the nation's largest corporations have offered one or more ERIPs. Within the public sector, the ERIP rate appears to be just as high. But while private sector ERIPs appear successful in meeting most of their objectives, those offered in the public sector do not. Ronald K. Snell, who co-authored a report on state ERIPs and is with the National Conference of State Legislatures, was quoted in The New York Times as saying, "I don't know why legislatures continue to adopt these programs. It's a triumph of hope over experience...."

With this study, the Public Employee Retirement Commission (Commission) undertook an evaluation of the feasibility of ERIPs in the public sector. Utilizing data from numerous surveys of public and private sector entities, as well as trade publications and magazine and newspaper articles, at least 185 public sector ERIPs offered in the last five years were examined. In order to generally determine the success or failure of public sector ERIPs, these programs were evaluated in terms of meeting their stated objectives. Pension benefit design enhancements have been the primary incentive used in the Commonwealth and, accordingly, are the main focus of this study.

Detailed employee data extracted from a database that was built by the Commission to study the budgetary effects of Act 23 of 1991, "the Mellow bill", served as a basis to analyze the variables that contribute to the cost or savings of public sector ERIPs. The effects of changes in the major variables, such as replacement rates and salary differentials, are generally applicable to other ERIPs and are shown in this study for illustrative purposes. The individual characteristics of other retirement systems and other incentive programs would produce somewhat different results.

The multi-employer data that would be needed to examine the budgetary impact on the individual school districts that participated in ERIPs offered by the Public School Employes' Retirement System (PSERS) was not available. As a result, detailed analysis of the ERIPs of the PSERS is not included in this study. However, the general findings regarding the feasibility of public sector ERIPs would be applicable to PSERS.

PART II

# SAVINGS POTENTIAL OF EARLY RETIREMENT INCENTIVE PROGRAMS

One of the more important concepts to be understood is the period of time over which costs and savings associated with an ERIP occur. In both the public and private sectors, the additional pension liability created by an ERIP may be amortized over many years and will affect both budgeting and cash flow for that period of time. The savings time frame, however, is quite limited. The salary savings attributed to an ERIP occur **only during the period that begins the day the employee retires and ends the day the employee would have retired had the incentive not occurred.** For example, according to information provided by the System's consulting actuary, the retirements that occurred during the SERS 1991 ERIP would have been spread over a three year period without the ERIP. The total salary savings, therefore, occurred only within the three year period immediately following the ERIP.

In theory, it is possible to structure an ERIP to accomplish one or more of the following:

- Long term cost savings coupled with permanent reduction of work force.
- Short term budgetary reductions.
- Other personnel management related goals (work force reclassification and revitalization, etc.)

Examination of public sector surveys, which are referenced in the selected bibliography of this study, indicate that the overriding objective of ERIPs implemented by public sector employers within the last five years has been to "save money". Long or short term budgetary reductions are almost always a stated objective of public sector ERIPs. For the most part, the surveys show that budgetary reductions were explained by survey respondents to be short term in nature. But even when the primary objective was said to be short term budgetary reductions, the surveys indicate there was almost always the expectation that long term or permanent cost savings would also result.

According to the same surveys, long term or permanent cost savings have been the primary stated objective of the ERIP in 60 to 65% of the programs. About 40 to 45% of the respondents explain that reductions of work force without the discomfort of unpopular layoffs was also a prime consideration. Many private sector ERIPs have other personnel management objectives, or are related to plant closings, but few public sector employers mention personnel management goals such as job reorganization or rejuvenated work forces as a primary reason for their ERIP.

Though the objectives of public sector ERIPs are most frequently cost savings and reductions in work force, a legitimate use of public sector ERIPs is to aid in restructuring the work force whether or not downsizing is contemplated. In that context, public sector ERIPs may be used as a tool to create vacant positions so that government may reorganize activities to reflect revised public policy objectives. Voluntary terminations of employment under an ERIP afford public sector employers the opportunity to hire new employees in one or more specific areas of government while maintaining or limiting the expansion of the total work force.

Depending on the original expectations, as many as 65% of public employers report that their most recent ERIP offering was unsuccessful. More noteworthy are reports indicating that between 30 and 40% of the public employers who offered ERIPs were unable to measure whether their ERIP's have succeeded in meeting their objectives of salary savings and reductions in numbers of employees.

### Long Term or Permanent Cost Savings

To effect long term cost savings as a result of an ERIP, it is clear that one of two conditions have to be present. Either a significant number of retiree positions must remain vacant, or, if a substantial number of retiree positions are filled, the average salary and benefit cost of the replacement employees must be significantly lower than the average salary and benefit cost of the retiring employees.

Many public sector ERIPs are patterned after programs that have successfully met the objectives of private industry. Though the motivation for offering incentives in the public sector is much the same as is the private sector, the ability to achieve success is predicated upon a vastly different set of conditions. Governmental experience does show long term cost savings objectives of an offering can be met. But the objectives have to be well defined, the expectations must be realistic, and the ERIP must incorporate enforceable controls on replacement hiring, both initially and over the long term.

According to a 1988 study by the Texas State Pension Review Board, even though the Review Board found that many states felt that their ERIP was useful in meeting the initial goals of reducing work force (avoiding layoffs and providing payroll savings), the survey concluded,

> ...most states indicated disappointment in the long term reduction of employees and costs. It appears that in some cases the costs were considerably more than the savings, with the costs of the incentives wiping out any financial gains. States which showed some cost savings were those whose enabling legislation either placed restrictions on the number of rehires or included provisions for the cost of the program to be borne by the [individual] employer....

The experience of New York State further strengthens the argument that enforceable controls, particularly in the area of replacement hiring, are an absolute requirement for a successful ERIP. The New York Times, in an article entitled "Early Retirements To Reduce Budgets Cost States Money," stated,

> New York is one of the few states that monitored its programs and learned from its mistakes. A 1983 program that was supposed to save $50 million wound up costing $50 million. A spokesman for the Governor's budget office said, "We had the double wammy of paying for the retirement incentives and replacing nearly everybody." In 1990 and 1991, New York offered incentives only to employees whose position the state intended to eliminate as part of a statewide restructuring program. The payroll savings expected to be generated as a result of the 1990 and 1991 ERIPs involves 6,000 employees and is calculated at $120 million.

