

may well mean a preferred position for members in each others markets and perhaps mutual aid in regaining a position in world markets if these recover after the war.

Canada will most decidedly be interested in finding markets after the war for her greatly expanded manufacturing industries, as well as in reopening markets for wheat and other staple commodities. Latin America is potentially an expanding market of great importance. The Argentine is her principal competitor in the world wheat market, while Brazil, the Argentine, Uruguay and Chile are com-

petitors in other commodities. Mutual understanding and good will between Canada and her potential competitors in world markets are essential. Membership in the Union may not be essential to protect her position in world markets, or to gain equitable rights of entry to the expanding markets of Latin America, yet it is quite conceivable that it may become so, if the Union tends to adopt an economic front against the world. In the hard struggle for markets likely to follow after the war it would seem essential that we "hedge" against all eventualities.

The Railways' Contribution to Canada's War Effort

By SIR EDWARD BEATTY

IT is interesting to remember that this country—as devoted to peace as any nation could be—has a railway and transportation history which has been deeply affected by military considerations.

The Intercolonial Railway was built for the specific purpose of providing a connection, wholly on Canadian soil, between the Maritime Provinces and the rest of Canada. The plan of Confederation, of which it was an essential part, was primarily intended to meet the economic needs of the people of British North America, but the underlying realization of military considerations played an important part in producing the decision to unite the Provinces, and in the decision to provide a publicly-owned and Governmentally-operated railway connection, which, for military reasons, was built wholly on our own soil. It has always been a matter of regret to me that this special status of the Intercolonial line was not preserved during the later railway development of the Dominion.

The Canadian Pacific Railway was equally constructed for a combination of economic and politico-military reasons, and its first function was to carry troops from Eastern Canada to the new settlements of the West.

It is unnecessary to remind students of history that the first major improvement in our inland waterways was the construction of the Rideau Canal—to bypass the International Section of the St. Lawrence River, in an earlier and less happy period of our relations with our brothers to the South.

The peaceful history of Canada made it unnecessary for us to use our transportation systems for military purposes, to any serious extent, until the World War of 1914-1918. During that struggle, the Intercolonial and Canadian Pacific Railways proved their essential value to the Empire and to Canada, and made this nation's participation in the struggle practicable.

In the years which followed the Armistice of 1918, the railways of Canada experienced many vicissitudes. The collapse of some private and Governmental adventures in railway construction and operation led to the creation of a giant system under public ownership. In the period of hectic prosperity which followed, both publicly and privately owned lines were able to increase their volume of traffic to great proportions, and the railway picture resembled markedly that which had existed during the

period of sounder expansion from 1900 to 1914.

The world wide collapse of economic activity which commenced in 1929, and became steadily intensified for some years after that, soon began to affect the railways very acutely. The situation was aggravated by the increasing competition of highway and waterway transportation.

During the Great War the private motorcar had come into general use, and, in the years of prosperity which followed, it actually revolutionized the habits of the people of North America. In 1920—despite the fact that every form of economic activity was at a far higher level than ever in Canadian history—the passenger traffic of the railway companies began to decline—a direct result of the substitution of the motorcar for the railway as a means of travel. The railways continued to hold long distance travel, and to serve many millions of short distance passengers, but the total volume of passenger traffic declined rapidly. When the steady decrease terminated in 1933, the passenger-mile figure stood at only 40% of the figure of 1920.

The use of highways as routes of freight traffic did not expand as rapidly, but, as passenger travel grew, there sprang up a very important public demand for the improvement of highways, and, before long, enterprising individuals began to see that, in view of the fact that they would not be asked either to assume the obligations of common carriers, or to pay any special charge for operating commercial transportation systems on the improved public highways, there existed an excellent opportunity for them to enter the field of freight transportation, and, by selecting only those movements of goods which would be particularly profitable, deprive the railways of the cream of their business—leaving them the lower grades of traffic, which the highway operators had no desire to handle.

To this was added a steady and very considerable expansion of waterway traffic. From 1904 the canals by-passing the St. Lawrence Rapids and connecting

the Great Lakes have been accessible to the ships of all nations, without the payment of any tolls, and the tendency to take advantage of this for the movement of all kinds of bulk freight, and many types of other cargo, has, of course, steadily increased in its effect.

Thus when the economic crash made itself felt in the affairs of the Canadian railways, there ensued a period of great difficulty—much accentuated by a very disturbed condition in world wheat markets, producing both a decrease in the volume of grain traffic on the Canadian railways, and, at the same time, a serious decrease in the buying power of the grain growers of Western Canada—normally among the best customers of the railway systems.

