Highway Development in Canada During the Past Decade

(W. A. McLEAN, C.E., Deputy Minister Highways, Ontario.)

The improvement of public highways has, throughout Canada, made very substantial progress; not merely in actual construction, but in the attitude of 'he average citizen toward the question. Some work of a very notable character has been produced, considerable expenditure has been involved, and better organization has been created; but perhaps most encouraging of all, public interest in the question has been aroused to a remarkable degree such as augurs much for the immediate future.

The development of roads in Canada, in essential principles, has followed the history of all other countries in this regard; and the student of the question cannot but be struck by the similarity which has existed in all countries

of the world. Canada has had:

(1) A period of toll roads prior to 1850.

(2) A period of railroad construction when the common road was neglected, but which has resulted in the construction of 32,000 miles of steam railway with a capitalization of \$2,000,000,000, including three transcontinental trunk

A period of bicycle influence and agitation commencing about 1890, when educational measures and some

better road organization were inaugurated and

(4) Commencing about 1915, a period of motor vehicle influence, which has finally awakened the cities to the cause of good roads as a measure of national development and prosperity - the cost to be borne not by half or quarter of the community, those residing on the farms, but by every one receiving the benefits and carrying the responsibilities of citizenship.

This is the story which might be told of the United States, England or France, with variety of detail according to local conditions. Just as there has been difference of detail between the States of Massachusetts, of Maine and of Dakota - so have local circumstances influenced the progress and results of organization in the Canadian

provinces.

Roads in nearly all countries fall naturally into a three-fold classification. There are:

The main roads between towns and cities;

Leading farm roads, radiating from market centres and shipping points, and,

Local feeders, each carrying only the traffic which

originates on itself.

The natural features of any country have been very largely, a controlling factor as to which of these classes of roads has received first or chief attention, and for which

organization has been created.

It is to be observed that no two provinces have the same organization for municipal, provincial or other road organizations. The same is true of the various American States and of all countries in the world. This great variety of organization is due to the variety of local circumstances which have influenced the general trend of public feeling, action and administration on which road organization is

British Columbia.

Thus the mountainous character of British Columbia has prevented uniform municipal organization such as is possible in the prairie provinces. The French code and French characteristics of Quebec have made a striking difference as compared with Ontario, while Prince Edward Island and Nova Scotia have special characteristics in their road

During the past decade the Province of British Columbia has made very remarkable progress in road construction, which has been carried on very largely by the Provincial Department of Public Works. Provincial estimates for roads and bridges in 1901 amounted to \$344,000; in 1915 the estimates amounted to \$2,459,000. A special programme was provided in 1910 with an estimated outlay of about \$20,000,000, the greater part of which has been spent in the construction of main roads of excellent type.

Alberta.

In the Province of Alberta, both provincial and municipal organization has made substantial progress. Provincial Government has a branch especially in charge of this work under the Provincial Engineer of Highways. Municipal expenditure in 1913 was \$681,000; in 1914, \$865,-190; and in 1915 about \$900,000. Provincial expenditure in 1915, principally on trunk road, those paralleling the railway lines or leading out from shipping and business centres at right angles to the railway lines, amounted to \$1,000,000, local organizations using their funds chiefly on roads branching out from the Provincial trunk road systems.

Saskatchewan.

The Province of Saskatchewan has created a Provincial Board of Highway Commissioners, the duties of which are as follows:

To lay out, plan and determine upon a system of public highways for the Province which may from time to time be altered or modified as the Board may determine.

(2) To determine upon the most feasible and economical methods for constructing, improving and maintaining

public highways.

(3) To furnish the officers of the municipalities with information respecting the construction, improvement and maintenance of public highways.

(4) To appoint such engineers, inspectors and officers as are necessary for the proper carrying out of the duties

of the Board and the provisions of this Act.

The Provincial appropriations of Saskatchewan for 1915 amounted to \$2,000,000 but, owing to conditions created by the war, this was reduced to \$661,000. As with the Province of Alberta, provincial expenditure is devoted as largely as possible to trunk roads while the local municipalities improve the branch lines; but receive 50 per cent of the cost of their improvement as aid from the Province. when these improvements have been carried out in accordance with the regulations of the Board.

Manitoba.

The Province of Manitoba has been active in road construction, both through the Provincial Covernment and the local municipalities. In 1915 the municipal expenditure alone amounted to about \$700,000; while under the Good Roads Act of the Province, the sum of \$374,790 was spent, of which the Province contributed \$141,700.

Ontario.

The Province of Manitoba has created the office of Provincial Highway Commissioner and has adopted a Good Roads Act, whereby a Provincial subsidy is granted to municipalities to the extent of one-third for good earth roads and one-half the cost for gravel or more permanent roads.

The Province of Ontario has recently entered upon a programme of advanced road construction. A Department of Public Highways has been created. It has been announced that the collection of motor vehicle license fees will be made a Branch of the Highways Department and a revenue of \$500,000 is anticipated for 1916. It is the policy of the Province to subsidize the construction of main and market Province to subsidize the construction. Under this policy, an roads to the extent of 40 per cent. Under this policy, an building of model and experimental roads, the organization of township administration, the construction of coloniza-tion roads have also been features of Provincial activity in which much progress has been made.

Quebec.

Under recent legislation the Province of Quebec is seeking to improve the roads under three well-defined plans.

First, an Act, consolidated in 1911, which has as a chief the abolishing of the share system and statute labor (la corvee). To this end a small annual grant is given to townships, from \$200 to \$400, on condition that they comply with certain conditions. About 400 municipalities, out of 1,130 have become entitled to this grant.

Second. Provincial grants are made to townships as aid in gravelling or macadamizing roads; not to exceed \$1,000 a year for macadam, nor \$500 for gravel, and based on 50

per cent of the expenditure.

Third, under an Act of 1912, the Province of Quebec appropriated \$10,000,000 (supplemented in 1915 by an additional \$5,000,000) for more substantial construction under two methods:

Main roads built by the Province.

(2) Roads built by the municipality.
On a system of trunk roads nearly \$4,000,000 has been spent by the Province. In the case of roads built by the municipality a feature of the Quebec aid to municipal construction is that, for substantial improvement the Government will provide the necessary capital, charging the municipality 2 per cent for a term of 41 years, the Government meeting the balance of interest and sinking fund. About \$8,000,000 has been thus appropriated to the present (Continued on Page 93.)