

C O M M O N O W N E R S H I P I N

T R A N S P O R T A T I O N

by

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A B S T R A C T

The Problem :

If common ownership of transportation modes is allowed, do the benefits of improved co-ordination of service between the various modes and the economies of joint management exceed the dangers of monopoly power that could be obtained by a large firm engaged in all modes of transportation?

Methods of Investigation:

Literature was reviewed to try to determine whether or not the logic of allowing a firm to engage in all forms of transportation is stronger than the logic of segregating the modes within the transportation system. The arguments of those in favor of allowing common ownership are presented from a railway point of view. These individuals point to the financial plight of the railroads in today's transportation system. They argue that the railroads should be allowed to diversify to better utilize today's intermodal techniques and economize by using the best combination of modes or a particular mode to suit the shipper's needs. Those opposed to common ownership feel that competition between the modes will be reduced and the rate of technological innovation will decline.

They feel that railroad companies will gain monopoly powers that would be detrimental to the public interest.

In the United States policy makers restrain common ownership and advocate voluntary co-operation between the modes. History of regulatory policy regarding common ownership is reviewed to try to determine if restraint has been beneficial to the transportation system. The nationalized period of British transportation is also reviewed to try to determine whether or not the pitfalls of this system of regulation could lead to the failure of a transportation system in which common ownership is allowed. Finally the history of the effects of no restriction of common ownership in Canada is studied. The extent of common ownership in Canada is described, with special attention given to the Province of British Columbia. An effort is made to try to determine if any monopoly power is apparent in the Canadian transportation system as a consequence of common ownership.

Conclusions:

Of the three approaches to regulation, the Canadian approach of allowing common ownership holds the greatest promise of meeting today's transportation needs with the best techniques available. This approach is not based on the preservation of historical systems of transportation and the

fear that railroads could again dominate transportation. It is possible, however, that large transportation companies could successfully administer prices if not closely controlled by regulatory bodies. The management of a transportation company should seek to use the most economic means of movement available, without bias toward a particular mode. If this is done both the company and the shipper will benefit from the use of the most modern techniques available in today's transportation system and improved techniques will arise through continued competition between similar firms and traditionally segregated firms, within future transportation systems. The United States should follow Canada's example in allowing freedom of common ownership.

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C H A P T E R I

INTRODUCTION

Reasons for the Study

Common ownership in transportation means simply that a company engaged in one form of transportation may purchase and operate a company engaged in another form of transportation. This type of ownership has been restrained by government regulation in the United States for many years and the railroads have often tried to get these regulations relaxed. The reason for this regulatory policy has historically been the fear that a large transportation company , such as a railroad company, could conceivably gain monopoly powers that would be detrimental to the public interest, if they were freely able to purchase companies engaged in competitive forms of transport. In Canada regulatory policy has not restricted common ownership and the two major railroads, the Canadian National and Canadian Pacific Railway companies, have always been allowed to purchase trucking companies, airlines and water carriers.

The question of the merits of common ownership has been a controversial subject in the transportation industry for many years. Recently it has come to a position of paramount importance in the United States, Canada and Great

Britain, because of an increasing diffusion of means of satisfying transport demand and a concurrent relocation of industrial sites away from railheads. This increasing diffusion of means of satisfying demand can be traced to the steady progression of technology and its application to transportation. So diversified has today's transportation industry become that a major problem has now become one of establishing co-ordination between modes as well as further diversifying available modes. One method of improving intermodal co-ordination is to have the various modes under single management. In Canada, and in other countries, the railroads have first seen passenger, and now freight transport, shift more to airplanes, trucks and buses. To alleviate this loss of traffic the railroads have organized trucking arms to try to recapture some of the lost traffic by adding a degree of flexibility to their rigid plant. In the past decade both the CPR and CNR have invested heavily in trucking subsidiaries and are now the biggest truck operators in Canada. Because of this the Canadian government has become more concerned with the question of common ownership and in the new Transportation Act of 1967; Sec. 20 provides for investigation of common ownership on a national scale.

In the United States the railroads have repeatedly tried to get new legislation through Congress enabling them to gain complete freedom of ownership of other modes. Thus

far their attempts have been unsuccessful, but the concept has been more thoroughly investigated by the Interstate Commerce Commission, the Civil Aeronautics Board, the Federal Maritime Commission and finally the new Department of Transportation.

In Great Britain all transport forms were nationalized under the Transport Act of 1947 and placed under a single agency, the British Transport Commission. Under the Transport Act of 1956 the massive trucking arm of the B.T.C. was reduced to 7,000 vehicles and the remaining 40,000 vehicles were sold in blocks to private operators. The value of the British example is to demonstrate the effect of large scale common ownership. In all three countries the question of common ownership has received considerable attention by policy administrators, academics, transportation men and shippers, but no ideal solution has been reached on how to handle common ownership so that the coordinative and competitive aspects of national transportation policy are kept in balance.

Essentially the overall purpose of this thesis is to show that the benefits of intermodal co-ordination and the economies of joint management achieved by common ownership outweigh the potential dangers of monopolistic power that could be obtained by a transportation company engaged in all modes of transportation. This is not to say that economic concentration resulting from massive ownership by a single

company could not be a dangerous phenomenon. It is to say that regulatory policy can control malignancies of monopoly without total restriction of common ownership. Competition, it is felt, is essential to ensure continuing innovation in the transportation industry. The question is how can a healthy level of competition be maintained while trying to achieve intermodal co-ordination?

While it is true that multimodal ownership may lead to a reduction in intermodal competition, a new type of competition results - competition within the firm and between transportation companies. Historically there have been many examples of wasteful intermodal competition which is not beneficial to society in the long run. While it is true the truck has many inherent advantages, so does the railroad, and in certain cases the total benefit is greater than if each operates at odds with one another. With the advent of various intermodal techniques, such as piggyback and containerization, co-ordination is now a primary concern of policy makers.

The thesis is that common ownership is a logical route to achieving better intermodal co-ordination and resolving the financial problems of the railroads, and that the consequences of a reduction in total competition within the transportation industry are overemphasized by those opposed to common ownership. This paper is limited to the area of freight transportation since passenger transportation is too

broad an area to attempt to cover effectively and too complex a transportation problem to be solved solely through common ownership.

Terminology

Common ownership has been given many names and numerous concepts have been associated with it, but the definition remains the same as in the opening sentence. Multimodal ownership is perhaps a more concise wording as it connotes the transportation image. A transportation company is one which freely engages in all forms of transport. Often the word "integrated" is attached to "transportation company" to give a more cohesive image to the concept. Co-ordination, on the other hand, is the physical integration of particular facilities of two or more carriers without the integration of carrier managements and policies. Thus the carriers retain their own corporate structures. Co-ordination need not mean even the physical integration of facilities, it may merely mean that two carriers strike an agreement with respect to rates or type of goods to be carried.

Often transport diversification is used to describe the movement of railroads into other fields of endeavours. Pegrum¹¹ distinguishes between integration or common ownership on one hand and diversification on the other. Diversification may also refer to common ownership of other modes in territories beyond the existing territories of the rail-

road or indicate expansions beyond transportation into other areas of industrial activity. When integration is concerned with transportation enterprise only, it is a matter of transportation policy, but when it involves diversification into other industries, it becomes a question of public policy with regard to industrial organization. Examples of this type of diversification are easy to find, perhaps the best one being the C.P.R. with extensive holdings in primary industries across Canada. For the purpose of this paper, however, diversification will be used in the same sense as common ownership.

