



# THE ROYAL BANK OF CANADA

## MONTHLY LETTER

HEAD OFFICE: MONTREAL, APRIL 1954

### RAILROADS IN CANADA

CANADA uses more railway transportation per person than any other country in the world, and Canada's unit cost of transportation is the lowest of all the hard currency countries.

Our standard of living and economic development depend upon abundant sources of transportation. Dr. R. W. Miller, of the Graduate School of Business Administration, Harvard University, has said that the United States and Canada would cease as organized, civilized communities within one month if transportation were to suffer a severe paralytic stroke.

As has been remarked so often in these Monthly Letters, our treasures of natural resources have been in existence through countless thousands of years, but it took the genius of human invention and the energy of human endeavour to make them available for the use of mankind.

The backbone, and many other important bones, of Canada's transportation today is 43,000 miles of railway. These railway lines opened up our west for agriculture, brought Canada together as a vigorous nation and made available for use the forests and minerals of eastern and central Canada. Today they carry the goods we produce to seaports for shipment to all the world and to market places on this continent.

Railways are one of the factors in establishing the relative economic condition of various areas. Montreal, Halifax, Saint John and Vancouver have the natural advantage of being seaports, but the railway lines extend this advantage to inland cities like Winnipeg, Regina and Edmonton, to the ore-producing fields of northern Quebec and Ontario, and to agriculture everywhere.

Besides the material benefits wrought by railway transportation, there are moral and intellectual advantages. Men cannot live by going quickly from place to place, but the exchange of views and the dispersion of culture and thought tend to remove national and provincial antipathies. Ideas, like goods, have to be spread abroad upon the earth.

#### *Canadian Railroads*

What railways have we in Canada? Because of their size the Canadian National and the Canadian Pacific constitute the country's railways, for all practical purposes, but there are several important regional railroads operated independently. These lines total 5,400 miles.

When we boast that Canada has more miles of railway per capita than any other country it is a wholesome exercise to look backward toward the beginning. Only six years after the opening of the first railway in the world, the Liverpool and Manchester, a charter was granted to a group of business men in Montreal for construction of the Champlain and St. Lawrence railroad. This 14½-mile line, connecting the St. Lawrence with the Richelieu, went into service in 1836, and for ten years it was the only railway in British North America.

There were three great periods of railway construction: the 1850's, when the Grand Trunk and the Great Western were built; the 1870's and 1880's, when the Intercolonial and the Canadian Pacific were built, and the 1900 to 1917 period which saw construction of the Grand Trunk Pacific, the National Transcontinental and the Canadian Northern.

In 1867 the colonies that came together in Canada's Confederation had 2,529 miles of railway which had cost about \$160 million.

#### *The Canadian Pacific*

The first lonely railway arm reaching westward was an audacious challenge to nature and to fortune. It had to be driven through the rocks, bridged across the muskegs of Northern Ontario, carried across trackless plains for over a thousand miles, and it had to breach four separate mountain ranges to reach the Pacific Ocean. For nearly two thousand miles there was not in sight — nor even in early prospect — enough traffic to pay for operation of its trains. It had nothing to recommend it except the visions of men.

But it was tackled with such spirited energy that the last spike was driven five-and-a-half years before the contract said the job should be done. The first train from Montreal to the Pacific reached Port Moody in July, 1886. The "great wilderness" so much feared by detractors of Canada had passed from existence.

We mentioned the "last spike" in the C.P.R. transcontinental line. There is a "last spike" ceremony in every railway extension (only a few months ago the C.N.R. president drove the last spike of the Lynn Lake extension into the open spaces of Northern Manitoba) but actually no real last spike can be driven, for railways must keep growing or die. During 1952 the C.P.R. spent \$60 million on improvements and additions, and it plans capital outlays of \$475 million during the succeeding five years to replace worn-out facilities and to continue the programme of improvements and additions needed to keep pace with our expanding economy.