In 1988, West Virginia offered an ERIP without enforcing controls on the replacement of retiring employees. As a result of the ERIP, 7,000 employees retired. The plan called for one out of every two retiring employees to be replaced, but soon after the ERIP, state agencies began replacing the retiring employees, and the bulk of the positions were filled. The salary and benefit savings they had hoped to generate were offset by the costs of replacing the retirees, and as a result of increased pension liability, the state's annual retirement costs increased by about 20%.

### Short Term Budgetary Reductions

ERIPs in the public sector have often been successful in generating short term budgetary reductions. Between 65 and 70% of survey respondents who had reportedly measured the costs of their ERIPs indicated that short term budgetary savings resulted. Usually salary and benefit reductions cannot be attributed to an ERIP for more than a three to five year period. Where replacement ratios are high (in the 50 to 100% range), net long term savings are difficult to achieve. An immediate or short term budgetary savings may be realized, however, if the ERIP positions that are to be filled remain vacant for a significant period of time. But while immediate budgetary savings may occur, the increased pension costs associated with an ERIP are typically amortized over a much longer period of time, often fifteen to twenty years.

The result is that rapid savings and long term costs make ERIPs an attractive way to achieve a net reduction in expenditures over the several year period immediately following their implementation. For example, six months after the 1991 ERIP of the State Employes' Retirement System, 38% of the vacated positions remained vacant, and at least 28% remained vacant for eighteen months. As a result, the short term budgetary reduction to the agencies included in a 1992 study by the Commission approximated $112 million. However, when the additional pension liability that the ERIP created for those agencies was considered, there was a net overall cost during that period of $6 million. In addition, when one considers the outlay of $310 million that will be required to amortize the liability over the 20 year period required by the legislation, the total outlay will exceed the savings by $198 million.

PART III

# TECHNICAL CONSIDERATIONS OF EARLY RETIREMENT INCENTIVE PROGRAMS

## DESIGN

Once the objectives of a potential ERIP have been established, the specific features of the program can be designed. The desired number of retirements, the demographic group to be targeted and the replacement policy must be determined. Actuarial assistance will be required to determine: how to best target the desired demographic group, the specific incentives to be used, estimated increased pension liability that will most likely result, the annual funding requirements, and the length of the window. Once those factors have been determined, the cost or savings potential of an ERIP may be estimated.

The importance of clear identification and communication of the objectives of an ERIP to all levels of management cannot be overemphasized. Only when the desired employer objectives of a potential ERIP have been clearly set forth and a mechanism established to control the variables can an ERIP be successfully designed and administered.

In a multi-employer, cost sharing retirement system, the diversity of individual employer needs and circumstances significantly reduces the potential to design a single ERIP that favorably impacts all of the participating employers.

## LENGTH OF THE WINDOW

The period of time during which the employee must leave service in order to receive the incentive is called the window. The window and the related election period should be long enough to allow employees to access counselors, make informed decisions, and plan the transition to retirement. If the window is too long, or includes a period of retroactivity, the effect is merely to provide bonuses to employees who would have retired anyway. If the period of the window is too short, it will simply not attract the desired number of participants or may require reopening. If the window is opened repeatedly, it may create the expectation of permanency and lose effectiveness as an incentive.

### Pension Benefit Related Incentives

Additional service credit. Granting additional service credit is the most common incentive offered among public sector employers. In a pension plan where the retirement benefit is calculated using a multiplier times the number of years in service, additional service credit translates directly into increased pensions. In a retirement system with a minimum age requirement, additional service credit, when granted alone, will generally entice only those individuals who are already eligible to retire. Older segments of the work force tend to be targeted by this incentive. For example, the Commonwealth's 1991 ERIP offered a 10% additional service credit.

Reduced age requirement. Age requirement reductions have the effect of increasing the number of persons eligible to receive benefits. When not associated with another incentive, a reduction in the age requirement will induce employees to retire sooner than they would have otherwise. The increase in pension liability associated with reductions in age requirements stems from the fact that these individuals will be on pension longer than previously anticipated. Because this incentive reaches employees who have not yet attained normal retirement age, reducing the age requirement will target a larger group than providing additional service credit.

Additional service credit along with reduced age requirement. When additional service credit is combined with a reduction in the age requirement, the target group is expanded even further by including individuals who have not yet reached the age requirement, those who do not yet have the required years of service, and those who are presently eligible but are still working to gain an increase in benefits. An incentive of this nature will target a somewhat larger group than the two previously discussed incentives.

### Non-Pension Benefit Related Incentives

Cash Incentives. The payment of a one-time cash incentive, usually as a percentage of current compensation or based on time in service, is administratively simplistic, easily understood by employees, and, when compared to some other incentives, may be the most cost effective. This incentive may be particularly attractive to younger employees in plans that have neither a minimum age requirement nor an early retirement option.

Post Retirement Health Care. The provision of health insurance coverage to individuals not otherwise eligible may provide an incentive to retire, particularly during the current period of rapidly escalating health care costs. Benefits may be provided until age 65, when Medicare coverage starts, or for life. Providing full coverage for life should be examined carefully, as this may be a very expensive benefit.

Post retirement health care is frequently a primary concern among employees. Post retirement health care is normally provided to SERS members with at least 25 years of service. The 1991 ERIP provided by SERS had an overall utilization rate, among members eligible for the incentive, of about 40%. Among members eligible for post retirement health care, however, the utilization rate was about 60% overall. Eighty-six percent of the members who retired under that incentive were eligible for post retirement health care.

Other Incentives. Other incentives to be considered such as an increase in the benefit multiplier, reduction or elimination of social security offsets, automatic cost of living increases, elimination of actuarial reduction for early retirement, extension of life insurance benefits after retirement, increased salary in the final year prior to retirement, and allowing the employee to pick up to two enhancements from a list of possible choices have also been used in conjunction with other enhancements with varying degrees of frequency.