One problem which arises when considering common ownership is the test of whether or not such a combination is in the public interest. Consistency with the public interest is not really capable of precise or limiting definition. Of necessity it is a flexible concept which is capable of being adapted to meet new situations. A test of public interest, and the way it will be used in this paper, is that carriers be permitted to do that which will enable them to give the best possible service at the lowest possible cost. The general public, for example, gains from the elimination of an uneconomical branch line operation even though certain individuals who use or are employed by the service are harmed. The public is interested in having at its service transportation that is adequate, dependable, expeditious and flexible. In testing public interest all

modes must be treated on an equitable basis. One mode cannot be discriminated against because of its size or form. All in all tests of public interest invariably boil down to a value judgement. Because of the difficulty of defining and measuring the public interest, many problems arise when trying to decide whether common ownership is beneficial or detrimental to the public at large.

Scope of the paper

Both the benefits and detriments of common ownership are difficult parameters to measure. Most notions associated with common ownership are primarily theoretical, which is due to a lack of experience with transportation companies in today's technical era and the immeasurable nature of such things as degrees of co-ordination and flexibility. The power of economic concentration is also difficult to quantify. If rates rise, one cannot state categorically that it is due to monopoly power as there is a whole host of elements that go into rate-making. Since measurement is a problem, the approach of this paper is to go from broad theoretical notions to an attempt at a more specific measurement of the effects of common ownership.

The first chapter consists of the argument that common ownership is beneficial to society, which is essentially the viewpoint of the railroads. Arguments are presented on problems in the industry, the need for diversifi-

cation and the importance of multimodal ownership in achieving co-ordination between the various modes. The need for diversification is exemplified by the loss of traffic to competing modes and the generally poor financial condition of the railways.

The mainstay of the affirmative argument is that common ownership is the best way to achieve successful intermodal co-ordination. This subject has always interested transportation academics and policy makers. The theory is that each mode possesses certain inherent technical and economic advantages and disadvantages. These advantages can often best be realized, or the disadvantages overcome, by combining two or more carriers to perform a joint or co-ordinated transportation service. Such co-ordination can bring about faster or more dependable service for the shipper and economies for the transport agencies, some of which may be passed on to the public through lower rates. The value of co-ordination is, in many cases, clearly evident through the avoidance of duplicate facilities, the sharing of costs or the utilization of less costly service.

Important as it is, co-ordination has no value for its own sake. It should be utilized only when it makes a real contribution to the overall economy and efficiency of movement. No hard and fast rule can be laid down in evaluating co-ordination, except to note that the costs of rehandling and the time consumed must always be taken into

account as offsetting factors for the advantages of co-ordination. Many schemes have been developed by policy makers to encourage co-ordination between the modes without permitting large scale common ownership. In the United States regulatory policy has been to encourage co-ordination through the establishment of joint rate agreements among the various carriers. The effectiveness of these alternative methods of co-ordination will be developed more thoroughly later on.

The second chapter is the argument against common ownership, which is essentially that of the independent truckers. Their chief argument is that, by allowing the railroads to freely enter the trucking field, the public would soon find they would be in another monopoly era in transportation reminiscent of the late 1800's and early 1900's. Perhaps the strongest proof in support of their case is demonstrated by the way that the railroads controlled water transport on the Great Lakes in the early 1900's by first purchasing virtually every water carrier and then establishing water rates which did not compete with railroad rates. They find it hard to believe that even today the railroads would really permit competition with themselves since density of traffic is most important to them. They also point to the vast difference in the amount of capital available to rail in comparison with their own limited resources.

The trucking industry developed to the strong position it is in today because of competition with the railroads.

They argue if the rails had been allowed to freely enter the trucking field, there would not be the strong motor carrier industry that we take for granted today. The independent motor carrier can provide the services that shippers require and they are experienced in their profession. If the railroad wants to use the motor carrier in a feeder capacity - it can contact independent truckers to do the job. The railroads, they say, know nothing about the motor carrier industry and they should stick to their own line of work - providing railroad service. If the shipper wants to use a combination of services, he can arrange contract among the various carriers involved.

Water carriers give basically the same argument except their case is perhaps a bit more forceful because of the previously described historical lessons. Domestic water carrier operation, in both the United States and Canada, is a very small industry. Moreover railroads generally run alongside waterways, because of excellent topography, and there is a good argument in favour of the notion that a competing railroad is very tempted to control a prospective water carrier to its advantage. The airlines, on the otherhand, are competitive with the railroads in a narrow range of traffic because their service is based on speed at a high price. Common ownership arrangements between trucks and airlines are more logical because of the excellent co-ordination possibilities between airports

and city centres.

The third chapter describes how politics and resultant regulatory policy has affected the extent of common ownership in the United States and Great Britain. Regulatory policy in the United States has been strongly orientated to the maintenance of competition, perhaps to the detriment of co-ordination. Actually the legislation on common ownership is not overly restrictive, but past precedents set in cases before the ICC have placed severe restrictions on certain railroads who are allowed to operate trucks. These restrictions are discussed in detail later on. In Great Britain government policy was very conducive to co-ordination, but by complete centralizing of all transportation, competition was perhaps overly restrained.

The value of this chapter is to demonstrate how both competitive aspects and co-ordinative aspects of government policy must be kept in balance to create an efficient transportation system within a country. It shows the extremes of regulatory policy with respect to common ownership and gives a perspective from which to view Canadian regulatory policy in the fourth chapter. It also shows how common ownership regulatory policy has affected the development of the transportation system in other countries, in comparison with Canada. Finally the dissolution of the British Transport Commission is discussed and analyzed to try to determine why

the single agency approach failed in this case.

The fourth chapter describes the extent of common ownership in Canada by both the C.N.R. and C.P.R. Both these companies are also heavily diversified, that is they are also engaged in non-transportation activities to a large degree. The success of these diversification ventures is analyzed and the policies of both the C.N.R. and the C.P.R., on the subject of diversification, is discussed. The C.P.R. is about the best example of a transportation company in North America. It's management feels that the company should be quite competitive between departments and trucking should not be visualized as merely a feeder operation to the railroad, but as one method of providing required service to the shipping public. The C.N.R., because it is government owned, has run into some opposition in trying to acquire trucking companies and operating rights. This opposition is described more thoroughly later on.

Both the second and third Royal Commissions on Transportation² essentially came out in favor of common ownership. Nevertheless, due to heavy protestations by the Canadian Trucking Associations, legislation enacted in the Transportation Act of 1967 has provided for investigation of

further rail entry into the trucking field by the Board of Transport Commissioners under the guidelines of the Combines Act. As yet there have been no test cases under this new legislation at the Federal level, but both the Provinces of Quebec and Newfoundland have objected to C.N.R. entry into the trucking field.

British Columbia was the first Province in which a trucking arm was established by the C.P.R. The C.N.R. has responded to the C.P.R.'s challenge and have established a large trucking arm in the Province also. An attempt is made to describe the extent and strength of railroad owned trucking in British Columbia in the final chapter with an eye to evaluating whether or not monopoly powers have been gained by the railway companies in the Province or in certain segments of the market in the Province.

In the final chapter Canadian policy is evaluated in comparison with U.S. policy on common ownership. The question is whether Canadian policy is setting a desirable trend or a bad example. The future of common ownership in Canada, the United States and Great Britain is finally predicted.