### *The Canadian National*

In mileage, the Canadian National Railway is the largest in North America, and it is the only railway serving all ten provinces. To its 24,150 miles of first main track must be added about 9,000 miles of secondary track, yards, sidings and spurs, making a grand total of 33,046 miles. It has more than 5,000 stations, nearly 6,000 bridges and 64 tunnels. It is Canada's largest employer and Canada's largest buyer.

The Canadian National system had its beginning in Canada's first railway, which became part of the Grand Trunk in 1852 and hence part of the Canadian National in 1923. The C.N.R. came into being when the Canadian government was trying to create a unified system out of a transcontinental mass of unco-ordinated lines which it had acquired to prevent their collapse through bankruptcy. The formation of the Canadian National Railways did not represent a deliberate experiment in socialism. It was a device to protect the people of Canada from a disastrous breakdown in transportation. All sorts of expedients were tried before government ownership was resorted to.

The lines were, for the most part, poorly equipped and in bad physical condition. Many of them had been constructed into areas which did not develop trade. Not only did the new management face the problem of rehabilitating plant and equipment, building morale, and unifying the crazy-pattern mileage, but it had to bow its back under the indebtedness of the lines it took over, shouldering a quite fantastic burden of interest.

Today, the C.N.R. can boast of many things. It was the first railway in North America to put a diesel-electric road locomotive into service. Its rolling stock has improved steadily. Its property investment account expenditures in the year 1952 amounted to \$125 million, including \$82 million for new equipment.

### *The C.N.R. and the C.P.R.*

No exact comparison can be made between the two railways. It would be unrealistic to criticize side by side a railroad that was built as a single integrated

unit and one which was a conglomeration of roads, not only not co-ordinated, but in many instances competitive.

The majority of the provincial representatives and of the representatives of other bodies who appeared before the Royal Commission on Transportation favoured continuance of the present system of two large railways, with the necessary corollary that the Canadian Pacific must be allowed to live and to operate as a privately owned railway.

Amalgamation has few friends. Various forms of joint operation have been carefully considered and condemned. Unification has been strongly opposed by labour unions (which fear loss of jobs), by shippers (who question whether the quality of service could be maintained without competition), and by communities (which would, many of them, suffer if the necessary efficiency of operation demanded abandonment of lines).

There is a real measure of co-operation between the railroads. Efficient transportation service is being performed by both C.N.R. and C.P.R. through pooling arrangements. Much wasteful competition has been eliminated and better schedules have been arranged. Standardization of freight car design, carried out as a joint effort, has benefited both lines.

### *Railroad Services*

These two Canadian railroads are engaged in a country-wide service. The business done at Halifax on the Atlantic and at Vancouver, 3,500 miles away on the Pacific, ends up in the same ledger. A haul of 4,506 miles is possible between two points on one railway: St. John's, Newfoundland and Prince Rupert, B.C. The average haul between east and west is about 1,800 miles; the average haul of all traffic in 1949 was over 400 miles per shipment. In the United Kingdom in 1948 it was only 72 miles.

The ability of the railroads to move vast quantities of raw material to central locations for fabrication and then to distribute finished commodities to the far ends of the nation and to shipping points is the key to Canada's industrial health. With the exception of pipelines for the transportation of liquids, no other instrument of land transportation can compete with the railways for low cost.

The railways are constantly bringing in improvements and supplementary services such as expedited movements, fast freight schedules, and "specials" for livestock and perishables. Striking evidence of improved efficiency is found in the C.N.R. performance figures over the past 25 years. Comparing 1952 with the boom year 1928 it is found that the C.N.R. furnished 67 per cent more freight transportation with six per cent fewer locomotives and five per cent fewer freight cars, while the average speed of freight trains increased by 27 per cent.

Both companies now operate services which link the shipper's shipping door with the addressee's receiving door. These truck and rail routes for less-

than-carload or package freight are no longer novelties, but are part of the regular railroad schedule. They not only speed up and make more convenient the service between cities, such as Toronto and Montreal, but they provide tributary service to smaller places.

Passenger service, too, is receiving attention, though the railroads are inclined to look a little glumly at their passenger-traffic ledgers. Less than eight cents of every dollar earned by the C.N.R. comes from passenger fares.

