

proper high school instruction is denied to students. After all a great proportion of Nova Scotia's population lives along or near the paved highways of the Province which are now open to traffic all the year round, and even if proper high school instruction were possible only if pupils were boarded at or near the high school for the difficult months at the public expense, that expense would probably justify itself in the long run.

A fuller realisation of the handicap under which high school students suffer in rural schools would I think help greatly to bring about the establishment of rural high schools, as would the adoption of the larger unit of administration in education. For reasons already given I should like to see those schools take their students not later than the end of grade VI, and I should like wherever possible, to see them large enough to give satisfactory duplicate courses. There are two possible aims for higher education in rural areas. One is to prepare the students for rural life, the other is to give an academic training leading to the University. At present in Nova Scotia

the second is the aim attempted, and the first, except for a handful of students, is neglected. It seems to me certain that when the new rural high schools come (as come they will) they will have to attempt *both* aims, the main body of students being given a training with a definitely rural and practical bias, and the few with academic leanings being educated along familiar academic lines. In short, the rural high schools will have to be high schools of a kind hitherto unknown in Nova Scotia and not very highly developed in any part of the world.

Such are the improvements that seem to me, a newcomer to the province and perhaps a somewhat hasty judge, to be desirable in the high schools of Nova Scotia. Whether we obtain these reforms or others which will solve the high school problem in a better way, depends in the main on whether Nova Scotians as a whole sufficiently desire for each of their children the chance to do the best that is in each one of them. It is the strength of that desire which distinguishes progressive from other societies.

Municipal Retirement Plans

By I. RAFKIND*

A RETIREMENT plan is concerned with the problem of employees who no longer can work with reasonable efficiency or are unable to work because of old age, invalidity (premature old age), or disability. The condition of inefficiency because of age or invalidity commonly is referred to as "superannuation." Various tools can be used to meet this problem. Of course, superannuated or disabled employees can be retained on the payroll, unless their condition is such that even an occasional appearance at their

jobs is impossible. But retention in service has proved to be unsatisfactory because the efficiency of the whole service is adversely affected. Moreover, such practice is expensive since the payroll actually includes a hidden pension roll.

The most satisfactory practice is the provision of a plan whereby employees may be separated from the service and receive a benefit. A scheme for accomplishing this objective generally is referred to as a retirement or pension plan. The benefit usually is an amount less than the employee's compensation while working, and except for rare exceptions, is paid during the lifetime of the retired employee. Death benefits to

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dependents such as widows and children, particularly if death results from injury or illness incurred on the job, also are often included in the plan.

Many existing retirement systems show ignorance of even the basic financial implications involved in their operation. In numerous cases benefits are promised without any knowledge of true costs. Such costs should be calculated not on the basis of benefits payable to persons retiring in the immediate future, but on the bases of probable disabilities, eventual retirements, probable mortalities both prior to and after retirement, the number and age distribution of employees and their dependents, salary trends, and numerous other factors. The most acceptable plans are jointly contributory, requiring contributions from both the employees and the employer. In many plans contributions are determined arbitrarily and bear no relationship to the actual cost of promised benefits. Eventually such plans require either increased annual contributions to pay benefits, or benefits are reduced to bring them in line with the inadequate funds on hand or both.

In order to ensure the financial soundness of a retirement plan, the services of an actuary are essential. Qualified actuaries have the training and experience that enables them to compute reasonably accurate cost estimates after considering the factors noted above. Cost estimates must be extended into the future in order to know the eventual financial burden for which to make provision. Estimating costs in advance is essential so that contributions to the retirement plan can be made sufficient to provide assurance that funds will be on hand to pay benefits as they become due. The realization of costs is more apt to keep benefits within reason and within the willingness and ability of the contributors to meet the financial burden. If costs are known in advance, there also is less possibility that the plan will be abolished in the future or that benefits will be decreased because the eventual burden of benefit payments is regarded as excessive.

From the above discussion it should

be obvious that a financially sound retirement plan must follow actuarial principles. Unless the system rests on a sound financial base, those employees who are still young may be disappointed when they reach retirement age. The experience in numerous cities proves this point. Fundamentally actuarial calculations depend for their accuracy upon the operation of the law of averages. For example, on the basis of the Men's Combined Experience table and 3% interest, on the average approximately \$9,600.00 must be on hand at the time an employee retires at age 65 in order to provide a monthly annuity of \$80.00. This does not mean that the cost of providing an equal annuity is the same for all employees retiring at the same age. Some persons will live more than the average and others will live less. But the average cost for a large group can be computed with safety on the basis of acceptable mortality tables. If the group is small, however, the law of averages may not apply and the system may have insufficient funds if a few employees live much longer than the average. In the same manner, actuaries estimate the number of persons who will become disabled on the basis of past experience. Contributions then are computed so that sufficient funds will be provided to pay benefits to those who become disabled. The larger the number of participants the more the calculations are apt to be accurate. In a small municipality, one or two serious accidents may cause an unbearable drain on the finances of the retirement system.

Because the law of averages does not apply to a small group, the reliability of actuarial estimates for a plan operated in a small municipality is questionable and the financial soundness of the plan must be viewed as unreliable. It is true that the mortality factor can be relied upon with reasonable confidence even in a group of 100 persons, but the rate of disability can be calculated safely only for a large group. Many actuaries believe that even 300 or 400 employees do not furnish a risk-spent sufficient for undertaking adequate disability benefits.