Limitations of the Study

As mentioned, the problem in trying to evaluate the effect of common ownership is severely restricted by an

inability to quantify such things as monopoly power and the benefits of co-ordination. If it were possible to do this, the strength of the argument would be greatly increased. As it stands theoretical arguments will have to suffice.

1 Pegrum, D. I. Transportation: Economics and Public Policy, Richard D. Irwin 1963 p.427

2 Carr, D. W. and Associates, "Truck-Rail Competition in Canada," Royal Commission on Transportation, July 1962, Vol III pp. 3-93
Royal Commission on Transportation, Queens Printer Vol II Dec. 1961 pp 70-71

CHAPTER II

THE ARGUMENT FOR COMMON OWNERSHIP

The argument for common ownership, as depicted by the railroads, centres about two basic historical pressures. First over the last century the transportation industry has diversified considerably. Each mode, that has resulted from this process of diversification, is inherently different both technically and economically. The modes are also competitive with one another and the management of a type of carrier essentially views its mode as superior to other modes. At the same time they do not recognize the inherent advantages of other modes and do not realize the efficiencies that could be obtained through co-ordination.

The other similar, but more sophisticated, historical lesson is that a company must develop a business or market rationale in order to stay in business. If a railroad company views itself merely as a producer of railroad transportation, it severely limits the spectrum of market demands it faces. By viewing itself as a transportation company, in the business of supplying transportation to shippers, a more enduring market orientation is developed. This is similar to American Telephone and Telegraph viewing its business as

communications rather than telephones or I.B.M. viewing itself as being not only in the computer business, but also in the business of solving problems for management.

Although they overlap, the benefits that are likely to accrue from common ownership may be discussed under the following sub-sections:

1. Benefits to common owners
2. Efficiencies of co-ordination
3. The introduction of intermodal technology
4. Benefits to transportation users
5. Other arguments.

1. BENEFITS TO COMMON OWNERS AND PRESENT PROBLEMS

Under the first heading, the main reason for the common ownership movement has been a steady decline in the amount of traffic handled by the railroads, and a consequent underutilization of the railway plant. This has further lead to a general decline in the financial condition of the railroad industry, especially in the United States. By acquiring other types of carriers, the railroads hope to offer a better service to shippers and consequently attract more traffic to cover the high fixed costs of their operations. Also in entering the trucking business, the railroads can participate in more of the higher value traffic obtained by motor carriers. Railroads have lost traffic in certain commodity markets and they are very interested in getting back some

into these markets as this trend is likely to continue in the future. This is similar to the newspapers getting into the radio business when they realized that their medium was facing new and successful competition.

Basically the reasons the railroads want to get into other areas of business are the same as in any other industry. A company may want to acquire or merge with another company for:

A. Financial Reasons:

- i. Improve on the profit level and rate of return;
- ii. Effect more rapid growth;
- iii. Spread the business risk

B. Operating Reasons:

- i. Improve on the volume level or trend in the present business;
- ii. Satisfy customers' demands for new services;
- iii. Reduce dependence on one product (railroad transportation);
- iv. Increase utilization of present resources;
- v. Vertically integrate toward the market served.

Just what problems do the railroads face and how important are these problems?

a. Railroad Problems- Loss in Traffic and Financial Condition

Both in Canada and the United States the railroads are not as strong as they were prior to the Second World War. In both countries other modes of transportation have made serious inroads into the traditional traffic of the railroads. This has been brought about by improvements in technology and a marked improvement in the highway systems of both countries. Because of these factors both people and industry have moved away from the city centres and railroads and find that they can obtain transportation service quite readily from alternative means of transport. Perhaps the most outstanding example of railway traffic loss is found in passenger transport. In table I, one can readily see the steady decline in revenue passenger mileage in both the U.S. and Canada as exemplified by the U.S. first class railroads and the C.P.R.

TABLE I
U.S. FIRST CLASS & CPR PASSENGER DECLINE

<u>Year</u>	<u>U.S. Revenue Passenger Mileage (in millions)</u>	<u>C.P.R. Revenue Passenger Mileage (in millions)</u>
1946	64,673	2,126
1950	31,760	1,142
1955	28,526	1,331
1960	21,258	1,008
1965	17,378	879
1966	17,084	557
1967 (est)	15,100	624

Sources: C.P.R., Burns Bros. & Denton - An institutional report; C.P.R. Annual Report - 1967 and Railroad Operations 1967 by the Association of American Railroads.

While much of this loss is due to the increased use of the automobile in both countries, there has also been a heavy loss to the airlines in commercial passenger carriage. Figures for the United States indicate the proportion of these losses:

Table II

Millions of Passenger Miles (U.S.)

	<u>1950</u>	<u>1955</u>	<u>1960</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Railways	31.8	28.5	21.3	18.5	18.3	17.4
Buses	26.4	25.5	19.9	21.9	22.7	22.7
Inland Waterways	1.2	1.7	2.7	2.8	2.8	2.8
Airways	<u>10.1</u>	<u>22.7</u>	<u>34.0</u>	<u>42.8</u>	<u>49.5</u>	<u>57.9</u>
Total	69.5	78.4	77.9	86.0	93.3	100.9

Source: ~~Burns Bros~~

C.P.R. - Burns Bros. & Denton - Institutional Report

All indications are the airlines will continue to capture passenger traffic at a more rapid rate.

More important is the financial loss to the railroads on these passenger operations. For example in 1962 passenger revenues amounted to \$55.6 million for the C.N.R. and \$41.2 million for the C.P.R. This amounted to deficits of \$95.2 and \$52.7 million for the C.N.R. and C.P.R. respectively. Expressed in another way, the C.N.R. paid out \$2.71 for every dollar received in passenger revenues while the C.P.R. paid out \$2.28 for every dollar received. While it is true the railway companies, under the Transportation

Act of 1967, may claim for 80% of their losses if they are not allowed to discontinue the service, the Canadian people must still pay the bill.

Even if one discounts passenger traffic as a continuing source of revenue for the railroads, losses in freight traffic have also been incurred over the years to competing modes of transportation. In Canada the railroad's loss in the share of intercity freight transport can be seen in table III.

TABLE III

Share of Intercity Transport for
Public Carriers 1945-1965 in Canada
(Billions of ton-miles)

<u>Year</u>	<u>Rail</u>	<u>%</u>	<u>Water</u>	<u>%</u>	<u>Road</u>	<u>%</u>	<u>Pipeline</u>	<u>%</u>
1945	63.3	72	22.0	25	3.0	3		
1950	55.5	61	27.0	30	7.6	8	.6	1
1955	66.2	54	34.3	28	10.2	8	12.3	10
1960	66.4	44	36.9	26	13.4	10	23.6	17
1965	87.2	42	55.0	26.5	19.4	9	46.8	22.4

Source: D.B.S. Daily Feb. 13, 1967.

Even more significant is the change in revenues received for freight hauled. The trucking industry attracts the higher value general freight while the railroad must retain the lower value bulk commodities. In relation to GNP Table IV shows the change in operating revenues.

TABLE IV

Canadian GNP and Carrier Operating Revenues
(in millions)

<u>Year</u>	<u>G.N.P</u>	<u>Airline</u>	<u>Pipeline</u>	<u>Road</u>	<u>Rail</u>
1945	11,800	10.5	-	42.0	774.9
1950	18,000	31.8	4	106.7	958.9
1955	27,100	77.4	58.9	220.0	1,198.3
1960	36,300	235.9	93.0	351.2	1,151.6
1964	47,000	335.0	138.5	557.3	1,324.4

Sources: Fulda, Carl H. Competition in the Regulated Industries and D.B.S. 53-222 and 53-223 Motor Carriers - Freight.