### Indirect Impact Analysis

During the design of the incentive, management should make an effort to identify the factors that may be indirectly impacted by the ERIP. Some of the quantitative and qualitative aspects to be considered are listed below.

- An increased demand for cost of living adjustments due to the earlier retirement of employees who terminated under the incentive may be experienced. If COLAs are based on years on retirement, these retirees will meet the criteria for COLAs earlier than they otherwise would have.

- Program aspects impacted by the ERIP that may affect the quality of services to be delivered because of possible loss of key employees must be considered.

- The financial impact of the incentive on the funded condition of the pension plan, as well as budgetary requirements for future amortization payments, may diminish the ability to provide future benefit improvements.

- The value of sick and annual leave payouts, longer periods of post retirement health care and other required termination benefits should be calculated.

- The costs of actuarial services should be considered, particularly in smaller retirement systems. An actuarial analysis must be performed to evaluate the effect of potential design elements and to assist in the design.

- Changed demographics of the remaining work force may cause changes in employer benefit costs and may result in more rapid salary growth among younger employees.

- Legal issues including compliance with the Age Discrimination in Employment Act (ADEA) should be considered. ADEA prohibits discrimination based upon age in the work place. An incentive that even appears to contain elements of arbitrary age discrimination will not comply with the Act. Communications with employees concerning the provisions of the ERIP must be written in a manner that will avoid the appearance of discrimination.

PART IV

# VARIABLES THAT MUST BE CONSIDERED OR CONTROLLED

## General Discussion

Identification of all the factors that may impact upon either the employer or employees as a result of an ERIP is critical to the ultimate success of the offering. Identification of the objectives of the incentive and each element that may vary depending upon the design of the ERIP prior to implementation will have a significant positive impact upon the ability of the entity to accomplish the purposes. Both public and private sector entities must go through this process, but governments may experience difficulty in the design and implementation of an ERIP with the controls needed to insure success.

The nature of governmental administration, which involves many parties and requires a lengthy development period, poses difficulties not normally encountered in the private sector. In order to effect an ERIP, the government must first pass legislation, and in order to pass legislation, more than one branch of government must be involved. In Pennsylvania, on the state level for example, legislation may first be developed and written by legislative or executive staff or an interested group that may have its own goals for the ERIP. The bill must then be introduced into the General Assembly. In the General Assembly, it is typically considered by at least two committees in each of the two houses. At any time in this process, the bill may be amended. Then it may be either signed or vetoed by the Governor. In contrast, private sector ERIPs may be written by a department of human services and adopted by a board of directors.

The characteristics of a multi-employer, cost sharing system warrant special attention in the consideration of an ERIP. The variables associated with employee replacement subsequent to an early retirement incentive program are more difficult to effectively control in a multi-employer environment due to both the multiplicity of decision makers and their differing circumstances.

## Replacement Ratios

The determination of the number of vacated positions that will be filled, or the replacement ratio, is easily the most critical factor in the financial success or failure of an ERIP. When replacement employees will be hired, and at what salary, will also have a direct financial impact. When most of the employees retiring under an ERIP are replaced, net savings will not be possible.

As a general indication of the effect of replacing retired employees on costs and savings, the "breakeven" graph on page 20 shows how savings and costs vary proportionately to replacements. For example, in the 1991 SERS ERIP, breakeven, or the point where the savings would exactly equal the costs, would have occurred with a replacement rate of about 69%. If replacements are legislated or otherwise established by firm policy guidelines at very low percentages, public sector ERIPs can be crafted with little risk that some savings will not occur. When replacement rates approach 100%, long term costs are almost always substantial. Careful analysis is required to determine a replacement ratio that will allow for the financial success of the ERIP.

In government, controlling the replacement of retiring employees is inherently more difficult than in the private sector. If replacements are legislated, or established by firm policy guidelines, control during the term of the current administration will be enhanced. Without legislated standards, the replacement of ERIP retirees by succeeding administrations may be impossible to control.

Placing restrictions on replacements prior to a certain date or for a certain period of time may provide for short term budgetary savings. The unpaid salary of retirees who are not replaced for a period of time translates directly into salary savings for the period that the position remains unfilled (until the date the employee would have retired anyway).

The fact that key employees may decide to leave under an ERIP is also of concern. The possible loss of key employees should be taken into consideration when determining replacement ratios and replacement salaries. If replacements are fixed by regulation or legislation and individuals in keys positions are enticed to leave under the ERIP, the fact that key positions will remain unfilled may cause administrative difficulties for the agency.

This study did not include a detailed review of the ERIPs of the Public School Employes' Retirement System. However, it should be noted, in view of the importance of replacement ratios on the financial success of an ERIP, control of the overall replacement ratio is difficult to maintain in a cost sharing multi-employer retirement system such as PSERS.

### Salary Differentials

Salary differential is the difference between the salary of the retiring individual and the salary of the replacement individual. When retiring employees are replaced, the potential for savings increases as the salary differential increases. The salary differential relates strongly to the design of the employer's pay plan. For example, in a thirty step pay plan, older employees who may take advantage of an ERIP are likely to be at the high end of a pay scale. New employees are likely to start at the low end of the range, producing a substantial salary differential. A seven step pay plan does not have the same potential to produce a substantial salary differential. Also, the higher

the level of knowledge or skills required by an employee in a particular position, the less the potential for salary differential. A certain amount of savings may also result from the difference between the high benefit costs of older, more long term employees and the somewhat lower benefit costs of replacement individuals. On the negative side, however, the potential for salary increases due to the more rapid promotions of younger employees after the ERIP may add costs.

### Targeting

Ideally, the incentive should be structured so that the impact will be within the departments and employee classifications desired. In the private sector, where employee reductions are associated with the closing of a particular plant, operation, or product line, downsizing in that area may be the primary objective of the incentive. In the public sector, determining the employees to be targeted is rarely that simple. Even where certain agencies are targeted to be reduced, selecting the employees that the government wishes to induce to retire may expose the government to accusations of discrimination, ADEA concerns or employee morale problems.