The Canadian railways—in common with railways of most nations—entered a period of depressed volume of business, without any opportunity to raise the unit charges for their services, owing to general depressed economic conditions, and this in spite of the fact that from the close of the first Great War they had been paying a scale of wages much higher than had ever before been known.

Public opinion—badly informed in this case—came to the hasty conclusion that the day of the railways was over. It was clear that, for political reasons, one of the two great systems would be maintained—whether it earned its way or not. The privately-owned system was not as fortunate.

The railways, however, met the situation with courage, and applied their best efforts to improvements and economies in operating technique. They undertook a programme of drastic reductions in the charges made for their services, and succeeded in obtaining the agreement of their employees to temporary and minor reductions in wages. They at first hoped that the public authorities who are responsible for the construction and maintenance of highways would see the wisdom of not permitting these to be used by adventurous individuals as commercial freight routes, without the payment of adequate charges, at a

time when taxation and public expenditures were reaching new high levels. That hope failing, the railways then undertook to meet the highway operators in their own field, and provided pick-up and delivery services, costly high-speed

ment in it had been greatly reduced by the Recapitalization Act of 1937.

From the outbreak of War the situation commenced to change with great rapidity. The following statistics indicate what has occurred:

	1939	1940	1941
Carloadings.....	2,550,000	2,827,000	3,206,000
Tons Revenue Freight ¹	91,042,896	106,096,465	128,000,000*
Railway Operating Revenue ²	363,325,800	424,820,600	531,000,000*
Freight.....	283,333,800	331,295,200	420,000,000*
Passenger.....	35,650,000	42,144,900	59,000,000*
Number of Employees	121,000	127,000	140,000*
Freight Revenue Per Ton Mile ³907c	.880c	.840c*
Passenger Revenue Per Passenger Mile ⁴	2.058c	1.954c	1.874c*

*Estimate based on 10 months' results.

1. "Revenue Freight" covers traffic carried for the account of customers—omitting traffic in materials and supplies for Company purposes.
2. "Railway Operating Revenue" covers all receipts from freight, passenger and other transportation services.
3. "Revenue per Ton Mile" is obtained by dividing total receipts from freight traffic tolls by tons of Revenue Freight carried one mile.
4. "Revenue per Passenger Mile" is obtained by dividing receipts from passenger fares by number of passengers carried one mile.

freight service, and other methods by which they might and did recapture a certain amount of the business which they had lost. In addition, the standards of passenger service were greatly improved.

As the economic recovery of the world proceeded slowly, the position of the Canadian railways began to improve, but, at the outbreak of War, it was still a fact that the investors who had placed their money in the common stock of the Canadian Pacific Railway—although this Company is very conservatively capitalized—had had no return on their investment for many years, and had no immediate prospect of such return in sight. The Preference shareholders had received small and irregular dividends, while earnings of the Company had been little more than sufficient to maintain the full service of the interest on its debentures.

The publicly-owned railway found itself falling annually far short of the amount of operating revenue required to provide for the service of its debt to the public and to the Government—even after the book value of the Government's invest-

The causes of this extraordinary change are quite apparent. The recruiting, training and equipping of the Canadian Army was, in itself, sufficient to expand railway traffic—both passenger and freight—in a marked degree. To this was soon added the traffic produced by the great Commonwealth Air Training Scheme, and, after a somewhat slow beginning, the industries of Canada began to assume their place as one of the most essential sources of munitions and other material of war for the British forces.

Meanwhile, the demand for our raw materials—the produce of our fields, forests, mines, and seas—expanded rapidly. There was no longer any difficulty in finding a market abroad for Canadian lumber, Canadian wheat, Canadian nickel, Canadian cheese and Canadian bacon. While, in the one respect of wheat, the expanding market did not keep up with production, and there was soon an almost complete loss of all except the British markets for our grain, in all other directions the problem became one of production and transportation.

The total expansion in the economic activity of Canada—and therefore in the

transportation requirements of the nation—has been on a colossal scale, and experience has served to prove that the many alarmist forecasts—to the effect that the day of the railways was past—have been entirely incorrect. It has been demonstrated clearly that, for the mass movement of either goods or passengers, the railways, and the railways only, are capable of serving a nation of the geographical type of Canada.

By degrees it has become evident that the proper function of highway transport is as an ancillary to the railways—as it is employed by the railway companies themselves.

The Canadian railways are in the habit of furnishing services which are not directly connected with their primary function. The Canadian Pacific Railway, for example, has long provided Canada with the finest and fastest ocean passenger services on both the Atlantic and the Pacific, and with a line of fast freight steamers on the Atlantic. The Canadian National Railways operate the West Indies Steamship service, owned by the Government. The personnel of these steamship services have played their full part in the heroic struggle on the seas, and ships of both fleets have been sunk by enemy action—including the famous "Empress of Britain", flagship of the Canadian Pacific fleet.