In the United States, in 1965, the railroads also only retained 42% of the intercity ton-mile freight market and the trucking interests had about twice the share of their Canadian counterpart or about 18% of the total.

In terms of revenues, while the operating revenues of the Canadian railroads have increased slightly over the years the average operating revenues, on freight, of the American first class railroads declined from \$10,491 million in 1957 to \$10,407 million in 1965. Other financial indicators such as net income and rate of return on fixed assets have also demonstrated weak performance by the U.S. railroads as shown in Table V.

TABLE V

Rate of Return and Net Income 1957-1967
U.S. First Class Railroads
(in millions)

<u>Year</u>	<u>Net Railway Operating Income</u>	<u>Rate of Return on In- vestment after depreciation</u>
1957	\$ 922	3.36
1959	748	2.72
1961	538	1.97
1963	806	3.12
1965	962	3.69
1967	712	3.59

Source: Railroad Operations 1967 (A.A.R.)

In 1961, for example, operations for all U.S. railroads for the first 5 months barely broke even and 38 out of 107 Class I railroads ran in the red. Net working capital at the end of May 1961 was down to \$316 million - equivalent to less than 18 days' cash operating expenses. Rate of return for the railroads still remains the lowest in a list of 73 different industries kept by the First National City Bank of New York and profits amount to only one-fourth that of other public utilities and manufacturing.

b. Other Inequities

The railroads also complain that they are not fairly treated by the government in relation to other modes of transportation. In the United States the rates of all railroad commercial freight movements are tightly regulated by the I.C.C. Major loopholes, however, allow private and interstate truckers to escape regulation. In fact nearly two-

thirds of all truck traffic and nine-tenths of inland waterway traffic is completely unregulated. Since 1946 rising government expenditures on facilities have also influenced the competitive position of U.S. carriers. As annual government outlays for highways rose by 1960 to $4\frac{1}{2}$ times the 1946 level, truck traffic expanded to $3\frac{1}{2}$ times. Likewise Federal outlays have helped bargeline traffic to expand to more than 4 times the 1946 level and air travel to nearly 6 times that level. In contrast the railroads build their own rights of way and pay heavy taxes on these land holdings.

In relation to each dollar of revenue the U.S. railroads pay about three times as much property and miscellaneous taxes as bus lines, nine times as much as water carriers, ten times as much as truck lines and fourteen times as much as airlines to state and municipal governments. In terms of the proportionate costs of owning, building and maintaining the facilities over which their vehicles run, the railroads bear 3 times as much as bus lines, 4 times as much as trucks and 13 times as much as domestic airlines. Bargelines pay nothing whatever to the costs of navigation works. Contributions by non-rail carriers include all user taxes (such as fuel and oil taxes, licence and registration fees, and toll payments). These comparisons further include annual carrying charges on investments in rights of way, way repair expenditures and way property taxes - all of which the railroads bear, but which

the taxpayer bears in whole or in part on behalf of other carriers.

In Canada the railroads are also charged with the maintenance of rights of way and do pay more taxes than other carriers. However their argument is weakened somewhat by the fact that one railroad has ample sources of capital in the Federal Government and both receive subsidies from the government for various types of traffic and for serving various remote regions. While it is true that the railroads do pay more for the maintenance and usage of railroad property, this argument only has relevance to the subject matter of this thesis in that through common ownership the railways would be able to make use of the facilities they have provided for ~~with~~through ~~via~~ their tax dollars.

c. Railroads Attempts to Solve Problems Internally

It can be argued that the railroads have not done enough to improve their own competitive position and their own efficiency, consequently they continue to lose traffic. The fact is the railroads in both the United States and Canada have done a great deal to create a more efficient plant and develop rates that are more attractive to the general shipper. When railways had a monopoly in the transportation of large segments of traffic, it was possible to meet increased expenses simply by raising rail rates. This

method of relief has grown more and more inadequate as the areas and intensity of intermodal competition have broadened. In fact the trend has been to increased use of competitive rates designed specifically to compete with tariffs published by other carriers. In 1966 approximately 30% of the revenues received on freight by Canadian railroads was derived from competitive rates. Also the use of agreed charges, which are designed specifically to attract and hold traffic, are being used extensively by the Canadian railroads. In 1966 28.7% of the revenues received on freight were derived under agreed charges.

In the United States, where agreed charges are not allowed, incentive rates, designed to encourage loading of available equipment to capacity, are being used more and more effectively. Although these rate schemes are quite effective in competing with the truck, basically the railroad must reduce its costs and improve its efficiency in order to be able to reduce rates.

In freight transportation the railroads have worked hard to improve their operating efficiency. Among the most significant recent developments are three computer systems for better control of freight car distribution and use, bearing the acronyms ACI, TRAIN and UMLER.

ACI - Automatic Car Identification is considered a revolutionary development in railroad technology. It is a standard scanning system that electronically identifies and records initials and numbers of freight cars moving in

road trains and in yards. The accurate and instantaneous recording of freight equipment movements by these devices far exceeds human capabilities. It is expected to reduce input errors greatly while pinpointing the location of individual units of rolling stock.

TRAIN - TeleRail Automated Information Network is an ambitious program designed to centralize car interchange information in a national data centre for all the U.S. railroads. This will allow the distribution of cars equitably between the railroads and geographic areas to alleviate unbalance in car supply.

UMLER - Universal Machine Language Equipment Register will enable railroads to determine, by computer, the physical characteristics of any freight car in North America. In Canada computer programs have already been developed to keep track of the 425,000 rail car fleet and a CN-CP Telecommunications subscriber can merely dial direct to computer headquarters to get first hand information on the location of cars. Both railroads are also actively interested in ACI.

Because of these improvements and dieselization, since 1946 average freight trains speeds have been increased by 22% and the hourly transportation output of the average freight train has increased by about 70%.

While these modern methods have been used to improve operating efficiency significant developments have been made in rolling stock in order to attract certain shippers. One of the most outstanding examples of the railroads recapturing a specific market by development of a specialized car is in the carriage of new motor vehicle. This has been brought about by the development of the giant double and triple deck rail cars. Before these cars were introduced in 1960 the railroad industry's share of new motor vehicle carriage in the United States had dwindled to about 8 per cent of the total market. In 1966 and 1967 the railroads managed to recapture about 50 per cent of the market from all other modes and the outlook for 1968 is even brighter. More and more specialized equipment is being developed to challenge the adaptability of the track to specific types of traffic.

Finally the merger movement in the United States is an outstanding effort by the railroads to improve their efficiency and reduce costs. When the railroads were first constructed, the national policy was based on a competitive approach to service and as a result competing railroads set up identical terminal facilities and yards, operated nearly parallel lines and in general created many duplicate and unnecessary facilities. Interchange points between railroad companies create needless delays and many railroads operate on inferior roadbeds which are uneconomic. Through merger it is hoped that many of these duplicate

facilities and uneconomical operations will be eliminated.