Within the restrictions posed by the public sector, employers may achieve an acceptable degree of targeting by utilizing the incentive itself as a targeting device. For example, where normal retirement requires both an age and a service component, an incentive that consists of an additional service credit will tend to be utilized only by older employees who already have met the age requirement. Cash incentives or lump sum payments tend to target young employees who may wish to take time off and join the work force again at a later date.

### Cost of Administration

Any ERIP will create additional work and administrative costs during the window period and shortly thereafter. Of concern is the ability of the system and the employer to communicate the availability of the ERIP and to answer employee questions. Computer capabilities and the ability to develop revised benefit calculations should be assessed. An analysis of the work load and administrative staff of the system may be required to make a judgement as to whether additional temporary personnel may be necessary. The number of retirements in the SERS tripled in the year of the Mellow incentive. As a result, staff worked over 18,000 hours of overtime, made 77,000 telephone calls, and delivered 24,000 benefit estimates to achieve 6,684 early retirements.

### Funded Condition, Funding Method, and Funding Period

Because the incentive is a liberalization of benefits, an ERIP will increase the liability of the pension plan. Under actuarial methods commonly used by public employee retirement systems,

an actuarial accrued liability is developed. The actuarial accrued liability represents the present value of benefits payable at a given date and may be compared to plan assets in order to determine the funded condition of the pension plan. When an ERIP is enacted and the liability is increased without a corresponding increase in assets, the fund ratio of the plan is reduced. If the pension plan is over funded (a fund ratio over 100%), the liability could be absorbed without amortization payments, although some pension plans amortize each new piece of positive or negative unfunded liability as a matter of policy. Alternatively, if the plan is under funded, or becomes under funded as a result of the ERIP, the piece of liability associated with the ERIP must be amortized with appropriate interest charges, much like mortgage payments. Amortization has the effect of spreading the costs of an ERIP over a period of time.

As a general public policy, intergenerational equity is achieved when the same taxpayers who receive a service pay for that service. With respect to pension plan funding, this intergenerational equity is achieved by funding pension benefits over the active working life of the participant. Unless an ERIP is funded by a lump sum contribution to the pension plan at the time it is enacted (which is not likely if the reason for the ERIP is a budgetary shortfall), it will be funded by amortization payments after the individuals have retired. Several conditions suggest that the amortization associated with an ERIP should be short. First, any payroll savings generated by an ERIP will be realized over a very short period of time - usually not more than three to five years. Second, the fact that the increased benefit (and the associated liability) is not incurred until the participant leaves service precludes funding of the benefit during the working life of the participant. The ideal matching of taxpayer costs with services provided is not possible under these circumstances. These factors argue for amortization of ERIP costs over a short period of time and the use of a level dollar method of amortization so that insofar as possible the liability of the ERIP will be funded during a period of time that is close to the period of time in which the liability was incurred.

Additionally, the liability created by an ERIP may be viewed as a post retirement benefit. In the aggregate, the pension plan disbursements to this group of benefit recipients will be higher during the years close to the ERIP date and will diminish in later years due to retired member deaths. Both this pattern of plan disbursements and the equity issue discussed above suggest that when amortization is required, the appropriate amortization method is a level dollar method, in which payments are equal throughout the period. Other amortization methods, such as a level percentage of payroll, result in low funding levels early in the life of the amortization and higher payments in later years.

In the public sector, the funding method for the ERIP should be specified in the authorizing legislation. Because of the facts set forth above, the amortization method used for ERIP liabilities should be level dollar, and the amortization period should not be more than ten years in length. For example, in amending the County Pension Law to permit counties to grant ERIPs, the General Assembly specified that the amortization payments be made on a level dollar basis over a period of five years.

PART V

# THE EFFECTIVENESS OF PUBLIC SECTOR INCENTIVES

## General Discussion

Public sector pension plans have encountered difficulties in the design and administration of ERIPs that are not commonly encountered in the private sector. Many governmental entities also appear to have difficulty in evaluating the financial success of their ERIP once the program has been completed. But most of all, governments generally are not successful in establishing and enforcing controls on the replacement of retirees. Further, the public sector does not lend itself easily to an appropriate ERIP funding strategy. Still, public sector ERIPs are enacted frequently. An immediate budgetary shortfall frequently is the impetus for an ERIP. The ERIP provides immediate salary savings, and the costs are not fully paid until many years in the future. According to a 1993 State Legislative Report by National Conference of State Legislatures, "...the consensus appears to be that it is difficult to obtain real savings from retirement incentive programs for state employees, and that control of replacement is the key to savings." The same study reports,

> State experience over the last decade indicates that early retirement incentive plans can meet expectations, if the expectations are moderate, and if the plan includes controls on replacement hiring and funding to cover the growth in the retirement system's cost. It can be hard to tell if expectations are met because savings are hard to track.

Governmental agencies have accounting and reporting systems that usually do not incorporate cost accounting and are not designed to measure net profit. As a result, the "bottom line" effectiveness of an ERIP may elude evaluation by governmental administrators. In an independent survey conducted by the Texas State Pension Review Board, 40% of the governments either responded that they did not know if their ERIP resulted in a net savings, or responded that they could make no estimate of savings.

It is in the area of control over replacement of employees that governmental success may be the most limited. According to the BNA Pension & Benefits Reporter, in a December 1993 article on public school early retirement packages, "The two most common reasons for offering [ERIPs] were cost savings and work force reductions. Only 35% of those plans achieved those goals."

Difficulty adhering to long term plans is a factor unique to the public sector that affects both funding strategies and replacement policies. Replacement policies adopted by a current administration may be easily ignored by the next. Where there are no restrictions on replacement of retirees, filling jobs vacated under the ERIP is even more likely. Three years after its most recent ERIP, which retired 6,684 employees, membership in the State Employes' Retirement System had grown to essentially its pre-ERIP level.