The Royal Commission which reported in 1951 came to the conclusion that "freight and passenger services are essential and if the passenger fares cannot be raised to produce sufficient revenues to enable the passenger traffic to pay its own way the freight traffic must bear the burden."

Both railways operate many subsidiary services: hotels, telegraphs, express, steamships, airlines; both conduct research, assist in agricultural development, and participate in immigrant settlement. Each railroad has a department devoted to assisting Canada in developing its industries and natural resources.

### *Problems*

Like all other businesses, the railroads have their problems, and, as is usual, these have mostly to do with making financial ends meet. An absorbing analysis of Canada's transportation problems is given by Dr. H. A. Innis, one of the commissioners, in his memorandum printed as an appendix to the *Report of the Royal Commission on Transportation*, February 9, 1951, obtainable from the Queen's Printer, Ottawa.

Donald Gordon, C.M.G., Chairman and President of the Canadian National Railways, said in an address: "The railways must justify their existence by rendering the kind of service the public wants at a price they are prepared to pay. Freight shippers, the travelling public, and other customers of the railways do not extend their patronage and support for mere reasons of sentiment, nor do they do so because they have no other choice. Indeed, the growth of competitive forces in the field of transportation has marked a significant change in the economic climate and presents a continuing challenge to railway management and railway men generally."

The Royal Commission referred directly to motor truck competition as a factor making it increasingly difficult for railroads to maintain service at a charge that pays. "Truck competition in Central Canada has grown to such a size as to eat into the railways' revenues by capturing a great portion of their most profitable traffic and by making it necessary for them to reduce their rates to what looks like a dangerously low point in order to retain some of it." The Commission went on to say that the difficulty of the problem is added to by the fact that truck traffic, in by far its largest form, comes under provincial, instead of federal, control, and the trucks are divided between private vehicles carrying the goods of their owners and the trucks that work for hire.

W. A. Mather, President of the Canadian Pacific Railway, touched upon the matter in an address in September. He pointed out that the railways have no longer a monopoly of land transport, but are in competition with trucks which run on highways built and maintained by the state, with air transport and with pipelines. Public and politicians alike continue to act as if trucks, airplanes and pipelines did not exist, and the railways remain under old regulations.

Mr. Mather's solution is stated in these words: "No competing transportation service must be put, deliberately or inadvertently, in the position of being burdened with a service or an obligation at a rate or on terms which demonstrably do not cover the costs of providing the service. Such a principle, I suggest, carries with it the obvious corollary that no transportation service can continue to be subjected to an obligation from which, if it should clearly constitute such a burden, it cannot escape either by raising its price or by withdrawing the facility."

It is time for all concerned to reconsider their attitude toward railroad economies, in the opinion of the Royal Commission, in whose report it is said: "Our railways should be allowed to practise similar economies (to those in the U.S.A.) in cases where operations are shown to have become substantially unnecessary or to be definitely unprofitable, especially, of course, when it is shown that reasonable service can be assured by other agencies."

### *Progress*

Notwithstanding their problems, the railways continue to press ahead in their attempt to improve the service they give.

The changeover from steam power to diesels is making steady progress, and this change may well go down in history as one of the most significant developments of this mid-century period.

The diesel makes faster starts under full load and hauls greater tonnage; it can be available for service for more than 90 per cent of the time compared with the 50 per cent of the steam locomotive; its maintenance costs are lower. The diesel car offers opportunities for developing new sources of profitable traffic and for reducing the costs of branch lines and local runs.

Another mark of progress is the provision of better facilities for the handling of cars and their freight at terminals and reshipping points. Most spectacular development is the C.P.R.'s push-button retarder yard outside Montreal. An 85-car train can be switched in about 25 minutes, with its cars directed by push-buttons on to the proper one of 48 tracks ready to be made up into trains for as many destinations. The average number of cars handled in a day is 2,300.

### *Speed*

Speed is not an obsession in Canada as it is in some other countries. Claims about how fast one can go

from here to there on "ultra-speedy" or "superspeed" trains form little part of the Canadian railroad picture.