The suggestion has been made that small cities should not include disability benefits in their plan. This should be discouraged because disability benefits are essential from the viewpoint of both the employer and the employees. Unless benefits are provided to enable disabled employees to retire with a reasonable allowance, the pressure of employees and the public to keep such employees on the payroll may defeat the objectives of the retirement plan. On the other hand, disabled employees may become a social problem by requiring some form of relief. Considering what is most economical to the municipality and what is socially desirable, one must conclude that a retirement plan should provide disability benefits.

Another problem peculiar to small municipalities is the fact that actuarial and other administrative expenses incurred in the operation of a complete retirement plan would not be spread over a sufficient number of members to furnish an economical overhead cost. A third problem is the difficulty of investing the funds of the retirement system, and this difficulty is minimized when larger funds are available, both because any losses can be absorbed more readily if a large group is involved and because a large system can afford to hire persons skilled in the techniques of determining satisfactory investments. Because of the trust nature of a retirement system's funds, limitations generally are imposed as to the type of securities in which the funds may be invested. No one who has had any experience in handling trust or sinking funds will question the difficulty in selecting safe and sound securities which yield a reasonable interest rate.

It is noteworthy that the state of Massachusetts has a uniform retirement law which must be adopted by local governments and operated separately by each unit of government. The law also provides that all systems be supervised carefully by the state Division of Insurance. At present, approximately 90 local governments in Massachusetts are operating under this uniform law. In

spite of the competent supervision, numerous difficulties are being encountered and consideration is now being given to one consolidated system covering all local systems under a central administrative agency.

A few attempts have been made to meet the retirement problem of the small municipalities by providing benefits through insurance companies. At first glance this seems like the simplest solution. With hundreds of thousands of participants, an adequate risk-spread definitely is provided. At the same time, the municipalities are relieved of the task of administering the system. But closer study reveals several disadvantages. Insurance companies normally will not write group disability and death benefits for a group comprising less than fifty employees. Thus the smallest municipalities are left without a satisfactory solution. Second, the cost of providing the same benefits under an insurance plan as under a large self-administered plan is greater because insurance companies add a substantial amount to the required contributions to cover commissions, other administrative expenses, and taxes.

A more satisfactory solution to the small municipality's problem is found in the pooled or statewide retirement funds existing in the United States. The oldest statewide plans cover only teachers, and such plans exist in more than half of the forty-eight states. Statewide plans covering employees other than teachers are found in California, Illinois, New Jersey, New York, North Carolina, and Ohio. Characteristics common to all statewide plans in the United States are administration by one central agency, the pooling of funds for investment purposes, and the pooling of mortality and other experience the same as is done by an insurance company. In the plans covering other than teachers, two basic systems are in use. In California, New Jersey, New York, and Ohio the existing retirement systems for state employees served as the nucleus around which the statewide plans were formed by permitting local governments to participate in the state employees' system.

In Illinois and North Carolina, the plans do not include state employees and new agencies were created to handle the administrative details.

Numerous variations in statewide plans are possible. Participation in New York need be approved only by the local governing body. In Illinois, New Jersey, and North Carolina participation must be approved by the local electorate, and the Ohio plan is mandatory. The Ohio system is the first example, excluding plans for teachers, of mandatory coverage on a statewide basis for all permanent and full-time employees. In California participation must be approved by both the local governing body and by the employees concerned. For the purpose of determining the departments to be included in the California system, the employees in the municipality are divided into three groups, that is, firemen, policemen, and all other employees. After participation has been approved by the local governing body, and if the majority in any group vote to participate, membership is compulsory for all individuals in the group. In setting up a pooled retirement system all possibilities should be surveyed, with particular attention to existing state or provincial agencies, such as insurance departments and sinking fund or investment committees, which may be able to handle all or part of the plan's administration.

The experience of New York, which has the oldest statewide plan for other than teachers, is significant. Local governments have been permitted to participate in the New York State Employees' Retirement System since 1922. In 1932 the system contained 16,895 local participants in addition to 29,278 state members. By June 30, 1935, the number increased to 42,518 local participants and 43,422 state employees; included over 300 cities, counties, towns, villages, and miscellaneous governmental agencies; and had assets of \$128,429,014.24. The satisfaction of municipalities with this arrangement is evidenced by the fact that in 1932 only one local retirement law for employees other than policemen and firemen in cities outside New York

City remained in operation. The village of Waterville, with only one employee (not including policemen and firemen), is a member of the state system and is furnishing that one employee with all the benefits of a complete retirement system. Even municipalities that are large enough to operate individual retirement systems safely may find it advantageous to join a larger system. (Buffalo, New York, for example, with a population of over 600,000, voluntarily participates in the New York state system).

In addition to solving the operating problems for a small municipality, pooled systems have other advantages. Because a central administrative agency is further removed from the employees concerned, policy and administrative decisions tend to be more unbiased than in a local system. This is most important as related to disability benefits, particularly if the retirement plan provides greater benefits for disability resulting from injury or illness incurred in line of duty than for so-called ordinary disability. Experience has shown that boards of trustees for local systems are more apt to consider debatable disability cases as duty-connected. Such decisions increase costs unduly.

Another advantage of a pooled system is that it facilitates the mobility of employees between units of government, for an employee can transfer from one municipality participating in the system to another and still retain his accumulated retirement credits without necessitating a transfer of funds. Such transfers of credits should be encouraged as an incentive to the promotion of the public service as a career. Numerous instances can be cited of employees who refused to accept employment in another locality because the retirement system in which they were participating included forfeiture provisions unless the employee completed a long period of service. A career service must ignore residence restrictions, and any hindrances to the mobility of public employees where residence restrictions for employment do not exist, should be eliminated.