Even though it was not one of the questions on a survey of ERIPs in the last five years conducted by the Texas State Pension Review Board, ten of the respondents reported the success or failure in achieving work force reductions. Six of the ten states reporting indicated that they had realized no overall reduction in work force as a result of their ERIP.

## Summary of Pennsylvania's Experience

### *The State Employes' Retirement System's Experience with "30 and Out" Provisions*

The special early retirement incentive enacted by Act 95 of 1984 authorized SERS members who were at least 53 years of age with at least 30 years of service to retire during the period from July 1, 1985, through June 30, 1986, with full benefits unreduced for early retirement. Members who were less than 53 years of age with at least 30 years of service were eligible to retire with a reduction of 1/4% for each month the person was less than age 53. Act 95 was duplicated by a special early retirement program offered for the Public School Employes' Retirement System. Normal retirement under the State Employees' Retirement Code is age 60 with 3 years of service. It was the intention of both the SERS and the PSERS ERIP offerings to induce greater work force terminations for long service employees who were approaching retirement age. It was hoped that the actuarial cost of the ERIPs would be offset or exceeded by the salary savings, either by not replacing terminated employees or by replacing terminated employees with new, less highly compensated employees. It was also the intention of the Commonwealth to study the cost effects of this ERIP and to use the results of that study to determine whether a "30 & out" provision would be of any benefit to the Commonwealth.

According to a study issued by the Office of Administration in December, 1986,

> The actuarial cost over the life of all special early retirements was $31,373,831. The one year estimated savings from abolished positions and temporarily vacated positions totaled $16,187,048 and the estimated annual salary differential savings for filled positions totaled $2,683,393. Unemployment compensation charges avoided were estimated at $50,949. Therefore, the net cost of the "early retirement window" as calculated is $12,452,441.

The study also indicated that as of June 30, 1986, only 11% of the 921 positions vacated under the ERIP were abolished. Of the remaining positions, 83% were either filled or temporarily vacant, and the status of 6% of the positions was unknown.

Since the initial ERIP offering by the Commonwealth, under Act 95 of 1984, the "30 and out" window has been extended in June 1985, July 1986, July 1987, October 1988, August 1991, and April 1994. Most recently, the "30 and out" provisions were extended by Act 29 of 1994 and apply to employees who leave service through July 1, 1997. After 6 extensions of the original incentive, many Commonwealth employees have come to view the "30 and out" provisions as a permanent feature of the retirement code. Because of the repeated extensions and the perception that the provision is permanent, the System's consulting actuaries no longer calculate the plan's funding requirements as though the cost of "30 and out" were a temporary liberalization but instead include these costs in the normal costs of the plan. Recent demographic data also tends to support the conclusion that the "30 and out" provision has become an informal, but permanent, benefit improvement and as an incentive is no longer effective as a work force reduction tool.

The Public School Employes' Retirement System had a very similar experience with an ERIP that began in June 1982, as a temporary window for employees at age 55 and with 25 years of service. That window expired after a three month period, but it was reenacted in 1984 with provisions similar to the SERS requirements and has been repeated each time the SERS extensions have been enacted. Like the SERS benefit, the present PSERS "30 and out" provisions apply to employees who leave service through July 1, 1997.

*The State Employes' Retirement System's Experience with the Early Retirement Incentive Provided by Act 23 of 1991 (The Mellow Bill)*

During Fiscal Year 1990/91, the Commonwealth experienced revenue short falls that resulted in the furlough of employees in February of 1991. It was also anticipated that additional layoffs would become necessary in order to balance the F.Y. 1991/92 budget. In an effort to minimize the economic disadvantage to the furloughed employees and to avert or minimize furloughs in F.Y. 1991/92, ERIP legislation was drafted and introduced that retroactively applied to eligible employees who were furloughed or terminated in February and opened an early retirement window to reduce voluntarily the current state work force. Inherent in the legislation was the belief, for the ERIP to be financially successful, retiring employees would, for the most part, either not be replaced or would be replaced by new employees at significantly lower salaries.

In August of 1991, the General Assembly of the Commonwealth of Pennsylvania enacted Act 1991-23, "the Mellow bill", that provided an early retirement incentive to Commonwealth employees by granting an additional 10% retirement service credit to individuals who terminated employment between February 1, 1991, and December 31, 1991, and who were at least 55 years of age with 10 or more years of service.

Actuarial estimates prepared prior to the passage of the legislation, indicated that 16,404 of the 109,000 active members of the System would be eligible for the incentive. With the expectation of a moderate utilization rate, the Commission's actuarial note on the proposed legislation estimated that about 7,900 employees would take advantage of the incentive. Targets set for replacement rates prior to passage of the legislation were informal, being neither mandated by the law nor imposed upon agencies by administrative regulation. Estimates concerning the numbers of vacated positions that would be filled varied widely, and no firm controls or guidelines were established with respect to vacancies or replacements. Unofficial estimates of the net savings that would occur as a result of the incentive ran as high as $65 million.

The actual utilization rate during the 11 month period that the window remained open was 6,684, or 41% of the eligible members. Sixty-three percent of the retiring members left service during the last month of the incentive. The total actuarial cost of the ERIP was calculated by the System's consulting actuary to be $127.2 million. The actuarial cost is composed of 1) the difference between the value of the benefit the member received under the incentive and the value of the benefit the member would have received at the expected retirement date, and 2) the portion of the total expected member contributions that were not contributed due to the member's early retirement.

As indicated earlier in this report, the salary savings that may be attributed to an ERIP occurs only during the period that begins on the day the employee retires and ends on the day the employee would have retired under normal circumstances, had the ERIP not occurred. According to an analysis of the demographics by the System's actuary, the 6,684 retirement incentive recipients who left service during the 11 month window would have retired over the subsequent three year period had the ERIP not been enacted. In other words, all of the employees who were induced to retire by the incentive would have retired anyway within three years, and the retirements would, for the most part, have been spread evenly over that period.