There is good reason for this. Canada is served by two great railroad systems, whereas the United States, for example, is served by several hundred shorter regional railways. The Canadian railways seek sustained accomplishment over all their trackage, rather than bursts of speed over segments of the route.

We have not gone in for fast through trains. There is not enough "terminal" traffic, that is, people travelling between say Montreal and Vancouver, to justify special trains. The stage of our development demands the sort of service we now have. Canadian trains, stopping at many stations, have a great deal of express carrying to do — what the railroads call "head-end work." This is increasing, rather than diminishing, because the flag stops of a few years ago have become more than that, and the increasing population clustered around them must be served.

It would be a bad thing for the country's development, the railway companies believe, to play up quick runs from city to city and ignore the thousands of small communities that lie between them.

### *Transportation Policy*

Each form of transportation has its advantages and its disadvantages, each can function economically and advantageously in certain particular fields. If a shipper wants a small amount of goods moved for a short distance with quick delivery, the trucks should be at his command. If he must have light articles from a distance in a hurry, air cargo space would be available. Water transportation, where it is to be had, is efficient for bulk cargo if there is no demand for speed. Pipelines are obviously best for conveying petroleum. And if the shipper is interested in moving commodities at low cost, with reasonable expedition, he will use the railroads.

The history of the legislation in Canada indicates that Parliament has always felt that the government should take an active interest in the railways. In fact, Canadian railways have been projected and built as manifestations of public policy, often with financial assistance recommended by the government, agreed to by Parliament and paid for by the people of the country. They were part of a deliberate, patient effort to create a country that was not a natural outcome of economic geography. The great railroad systems "stitched it together" from sea to sea. The national policy which actuated them is told in detail in the *Report of the Royal Commission on Transportation*.

An important feature of the national transportation policy is that the two great railway systems shall have the opportunity to operate side by side, providing needed services to the country and serving as a check and a balance on each other without destroying the opportunity of the privately-owned road to live and progress and to earn a fair revenue.

The Royal Commission report remarked that while the C.P.R. is entitled to an opportunity to earn a fair return on its railway investment the C.N.R. as a publicly-owned enterprise operating certain properties and providing certain services irrespective of their commercial merits should be expected to do the best it can at rates fair to the Canadian Pacific. The attempt to establish comparability, either to excite emulation or to make one railway a check on the other, should be definitely abandoned. "It is not practicable," said the *Report*, "to arrange suitable handicaps for such a race."

### *Regulation of Railroads*

In an address to the Railway Club in February Mr. N. R. Crump, Vice-President of the Canadian Pacific Railways, said: "The division of work between road, rail, water, air or pipeline should be governed by the consumer, but each of the competitors should be governed by similar conditions, rules and regulations. Then the consumer would best be able to pick the service fitting his needs and his pocketbook."

Many persons have no conception of the extent to which railways are subject to outside authority. As Mr. Gordon pointed out in an address, the regulations are so minute as even to specify that a conductor, ejecting a passenger who refuses to pay his fare, must first stop the train!

Representation in behalf of the railroads in recent years have not wept over the amount of competition there is, or the degree of regulation, but have deplored the fact that the several classes of competitors are not required to observe the same rules.

These railroads, looking back upon their remarkable record of building and serving the nation during the last hundred years, have a keen pioneering outlook for the world of tomorrow. They know that the average ton miles of freight handled each year for each citizen is about 1,500. They know, too, that the increase in population of  $3\frac{1}{2}$  million between the last two censuses demands increased carrying of that many times 1,500 ton miles. They are, in their plans to cope with the new needs of the country, moving along with technological advances in railroading, and at the same time seeking ways to economize without sacrificing the high quality of their service.

Canada has reached a stage of maturity in which its economic existence depends increasingly upon its facilities for the sure and speedy and economical transport of raw materials and finished products.

One end of steel is found in the distant places where Canadians are tapping the natural resources of their country — the wheat fields, the oil fields, the mines, and the forests — and the other end of the track is at a warehouse, a factory or a shipping dock.

The problem in transportation is to provide adequate modern services at the lowest possible cost, without unnecessary or uneconomic consumption of labour and materials.