2. EFFICIENCIES OF CO-ORDINATION

While it is true the railroads have done much to improve their operations internally, it is impossible for them to attract many types of traffic because of the inherently rigid nature of the railroad plant. Railways produce transportation efficiently in large volumes. Routes, terminals and equipment are all designed to accommodate heavy traffic. As companies move away from traditional rail sidings and terminal facilities it becomes more and more difficult for the railroads to bring traffic to these facilities. If the railroad plant is utilized effectively it is an extremely efficient means of transportation. In comparison with the truck much less tractive resistance is produced by a steel wheel rolling on a track than a rubber tire on pavement. Because of this, on the average, railroads handle over 3 times as much freight traffic per gallon of fuel as intercity truckers and about 58 times as much as an airplane. Next to the pipeline, the railroad is technically the most efficient form of land transport available. In terms of manpower railroads handle more than 5 times as much freight traffic per employee as a truck and 20 times as much as an airplane. In total it costs, on the average, about four times as much to ship a ton of freight by truck as it does by rail. On the long haul, after momentum is

gained, the low tractive resistance of a train makes it an extremely efficient and economical mode of transportation.

In the MacPherson Royal Commission on Transportation,¹ it has been pointed out why trucks have captured a significant amount of traffic from the railroads in recent years:

" For-hire truck traffic, in the early 1960's, had been strongly influenced by:

i. The railway rate structure which, with the elements of value of service rate-making, horizontal rate increases and other institutions, had over previous years made rates in certain areas and in certain traffic classes, particularly attractive for truck competition;

ii. Decentralization of industry and an increase in demand for smaller and more frequent deliveries to hold down inventory costs;

iii. The speed, economy and flexibility of highway transport in providing these specialized services;

iv. Some narrowing of the gap between railway and truck line-haul costs due to technically improved truck equipment. "

The speed and frequency of service and the adaptation of the truck to shipper's preferences for door-to-door delivery and care in handling have strongly influenced shippers to change to trucking for their

short to medium haul needs. Even more important to the railroad has been the invasion of the long-haul market. Equipment and highway improvements, such as lighter weight, more powerful diesels and increased trailer size, have enabled trucks to compete in this market where the railroads are most efficient.

While pipeline has captured a considerable share of traffic, in terms of ton miles hauled, it is not a threat to dry commodities and packaged commodities, but it may be a threat to more of the liquid commodities presently handled by tank car. Also if solids pipelines come into existence more railroad traffic will be threatened. For the common ownership argument, however, there are no restrictions, either in the United States or Great Britain to keep railroad companies from owning pipeline companies. Airplanes should threaten more railroad traffic in the future with the advent of the "Jumbo Jet", both higher valued truck freight should be affected more than railroad freight. For example railroads may face competition for their newly recaptured auto traffic:

" Detroit is seriously interested in the possibility of using the new jumbo jet planes to ship cars. General Motors, for one, has been talking with United Air Lines about converting the Boeing 747, due to fly next year, to a long-haul carrier. Auto officials say the 747 could be modified to hold 30 cars and fly them from Detroit to California in a few hours at \$47 less per unit than the present cost of shipping by rail. -- Air cargo would be especially suitable for such low-volume cars as Cadillac, Lincoln and Imperial, which are

still produced in Detroit (mass volume cars are assembled at plants throughout the² country to minimize transportation costs)."

The railroads are primarily interested in acquiring truck lines for co-ordination purposes to bring more traffic to the railroad. Donald Gordon has essentially stated this before the House of Commons Standing Committee on Railways, Airlines and Shipping owned by the Government³

" The company's aim is to offer the kind of transportation service that is best suited to public demand, both in terms of cost and efficiency, always remembering that its basic interest is the provision of service through railway facilities, in which the Canadian National has a very large investment.

The major interest of the railway is the long distance haulage of bulk and packaged commodities. Generally speaking, this can be done most economically by railway but certainly there exists and will remain a large field for long haul road transport. In addition road transport is a better agency for the collection and distribution of much traffic and is more economical and faster for short-distance service --- Canadian National is not in any way interested in driving the independent trucker out of business. Both the railway and the truck are tools of transportation and in the best interests of the shippers and receivers - the users of the service - each tool should be used as it is best suited. What is needed, therefore, is an intelligent recognition of a competitive co-existence and the development of a co-ordinated rail-highway system in which each form of transportation would play the role in which it best fits. --- Canadian National's objective is to acquire a trucking pattern so as to obtain for its own operations the benefits of co-ordination with railway facilities or even replacement of them in those cases in which the truck is a better tool. "

Many academics agree with the picture of co-ordination portrayed by Mr. Gordon and this argument is also that of other railway companies. The idea of "competitive co-existence" instead of "wasteful competition" means that facilities must be co-ordinated and not duplicated unnecessarily. Co-ordination implies not only the elimination of unnecessary competition, but also the prevention of such competition. Wasteful competition between two agencies implies costs that are swollen by duplicate administration, competitive advertisement, and the provision of surplus vehicles and services to the shipping public. Furthermore the narrow margin of profit that may occur in highly competitive situations may prevent the establishment of the transport undertakings on a sound commercial basis. The scale of operations of certain competitive firms may be smaller than the optimum economic size of business under the given conditions, with the result that the full economies of large scale are not obtained.

From an economic viewpoint co-ordination refers to two or more transport modes that, in being organized together, create more efficient resource use than would be possible if each one were treated independently. Expressed more simply, a co-ordinated organization puts two or more modes together so that a larger net product is possible

than if the modes were under separate organization. In terms of total costs and total revenues the difference between the total revenues less total costs. (including transfer) is greater than the difference between total revenues and costs of the most economical mode (for a particular haul).

There are essentially three ways of achieving co-ordination in a broad sense:

- i. Voluntary co-operation - each company maintains its separate identity;
- ii. Pooling of resources - a certain degree of common ownership with a controlling body to safeguard the public interest and,
- iii. Common ownership - the provision of all service by a transportation company.

a. Voluntary Co-Operation

In the United States, where common ownership is restricted, government policy has been to encourage voluntary co-ordination through the allowance of through route and joint rate arrangements. Under such a system the use of through route and joint rate arrangements aid co-ordination by permitting shippers to deal only with the originating carrier regardless of how many other carriers are involved in the movement to the final destination, and by making available to shippers a single-factor joint rate for

through service. In the last decade the growth of Plan I traffic⁴ and in the last few years the growth of Plan V traffic,⁵ has demonstrated that rail and motor carrier managements in their own interests will respond to economic conditions and find a common ground for sharing in savings inherent in such co-ordination.

It has been said that the objectives sought through common ownership can be attained through co-ordination between rail and motor carriers, by filing joint rates. While joint rates do have a place in the transportation industry, they are not entirely adequate. The parties to such arrangements remain competitors and it must be remembered that the truck always has an alternative method of movement. For selfish reasons each party seeks to gain the advantage over the other. There is constant pressure as to who gets what in division of rates, who is to move the ~~unrated~~ traffic, who will get the undesirable traffic and who will get the long haul. Similarly in Plan I and Plan V piggyback, it is the trucking company which executes the bill of lading with the shipper, has all the contacts with the shipper and delivers the freight to the consignee. In these situations the railroad is only an intermediate carrier that has no contact with the shipper or the consignee. If the trucking company decides to go back to the highway on the intermediate haul, the railroad is left with empty piggyback cars and no contract.

b. Pooling of Resources

This is a fairly new concept of co-ordination which the United States appears to be heading toward. The theory behind this movement is not exemplified by intermodal integration as much as it is by the railway merger movement. This is a direct effort to combine or pool the resources of one type of carrier to obtain better utilization of resources. In the merger movement careful testing of the public interest is carried out by the I.C.C. Intermodal examples of pooling of resources are still mainly in the theoretical stage. One example is the idea of container pooling which is now quite prevalent in Europe. In February, 1968 Railway Express Agency set up Interpool Inc., a company specializing in the leasing of containers and supporting equipment. The company serves rail, truck and steamship lines with containers and side-loading equipment supplied by Steadman Industries Ltd. - a Canadian Company. A pool of 20-foot and 40-foot containers has been established in Chicago. Interpool arranges all terminal services, including the transfer of containers between rail cars and trailer chassis.