With the aid of the Office of Administration, during late 1992, the Commission conducted an analysis of the budgetary impact of the incentive on the budget of the Commonwealth of Pennsylvania. The analysis included all of the agencies under the Governor's jurisdiction as well as other agencies that provided, on a voluntary basis, the information needed to track the individual positions vacated and filled. The status of each individual position vacated was tracked for a multi-year period, and the budgetary effect of the ERIP was measured for each period. Based on the agencies that responded, the Commission was able to account for 6,225 (93%) of the 6,684 positions affected by the ERIP. The corresponding proportionate actuarial cost associated with the 6,225 positions used for the budgetary analysis is $118.3 million, as opposed to $127.2 million that was the cost for all the positions vacated during the ERIP window.

The Commission calculated the salary savings, the benefit savings, the replacement salary costs, the replacement benefit costs, the pension amortization costs, and the net costs or savings

for each reporting agency and for each fiscal period affected. A more complete analysis is available from the Commission's 1992 study on this ERIP.

BUDGETARY IMPACT AND PENSION COST OF ERIP ($000)

| Fiscal Year | Salary & Benefit Savings | Replacement Costs | Net Savings |
|---|---|---|---|
| 1991/92 | $102,348 | $ 46,670 | $ 55,678 |
| 1992/93 | 134,066 | 87,973 | 46,093 |
| 1993/94 | 46,275 | 35,746 | 10,529 |
| Totals | $282,689 | $170,389 | $112,300 |
| Additional Pension Liability of ERIP | | | $118,300 |
| Excess of Pension Liability over Savings | | | $ 6,000 |

The chart above indicates that during the three fiscal years affected by the ERIP, the salary and benefit savings to all the Commonwealth agencies that participated in the study amounted to $282,689,000. As of the date that tracking of the individual positions was discontinued, 72% of the positions had either been filled or were projected to be filled. The actual count of the positions filled within the three year period subsequent to the ERIP has not been updated since that time. However, the total active membership of SERS has now reached essentially the same level as before the ERIP, and it is reasonable to assume that the replacement costs have increased above what was estimated. The salary cost of filling 72% of the vacated positions, as shown above, totals $170,389,000. The net budgetary savings that result, without considering the cost of pensions, is $112,300,000.

The additional pension liability resulting from the increased benefits under the ERIP for the agencies included in the study is $118,300,000. This amount represents the present value of the increased benefits to be paid in the future. The benefits could have been fully funded by the deposit of that amount into the pension fund at the inception of the ERIP, and would have resulted in an excess of pension liability over the savings realized of $6 million for the agencies that participated in the study. The legislated funding policy of the System, however, requires that the cost of the ERIP be amortized over a 20 year period, with annual payments beginning July 1, 1992, and increasing 5% each year. Twenty annual amortization payments made according to the method prescribed by the legislation to fund $118,300,000, including interest, will require the outlay of $310,584,000.

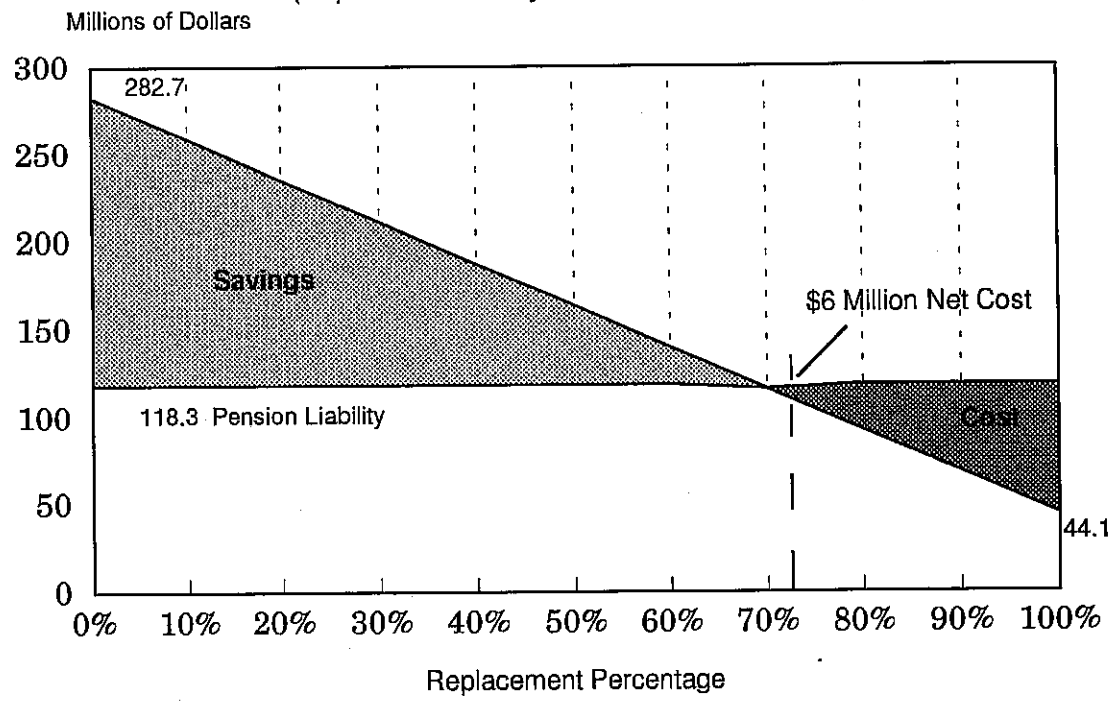
From a financial perspective, the incentive produced a budgetary savings of $112 million in the three years after the ERIP, and resulted in an expenditure of $310 million over the 20 years after the ERIP for the positions studied.

## The Financial Impact of Changing Replacement Rate and Salary Differential of an ERIP

Displayed below are three graphs that are based on the 1991 SERS "Mellow bill" experience. The graphs were developed using the Commission's 1992 study database, which includes detailed information on 93% of the ERIP participants. The exact financial impact of this experience is applicable to this ERIP only. The general principles and the primary variables are, however, applicable in other situations and show the relationship of key variables in ERIP design considerations.

