

plus interests on initial expenditure. A hypothetical case might be taken where the difference between the interest charges on capital invested in an expensive roadway and that of a less costly one would maintain the latter many times over and produce, for all purposes as satisfactory and desirable results. Roads should be built to meet the conditions of traffic upon them.

In financing a scheme of road improvements, as fair distribution of the cost as possible should be levied on those who benefit from them. This in itself is no easy matter to adjust. Roads are being built for the public and as a public convenience everybody has the right, if not to an equal extent the opportunity, to use them.

It is generally conceded that the construction of a good road through a municipality, while a benefit to that municipality as a whole, produces the greatest benefit to the property immediately adjoining it—this benefit decreasing in a more or less regular gradation as the distance therefrom increases, until a point is reached where the difference would be practically undiscernible. In the construction of an individual road a method of levying the cost thereof might possibly be adopted by which the municipality might assume a certain proportion of the cost and the remainder distributed on a graduating basis, over the lands contained within a zone three or four miles in extent on each side of the highway with the highest levy on the lands contiguous to the highway. Such a plan has often been suggested to the writer as being applicable in rural districts—being only a modification of the frontage tax system so universally adopted in cities and towns for assessing the cost of improvements; and while agreeing with the principle that as equitable a distribution as possible of the cost of an improvement should be attained and that the foregoing might well be adopted in isolated places, nevertheless, the best interests of a municipality will be served when the community should be bound together by main market roads radiating from its markets, built on lines which through virtue of their location will serve the greatest number in these respective districts and paid for by the municipality as a whole.

The two great users of the public roads—the farmer and the motorist—may be somewhat at a variance both as regards to the roads that should be built and the nature of the improvement performed. The farmer will usually be satisfied with the road over which he can haul the produce of his farm from home to his market town, while the motorist will be more interested in the development of the long stretches of main highway connecting the towns and cities. To this it may be said that the construction of market roads whereby the farmer will be able to reach his market with the least possible inconvenience and expense, will without doubt prove a greater factor in the development of this province than the construction of trunk lines, and also of some benefit to the local motorist.

It is difficult to say with the tremendous developments taking place in the motor trades, what the future may have in store for this industry. Indications point to a more general use of the automobile and motor truck on the farm. Nevertheless, whatever these developments may be, it may be safely said that the building of substantial market roads in this essentially agricultural province will always remain a most desirable undertaking, and a lasting benefit wherever effected.

The cost of constructing systems of roads in the various municipalities of this province will require large outlays of money and if these plans are to be consummated within a reasonable period of time the requisite funds must come by issuances of debentures, with the repayment extending over a number of years.

Judging from the experience of the past in our own country and those in other lands, this method of providing money from debenture issues for the construction of roads is a proper one to pursue so long as the ensuing maintenance charges are met from annual levies. Whatever may be said in favor of a "pay-as-you-go" plan, it must certainly be admitted that progress will be slow, especially in sparsely settled districts and the system more or less disjointed for sometime.

There can be no serious objections raised against the principle of making such public improvements as the building of good roads with money borrowed on the credit of a municipality any more than can be used against the development of any other enterprise whether it be of a public or private character from funds obtained from the same source. It is the natural averseness of the average farmer to incurring an obligation of such long standing that prevents this system from being more gradually adopted.

But, with due respects for the propriety of such sentiments, a little study of the question will show that the desired results cannot be obtained within a reasonable period of time without resorting to such a course.

The capitalization of \$5,000 per annum for thirty years at, say, 5½% interest to the investor, will produce the sum of about \$72,675, retiring the debt in equal annual instalments of principal and interest. There are very few municipalities, if any, in this province which does not spend at the very least \$5,000 every year upon its roads, while many of them spend as much as \$10,000 yearly and will probably continue to do so continually. Now, if even a portion of the annual expenditure was capitalized, the municipality would be in a position to make substantial improvements on their roads and enjoy the same immediately.

The term of years for which debentures should be issued is a question that should be considered. In general, it is safe to say that this period should be commensurate with the useful life of the improvement made. While absolute permanency in road improvement is scarcely obtainable, still there are certain features of the work which may be justifiably classed as such, *viz.*, the system of drainage; heavy foundations, such as concrete or telford; deep cuttings; embankments; concrete or steel bridges and culverts. The road surface, on the other hand, cannot be considered of long duration. The gravel surface usually placed on a road cannot be expected to last more than five years. Broken stone will wear down and disappear if not continually replaced and even the more expensive road surface of asphalt or tar products are subject to the same destroying influence of traffic and the elements, and will seldom warrant a debt of more than ten or twelve years' currency.

It might be considered businesslike to apportion a percentage of the capital expenditure for this class of work to a long term of, say, thirty or forty years and the balance to a lesser term of ten or twelve. Or, again, the construction of permanent bridges and culverts might be met by debentures and the improvement of the roads by annual levy.

Debentures should bear a rate of interest that will enable them to be disposed of at par. As a lower rate, necessitating any considerable discount to the purchaser, might interfere materially with carrying the project to a satisfactory completion. Again, the method of retiring debentures by equal annual payments of principal and interest would be considered more preferable in rural municipalities than by paying annual interest charges and providing for the principal by way of sinking fund. Rural