In the United States several changes in the present regulatory policy have been considered to improve co-ordination. Although these proposals do not necessarily recommend the pooling of resources, they do imply that United States policy has had somewhat of a change in recent years. The

"Doyle" Report ⁶ recommended that through routes and joint rates be required among and between all common carriers, including motor carriers; that regional joint rate bureaus be established, under the antitrust umbrella, to facilitate and expedite all rate actions, including specifically intermodal joint rates and through routings; and that users as well as carriers be permitted to initiate an application for such rates and through routes. It further recommended that the I.C.C. should:

" Broaden the powers of the regulatory agency beyond the Interstate Commerce Commission's present powers with respect to through routes and joint rates by giving the power to the regulatory agencies to compel such when it receives no co-operation from a carrier involved and the latter's acts or refusals to bargain upon the matter amount to bad faith. "

The other indication of change was contained in the late President Kennedy's Message to Congress in 1962 with respect to co-ordination: ⁷

"Assure all carriers the right to ship vehicles or containers on the carriers of other branches of the transportation industry at the same rates available to non-carrier shippers. This change will put the various carriers in a position of equality with freight forwarders and other shippers in the use of the promising and fast-growing piggyback and related techniques. "

With respect to through routes and joint rates, the Message said:

" For many years some regulatory agencies have been authorized to appoint joint boards to act on proposals for intercarrier services; but they have taken virtually no initiative to foster these arrangements which could greatly increase service and convenience to the general public and open up new opportunities for all carriers. I recommend, therefore, that Congress declare as a matter of public policy that through routes and joint rates should be vigorously encouraged and authorized all transportation agencies to participate in joint boards. "

At present the only arrangement for a joint board of Federal agencies is in the Federal Aviation Act of 1958 which allows for the creation of a joint board of the C.A.B. and I.C.C. to deal with joint rate practices which might be established by air carriers and other common carriers. A proposal for the creation of a new joint I.C.C. - C.A.B. - F.M.C. board was introduced at the request of three agencies before the 89th Congress in the United States, but no hearings were scheduled.

c. Common Ownership

The proponents of common ownership argue that it is not necessary to force parties to enter into joint agreements. Basically no matter how one regulates the various carriers the fact remains that they are still competitors and will always seek to gain the advantage in such situations. Under a system allowing common ownership the shipper deals with a single entity which is able to offer him a variety of combinations of service and price. The incentive, which is

strongly present between rivals for traffic, to offer service in a manner that does not give full recognition to the inherent advantages of each of the modes of transportation available disappears under common ownership. In the case of rivals the principal aim of each is the maximizing of profits regardless of the over-all economy and suitability of the service ~~would as~~ compared with some other service or combination of service that was available.

When the corporate entity owns and operates different modes it presumably selects the methods which provide the most efficient service at the least possible cost because it is in their own self interest to do so. The economic merits of this type of organization are numerous. Elimination of waste and duplication of facilities represent major virtues. Excess capacity is minimized because single management invests most heavily in those areas where the probability of success is most evident. Specific cost advantages accrue from common ownership through the elimination of duplicate overhead expenses such as in forces engaged in solicitation of traffic, billing and accounting. Further economies and greater efficiency also accrues from better co-ordination in operating schedules, in the utilization of equipment, in the operation and maintenance of physical facilities for the loading and unloading of equipment in piggyback services, and the like. Decisions are based on a consideration of all modes and the needs of all modes as opposed to the

competitive situation where actions are limited by the needs of a single mode.

Mr. Forgash, president of United States Freight Co.⁸ has said "

" Taking up the dictionary definition of 'co-ordination' as 'harmonious combination', you cannot have co-ordination without a combination, and unless it is harmonious it will not be very effective ... If it is to serve any useful purpose the combination must be such as to obtain the maximum benefits from each kind of service. "

The common ownership proponents claim that no combination will be harmonious unless it is real - the combination of several companies under one management. Under the present system most co-ordination, outside of TOFC is transfer from mode to mode under the supervision of a user or his agent which cost time and money. The costs incurred by the user but not included in the freight charges paid are, nevertheless, part of society's transportation cost. The shipper cannot be condemned for working to eliminate costs which appear unnecessary for performing an efficient and required transport service. It is debatable, however, whether individual shipper management of co-ordinated activities is conducive to a beneficial long-run solution and that such co-ordinated service is being conducted at the lowest cost consistent with the public interest.

Richard H. Stokes⁹⁰ put it this way:

" Groups of traffic solicitors all chasing after the same business, dnnumerable executive suites, staffs and equipment maintained for the operation of each company, countless small terminals duplicating work which could be handled more efficiently and economically by consolidation all present a picture that must dismay those concerned with the future economic health and strength of the transportation industry. "

Co-ordination of transport operation can be accomplished at lower costs by transportation companies rather than shippers. Transportation managers direct their attention to providing transportation; they are aware of existing technological and managerial developments; they are capable of assessing the merits of changes in the manner of providing transportation. Transport management relies on profits attained from selling transport services; the attention of the shipper is divided among production and distribution problems. The ability to specialize gives the management of transportation companies an advantage in providing low-cost transport service. Railroad management claims that they are the most experienced in the business of transportation with some justification. They are the oldest companies in the business and because of their size they are able to utilize computers for increased efficiency in solving problems and deciding when it pays to use only one mode or a combination of modes.

3. THE INTRODUCTION OF INTERMODAL TECHNOLOGY

With the increased use of intermodal technology such as piggyback, "birdyback" and containerization there

is a need for standardization of hardware and facilities used in intermodal operations. One of the main problems in containerization is a general lack of standard equipment and transfer devices. Because of this the growth of containerization has been slow. Vested interests in certain modes and the practical problems of reconciling the differing interests of the many firms in each mode all suggest that the single transportation firm is uniquely suited to hasten the introduction of intermodal technology. The fragmented nature of the present multitude of carriers lead to undesirable rigidities in the system that are not conducive to rapid change.

Other advantages include the co-ordination of research and the pooling of risks inherent in the development of new technology. Common ownership provides a broader perspective for viewing the needs of intermodal co-ordination and the needs of the shipper. This perspective is not available to a single owner or even an equipment manufacturer. Also if the transportation company comes up with a successful innovation this increases the incentive for continued research. Inherent in any experimentation is also the risk of failure. The size and diversity of a multimodal firm makes the dangers of risk less problematical and a certain degree of failure can be allowed. The development of the Steadman container system described previously has greatly been encouraged by both the CNR and CPR.