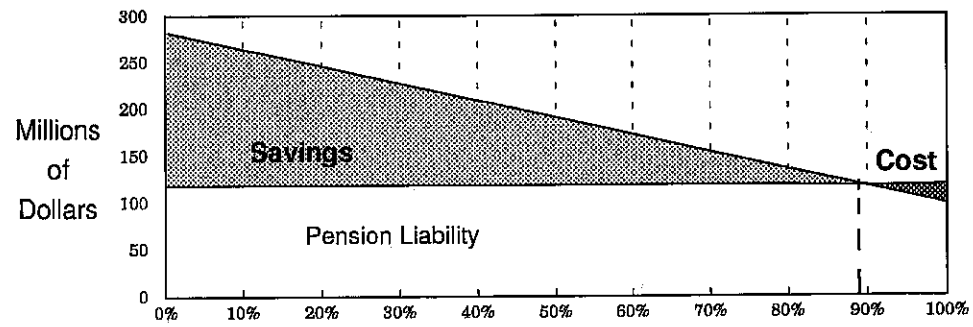
Graph A is based on the actual experience of "the Mellow bill" ERIP. It demonstrates the dramatic effect of replacement rates on costs and savings associated with that ERIP. Graph A shows that the fixed costs, or the amount of the increased pension liability was $118.3 million. The reported replacement rate of the retirees was 72%. At that rate the net cost, or the present value of the increased pension liability in excess of the savings, was $6 million. The breakeven point of costs and savings would have occurred with a replacement rate of about 69%. Given this particular set of circumstances, net savings would have occurred with replacement rates less than 69% and net costs would have occurred with replacements in excess of 69%. Graph A also shows that at a zero replacement rate the net savings would have been about $164.4 million ($282.7 - $118.3), and that with a replacement rate of 100%, the net costs would have been about $74.2 million ($118.3 - $44.1).

**Graph A**
**Breakeven Analysis for the**
**SERS "Mellow Bill" ERIP**
(Replacement Salary = 78% of the Retiree Salary)



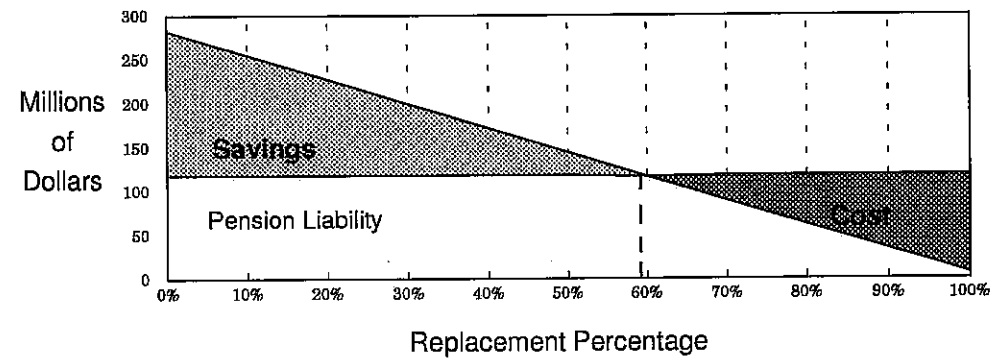

Average Retiree Salary $31,756 (Actual)
Average Replacement Salary $24,685 (Actual)

**Graph B**
**Breakeven Analysis for**
**Salary Differential Variation No. 1**
(Replacement Salary = 60% of the Retiree Salary)




Average Retiree Salary $31,756 (Actual)
Average Replacement Salary $19,054 (60% of Retiree Salary)

**Graph C**
**Breakeven Analysis for**
**Salary Differential Variation No. 2**
(Replacement Salary = 90% of the Retiree Salary)




Average Retiree Salary $31,756 (Actual)
Average Replacement Salary $28,583 (90% of Retiree Salary)

Graphs B and C disclose the effects on costs and savings that result with variations in replacement salary that cause corresponding increases or decreases in salary differential. In Graph A, where the actual salary differential during the Mellow ERIP was used, the breakeven point occurred at 69% replacement. During that ERIP the average replacement salary was 78% of the retiree's salary. In other public sector units, the differential may be more or less. For example, school districts commonly have a very significant difference between starting and retiring salaries. Whenever replacement of a significant number of retirees is contemplated, the salary differential is an important design consideration.

To show the effect of variations in salary differential, Graph B indicates that, where the other variables are similar, and the replacement salary is only 60% of the retiree's salary, the breakeven point of costs and savings would occur where approximately 89% of retiring employees are replaced. Graph C indicates that when the replacement salary is 90% of the retiree's salary, the breakeven point would occur when approximately 59% of the retiring employees are replaced.

**CHANGES IN OVERALL SIZE OF WORK FORCE.**

The chart shown below discloses numbers of active versus retired members in the State Employes' Retirement System at December 31, 1990, December 31, 1991, and again at December 31, 1993, before and after the ERIP, which was from February 1 to December 31, 1991.

| | 12/31/90 | 12/31/91 | 12/31/93 |
|---|---|---|---|
| Active Members | 112,248 | 104,651 | 111,962 |
| Retirees | 68,156 | 74,242 | 73,894 |
| Totals | 180,404 | 178,893 | 185,856 |

During the period of the ERIP window, the number of state employees was reduced by 6,684. Of the 6,225 ERIP positions tracked by the Commission and the Office of Administration, 62% were filled as of June 30, 1992, and another 10% were estimated to have been filled by December, 1992. The remainder of the positions were either abolished or reported as vacant. Two years after the close of the early retirement window, however, the number of active employees in the state system had returned to essentially the same number as prior to the ERIP, and the number of retirees had increased by 5,738. In order for the overall complement size to have grown to it's pre-ERIP level, all the positions vacated must either have been filled or replaced by employees in new or other positions. While the Commonwealth work force returned to its pre-ERIP level, the reduction in number of employees as a result of the ERIP provided the opportunity for restructuring of the work force to reflect changes in public policy objectives.