The ocean steamship services of the Canadian Pacific have been absorbed into that great network of ocean transportation which has been organized under the British Ministry of Transport—the Canadian agency of which operates from the Canadian Pacific Railway offices in Montreal. The telegraph services of the two railways are, of course, the basic communication system of the Dominion. The Government-owned Trans-Canada Airways is operated by the Canadian National Railways, while the Canadian Pacific Railway has recently acquired control of a large number of smaller airlines throughout Canada—with the result that the airway facilities operated by the two companies are playing an important part in maintaining high-

speed transportation; serving the outlying areas of the Dominion, and providing valuable facilities, to be used in connection with the Commonwealth Air Training Scheme and the air defence of Canada.

In addition, the Canadian Pacific Railway organized, on behalf of the British Government, the ferrying of bombers built in the United States to Britain—now carried on by the Ferry Command of the Royal Air Force.

One particular asset to the military effort of the nation has been found in the use of railway shops, for the manufacture of ordnance and munitions. While the details of this work are necessarily secret, it is well-known that the Angus Shops of the Canadian Pacific Railway, for example, have already produced a large number of infantry tanks—not a few of which are now in service in Russia. It would be impossible and indiscreet to attempt a catalogue of the items of this very important railway contribution to the War, but it is worthy of note that, almost alone among Canadian engineering plants, the railway shops are being called upon to make this added effort—without a reduction in the burden of their ordinary task. They continue their function of constructing and maintaining railway equipment, at a time when the enhanced tempo and volume of railway traffic has greatly increased the amount of shop work needed for purely railway purposes.

Officers and employees of both railways have been called on by the Government for special technical duties, and over 9,700 employees of the Canadian Pacific alone have entered the armed forces on active service, or are working under the orders of the Admiralty.

It is thus clear that the Canadian railways can claim, in all modesty, to have played their full part in making possible both the measures for the defence of our own country, and the important contribution which this nation is making to the Allied cause. To no small extent the success attained has been due to the hard and gruelling experiences of the days

of depression and low traffic volume—during which the railway officers and employees learned how to increase the efficiency and economy of their handling of traffic.

Financially speaking, the effect of this great increase in railway business does not seem likely to be startling. It is true that the publicly-owned railway has, in 1941, been able to earn a net operating income of \$66 million as compared with the best previous record of \$55 million in 1928. This sum has been sufficient to meet the system's obligations to private holders of its securities, and, it is expected, will leave some \$4 million available—as a return on the Government's investment in the System.

This figure of \$66 million does not allow for any provision for such taxes as the Canadian National Railways pay. The System does not pay Excess Profits or Income Tax.

The Canadian Pacific is estimated to have earned—from rail operations only and after provision for all taxation—almost \$46 million net—which is, however, not equal to its record earnings of \$53 million from the same sources, and from a smaller physical volume of traffic in 1928. It must be remembered that the Canadian Pacific's earnings have been subject to quite heavy taxation—both Corporation Income Tax and Excess Profits Tax.

Both railways are still operating—with a few exceptions—at the low level of freight and passenger rates established to meet depression conditions, and the large proportion of passenger business arising from movements of the armed forces is conducted at less than normal charges. On the other hand, both railways have restored their rates of pay to

pre-depression levels, and are, in addition, paying the full cost-of-living bonus to their employees.

To sum up, it would appear that war record of the Canadian railway systems is one of which their officers and employees may be proud. They appear to have met all the demands imposed upon them, with efficiency, and without, at any time or in any place, failing to provide the nation and its armed forces with transportation service which has been needed. On the other side of the ledger, however, there are certain warnings to be taken from this record. One is that we must remember that the improvement in railway traffic has been entirely due to the ephemeral and destructive type of activity which arises from a war. There still remains ahead of us the problem of finding how we are to make our railway systems function successfully in times of peace. Even in these days of record traffic, the net earnings of the Canadian Pacific Railway are no more than sufficient to provide a modest return on the money prudently invested in the property, while, of course, the record earnings of the Canadian National Railways—although they fully meet that System's obligations to the public—give but an insignificant return on the vast amounts of money which have been invested in it by the Government of Canada. Even in the reduced form provided for in the Recapitalization Act of 1937, the Government's investment in its railway properties stands at \$670 million.

The experiences of the war period so far have proved that Canada has well constructed and well equipped railway systems, operated by efficient officers and workers. They prove also that, at the termination of hostilities, Canada will still have a railway problem.