The U.S. National Committee of the International Cargo Handling Co-ordination Association has proposed an entirely new concept of container service and technology. They feel the container itself should be considered a transportation vehicle under the control of a "transmodalist" operator who controls the movement of the container as it passes through the services of the various transport modes. The need for this new concept has been described by Mr. R. P. Holubowicz:¹⁰

" The traditional carrier sees the character of his investment changing radically from a preponderance in ship hardware to one in containers. The area in which he can realize a return on the new capital investment, however, is still limited to the port-to-port segment of overall cargo movement. 'Integrated' transportation at the ocean carrier's expense is not particularly attractive as a result. "

He further says that:

" It is our contention that the mere existence of a large number of containers, whether they are standardized and interchangeable or not, will not, in and by itself, bring about or even lead to true integration of our transportation system if this technology is merely superimposed on the present, fragmented transportation system and national transportation regulatory philosophy. "... under this concept, there should be no bar against the existing modal carriers from becoming transmodal operators. "

As complete standardization is really very acceptable in theory, but not in practice they say that:¹¹

" While it would be most desirable to have all equipment used by the transmodalists completely standardized, interchangeable, and compatible with all modes, the success of an individual operation would not necessarily be dependent on this factor. To the extent there are varying

sizes or other characteristics, it would be necessary for the transmodalist to ensure that he keep within a given 'closed' system where interchangeability and compatibility can be achieved. Nevertheless, standardization of equipment is a most important goal if true integration is to be achieved. "

Therefore a transportation company could develop their own standard equipment and handling equipment throughout their entire "closed" system. The Canadian Pacific Railroad has these capabilities at present. They utilize the Steadman system throughout their operations and can use their own ships, if they desire, to provide a completely integrated container service. Even in the piggyback field Canadian Pacific had shown that the common ownership principle has its merits. In the early 1960's they became the biggest piggyback carriers in the world in a very short time because of their ability to use their own trucks and trailers for pick up and delivery. They were able to capitalize on the obvious economies of integrated rail-highway service available through piggyback quickly and effectively. The C.N. also was quick to enter the piggyback field.

4. BENEFITS TO TRANSPORTATION USERS

The benefits that should accrue to transportation users are already implicit in the efficiencies and economies that accrue to the multimodal owner. If the transportation company benefits from improved efficiency through new technology and economies of joint ownership costs are reduced and

rates should be lowered. Also if a railroad can use trucks to feed its operations, service advantages such as greater flexibility and door-to-door service will be offered to the shipper. In addition the shipper will have to only deal with one company to handle the entire spectrum of his transportation needs, if he so desires. He is able to tap the knowledge of a pool of transportation talent that is not available when dealing with a single carrier. Hopefully, under single ownership, the management will not be particularly biased to any particular mode and will be able to offer excellent informal advice on handling the particular physical distribution problems of the individual shipper. In other words the transportation company is in the business of providing transportation, not merely railroad or truck transportation.

An additional economy accrues to the shipper in the handling of intermodal shipments. He receives only one bill of lading, and if damage occurs he does not have to go through the complex business of tracing down his claim as he only has one company to complain to. " Anthony F. Arpaia, W.P., of International R.E.A. has said: ¹²

" True co-ordination, in my opinion, means a single document, single responsibility, a single factor rate, and a single contract with the shipper where a movement of goods takes place in one complete transaction. "

As far as the shippers are concerned, in general they are interested in dealing with transportation firms.

In fact Canadian Industrial Traffic League President, J. M. Benson has said the following about the new Transportation Act: ¹³

" The Act illustrates a recognition, finally, that there is a relationship between carrier modes and that, somehow, modal developments must be co-ordinated by one agency. Canada, which is a high transportation cost country, must not waste money through suicidal duplication of service or a protected transportation industry. The U.S. is attempting to do the same thing through its new Department of Transportation but has a much tougher job because of its massive regulatory system and multiplicity of regulatory agencies, strongly entrenched. "

In the United States a letter to the Secretary of Commerce from the President of the National Industrial Traffic League said the following: ¹⁴

" Effective co-ordination of the facilities of rail, truck, water and air services is necessary to give the public the full benefits of modern transportamethods. Such co-ordination is most likely to develop freely if the different forms of carriage are permitted to be held under common ownership, provided that competition is preserved. ...

Recommendation No.10 The League recommends that the law be amended to permit one form of transportation to operate other forms of transportation through ownership or contractual arrangements, subject to the Commission's power to preserve competition by enforcing such restrictions as it finds after hearings are necessary to that end. "

Other statements were heard before Congress in 1960 when the railroad tried to get bills passed that would allow common ownership. Lowe P. Siddone, general traffic manager

of the Holly Sugar Co. and a past president of the N.I.T.L. had the following to say:

" The enactment of bills H.R. 7960 and H.R. 9280 would be in the public interest for it would promote the national transportation policy which requires a railroad transportation system adequate to meet the needs of commerce, the United States Postal Service, and the national Defence." 15

William H. Ott, general traffic manager of Kraft Foods, and president of the National Industrial Traffic League:

" The League urges that legislation is needed to make possible a greater degree of common ownership of carriers in different transportation fields, at least in the field of highway transportation. " 16

It is hard to argue against statements of the shippers as they are the individuals who use the transportation service provided by the industry not the legislator who, in the United States, maintain restrictive legislation against common ownership.

5. OTHER ARGUMENTS

a. Private Carriage

The railroads have lost traffic and continue to lose traffic, but they also point to the fact that common carriers are all losing traffic to private and unregulated carriers. Various estimates have been made on the extent of unregulated carriage, some estimating that between 40 and 60 percent of the total intercity ton miles are now being moved by other than the regulated carriers in the U.S.

In a recent Canadian debate the following figures were quoted:¹⁷

" During the year 1960, the combined total revenue trade carried by service transport in this country amounted to 423,820,000 tons. Of this total the railways are credited with having carried 168,462,000 or 37.39%. The 'for hire' carriers, 145,086,000 tons or 34.23%. The private motor transports, 20,291,000 tons, 28.38%. In other words, 62.61% of this country's surplus transport today is being furnished by agencies other than the railway which should certainly dispell the all too prevelent notion that the Canadian Railways continue to hold a monopoly in the transportation field."

Private and unregulated competition takes many forms. Even traffic which had been thought to be captive to a certain mode has been displaced to unregulated carriage. Private carriage of freight, once begun, tends to become an irrevocable action. This is because a substantial investment in equipment and facilities must be made. Whether done by new construction, purchase or lease the investment or liability is relatively long-term. To give up private carriage also involves either an immediate cost to the firm or a gradual tapering off. Private carriage also develops the irreversable quality from its transportation service. These benefit the customer as well as the warehouse or factory of origin. To give up private carriage may well result in loss of customer patronage. Until private carriage is made uneconomic through combination of available services or improvement in service by the present regulated carriers in such a way as to meet all the requirements of the shipper,

whatever the commodity or wherever located - it will not lose its appeal.

The railroads say to the regulated common carriers that it is necessary to band together and work in unison to provide better service in competition with unregulated carriers. While it is true that the railroad cannot expand into other areas of endeavour in the U.S. very readily, this has definitely not been the case for other companies entering the railroad field. For example American Can Company, Bethlehem Steel Company and United States Steel Company are just a few of the shippers who actually own and operate railroads. It is also not at all impossible that several of the large trucking firms in the United States could get together to acquire a railroad. Whatever is possible, the railroads and other common carriers should, in some way, provide cheaper and more adequate service to compete with the large number of "do-it-yourself" shippers that have appeared in recent years.

b. Asset Value & Congestion

The railroads finally argue that the value of the railway network, already established and operating, is incalculable to the nation and that it cannot be abandoned, especially since the railroad has a definite use in the transportation network. They point out that it is necessary to use these facilities to capacity for society to get the

maximum benefit of economic efficiency. The railroad is essentially a resource which must be used to the best advantage in society's productive processes.