Moderate changes in numbers of active members and retirees are a normal part of the dynamics of a mature retirement system. Growth in the overall size of the employee complement during this period may either be due to replacement of employees who retired under the ERIP or to hiring new employees that would have occurred anyway. However, the overall effect on membership during this period was growth in the number of retirees without a corresponding decline in the number of active employees.

Overall, the budgetary impact analysis of this ERIP shows a net cost of $6 million based upon the tracking of individual positions vacated during the incentive and a replacement ratio of 72%. The fact that the overall complement is now at its pre-ERIP level indicates that there was no

permanent reduction in the size of the Commonwealth work force. When the total amortization cost of $310 million over the full 20 year period is weighed against the net short term budgetary savings of $112 million, the outlay exceeds the savings by about $198 million.

Even in situations where a work force is permanently reduced after an ERIP, any savings that result after the date that the retiring employees would have retired without the ERIP are attributable to a long term policy of not replacing retirees and are not directly the result of the ERIP. In other words, a work force reduction by attrition would produce the same cost savings without the added pension costs.

PART VI

# CONCLUSION AND RECOMMENDATIONS

The annual focus required for governmental budgeting, the frequent inability of governments to control the replacement of ERIP retirees, and the governmental decision making process impede both the design and the successful implementation of ERIPs in the public sector. Accordingly, long term reduction of personnel and measured financial success of public sector ERIPs has been limited. The popularity of ERIPs in the public sector appears to be due in large measure to their relative success in generating short term budgetary savings.

To achieve long term savings, the objectives of an ERIP must be identified and agreed upon. The design must be coordinated by all parties involved in the legislative process, and enforceable controls must be placed on the number of replacement employees, when the retiring employees are replaced, and the salary differential. In order to effect long term savings, the number of replacement employees must be limited. When significant numbers of retirees are replaced, the salary differential must be substantial if net savings are to occur. Controls must be placed on replacement of employees for periods that often extend beyond one governmental administration, and the overall employee complement must be limited. In addition, a conservative funding strategy must be maintained to fund the pension liabilities created.

The Commission believes that if the Commonwealth chooses to utilize early retirement incentive programs in the future, policies should be developed that will place controls on the major variables that affect the costs, savings and personnel elements of the program and that the overall costs or savings should be measured and reported.

The specific recommendations of the Commission are as follows:

- The Commission recommends that proposed ERIP legislation clearly set forth the specific purpose of the ERIP as being either a permanent work force reduction to achieve long term savings, a temporary work force reduction to achieve short term budgetary reductions or a means to achieve a restructuring of the work force at its current level.

- The Commission further recommends that proposed ERIP legislation specify complement control mechanisms and that the complement control mechanisms include the assignment of maximum replacement rates and total complement parameters to be applied on an agency by agency basis for at least ten years following implementation of the ERIP.

- The Commission further recommends that proposed ERIP legislation specify the amortization period and methodology for the ERIP pension liabilities and that the amortization period be no more than ten years and the amortization methodology be level dollar.

- The Commission further recommends (1) that prior to final consideration in either House of the General Assembly an analysis of the proposed ERIP legislation be conducted by the Office of Administration of both the estimated pension liability and the estimated net costs or savings impact upon the Commonwealth budget and (2) that the analysis disclose the assumed replacement ratios, the assumed average replacement salary differential and the total outlay required to amortize the pension liabilities.

- The Commission further recommends that the Office of Administration monitor the replacement ratios, the replacement salary differentials and the overall costs or savings of the ERIP and issue periodic reports on its findings to the Governor and the General Assembly.

ERIPs work well only when replacement ratios are low and salary differentials are high. If these conditions cannot be achieved, work force reductions by attrition would produce similar cost savings without added pension costs. Through the utilization of ERIPs, public employers may realize reduced costs and a revitalized work force, and public employees may terminate their employment voluntarily under favorable conditions. However, if not thoughtfully designed and effectively controlled, an ERIP can fail to achieve its purpose and increase operating costs for many years.

# SELECTED BIBLIOGRAPHY


Brown, Dr. Herb R. and Repa, Dr. J. Theodore, Do Early Outs Work? Teacher Early Retirement Incentive Plans, School Business Affairs, (Association of School Business Officials International), August, 1993.

Early Retirement Incentive Programs, National Education Association, Washington, D.C., 1994.

Early Retirement Incentive Programs of Public Pension Plans, Texas State Pension Review Board, Austin, Texas, January, 1994.

Employee Benefits Research Institute, Pension Evolution in a Changing Economy, Special Report and Issue Brief Number 141, Washington, D. C., September, 1993.

Enos, Gary, Early Retirement Gains Popularity, But States Pay Price, City & State, (Crain Communications, Inc.), Chicago, Illinois, August, 1990.

Government Finance Officers Association, Early Retirement Incentive Programs: Recent Experience of States, Pension & Benefits Update, Volume 2, Number 2, March/ April, 1991.

Leavitt, Thomas D., Early Retirement Incentive Programs, (Policy Center on Aging), Waltham, Massachusetts, December, 1983.

National Conference of State Legislatures, State Early Retirement Programs in FY 1992 and FY 1993, State Legislative Report, Vol. 18, No. 5, Denver Colorado, 1993.

The New York Times, Early Retirements To Reduce Budgets Cost States Money, New York, N. Y., November, 1992.

PA State Employes' Retirement System, Report on 1991 Early Retirement Incentive, October, 1992.

Perlman, Ellen, It's a Lose-Lose Situation. Early-Retirement Efforts Often Fail, City & State, (Crain Communications, Inc.), Chicago, Illinois, November, 1992.

Siegel, Conrad M., F.S.A., Early Retirement and Pennsylvania's Public School Employees, Public Employee Retirement Commission, Harrisburg, Pennsylvania, April, 1987.

Smith, Ronald J. W., Public Employer Early-Retirement-Incentive Programs, Pension Section News, December 1992.

Spencer's Research Reports, Early Retirement Provisions and Practices: Factors That Will Affect Future Experience, 111.01-1, Chicago, Illinois, 1992.

Texas State Pension Review Board, Fifth Biennial Report, 1987-1988, Austin, Texas.