Another recent argument that has been espoused by the railroad is its role in relieving congestion. City after city in the United States is calling for express bus service and new railways on above or below the general level. In large cities such as New York and Montreal trucks of the intercity size produce unnecessary congestion on city streets because of their size and speed. In most cities the railroads have centralized terminal facilities and fairly efficient road facilities. In New York, for example, the railroads are subsurface and do not interfere with movement of traffic in the city. It is much more efficient to utilize the terminals and deliver goods throughout the city with smaller, more efficient delivery trucks, rather than have a full size tractor and trailer drop packages off at each shipper's door.

S U M M A R Y

Many of the advantages professed by those in favour of common ownership are logical from the perspective of the business manager. The railroad industry is definitely not as lucrative a business to be in as it was in the past. In many areas of the transportation market the railroad has become obsolete and changes are required in the basic

structure of the railroad industry if it is to move out of the 19th century into the 20th century. One of the methods of accomplishing this is to modernize plant and equipment and make operations more efficient. The railroads have worked hard in these areas, but this approach has not and probably never will solve all the problems of the railroad. Another method is to allow the railroads to diversify and enter into other areas of transportation through common ownership.

By letting railroads acquire complementary service more lucrative types of traffic can be attracted back to the rails. Furthermore the railroad company can better utilize capacity and more effectively avoid the risk of becoming totally obsolete. If the railroad were a totally inefficient method of transport, perhaps it would be better to eliminate the services provided, but the railroad is efficient and can be used in today's modern era. If the management of the railroad companies is truly interested in using alternative methods of transport to provide better, more economical and efficient service to the shipping public, then they should be allowed to purchase and operate certain other carriers in other transport modes.

F O O T N O T E S

- 1
op cit p. 18
- 2
Business Trends - "Air Car-Go?", Newsweek Magazine
July 1, 1968, p. 65.
- 3
House of Commons Sessional Committee of Railways, Air
Lines and Shipping Owned by the Government. June 19,
1961, Queens Printer, p. 261 Ottawa.
- 4
"Plan I TOFC service" - is service performed by a rail-
road in substitution for motor common carrier service
to, from and between named points over the motor
carrier's route - moved at motor carrier routes.
- 5
"Plan V TOFC service" - is that performed under
published joint rail motor rates over through rates
with certificated motor common carriers.
- 6
Special Study Group on Transportation Policies in the
United States of the Senate Committee on Commerce in
its Report on National Transportation Policy (Senate
Ref. No. 445, 87th Congress, 1st Session, 1961)
p. 227-228
- 7
President Kennedy's Message relative to the Transportation
System of Our Nation (H.P. Doc. No. 384, 87th Cong.,
2nd Sess., April 5, 1962) p.5 & P 8.
- 8
The Revolution in Transportation, The Journal of Commerce
June 1959 p.48.
- 9
Stokes, Richard H. What Single Improvement of the Inter-
State Commerce Act Is Most Needed, I.C.C. Practitioner's
Journal 33:421,425 February 1966.

10. R.P. Holubowitz, The Transmodalist, World Ports, October, 1967, p. 3
- 11 Ibid p. 30
- 12 -----, Third International Symposium on Coordinated Transportation, Distribution Age, Nov., 1962, p67
- 13 Donlon, E. Canadian Pacific: The Restless Multimodal Colossus to the North, Railway Age, December 18/25, 1967, p. 33.
14. Prince, Gregory S., Ownership of One Mode of Transportation by Another, Speech before the Transportation Law Committee of the Federal Bar Assoc. Annual Convention , Phila., Pa. 1963, p. 7.
15. Transportation Diversifications: Hearings before a subcommittee of the committee on Interstate and Foreign Commerce, House of Representatives Feb. 2,3,and5, April 12, 13 and 14, 1960, p.301
- 16 Ibid., p 372
17. ----- Debate: Should Railways Engage in Transcontinental trucking? , Canadian Transportation, Jan. 1962, pp. 18-23

CHAPTER III

THE ARGUMENT AGAINST COMMON OWNERSHIP

The argument against common ownership is essentially that of the independent trucker, the water carriers and to some degree the airlines. The basis of their argument is of historical origin. Before the truck had reached a stage of development where it was possible to compete against the railroads for any large segments of traffic, the railroads had a virtual monopoly in transportation, with the exception of domestic water carriage. During this period the railroads and great railroad builders, such as Hill and Harriman in the United States, engaged in cutthroat competition among themselves and against other carriers trying to enter the transportation market. Railroad companies were very large and rather unscrupulous. From this era the railroads gained a bad reputation for unethical business practices and, in fact, have never been able to completely live down this image.

Historical Lessons - Water Carriers

Those who argue against common ownership, almost without exception, use the following quote taken from the

report of the House Committee on Interstate and Foreign Commerce, which dealt with the legislation that became the Panama Canal Act of 1912:

" The proper function of a railroad corporation is to operate trains on its tracks, not to occupy the waters with ships in mock competition with itself, which in reality operate to the extinction of all genuine competition. ---

Although the resulting Panama Canal Act prohibited rail control of water lines operated through the Canal, it allowed such control of other water lines to continue if the Commission shall be of the opinion that any existing ... (line) is being operated in the interest of the public and is of advantage to the convenience and commerce of the people. " 1

Shortly after passage of the Panama Canal Act, various railroads owning or having an interest in water lines operating on the Great Lakes filed petitions seeking the right to continue the relationship. In Lake Line Applications Under the Panama Canal Act, the Interstate Commerce Commission concluded their report by saying:

" These boat lines under the control of the petitioning railroads have been first used as a sword and the a shield. When these roads succeeded in gaining control of the boat lines which had been in competition with paralleling rails in which they were interested and later effected their combination through the Lake Line Association by which they

were able to and did drive all independent boats from the through lake-and-rail transportation, they thereby destroyed the possibility of competition with their railroads other than such competition as they were of a mind to permit. Having disposed of real competition via the lakes, these boats are now held as a shield against possible competition of new independents. Since it appears from the records that the railroads are able to operate their boat lines at a loss where there is now no competition from independent lines, it is manifest that they could and would operate at a further loss in a rate war against independents. The large financial resources of the owning railroads make it impossible for an independent to engage in a rate war with a boat line so financed.

From a consideration of all the circumstances and conditions disclosed by the respective records herein, the Commission is of opinion and finds that none of the several existing specified services by water herein concerned is being operated in the interests of the public or is of advantage to the convenience or commerce of the people within the meaning of the act, and that an extension and a continuance thereof will prevent, exclude, and reduce competition on the Great Lakes. The application of each of the petitioners herein is therefore denied, effective Dec. 1, 1915. " 20

Although the provisions of the Panama Canal Act have been dormant for many years and no further railroad applications had been filed to acquire control of water carriers, recently the Illinois Central Railroad Company and the Southern Pacific Company applied to acquire control of the John I. Hay Company, a water carrier. The I.C.C. concluded that the rail applicants had failed to meet the statutory requirements necessary for approval of the proposed transaction. Leading up to this conclusion they said:

" Compared to water carriers not blessed with such financial backing, the competitive advantage accruing to Hay would be substantial. Undoubtedly, the immediate result of an approval would be that competition for the available water traffic would be increased and intensified and that protestant water carriers, most of which are financially sound, may be able to withstand such competition for a time.

However, with Hay's expanded facilities, additional equipment, more frequent sailings and enlarged solicitation force, the end result would be a sharp reduction of, and possibly complete elimination of, competition on the water routes involved. Accordingly, the fears of water carrier protestants that Hay's acquired advantages would be so great as to jeopardize their competitive position and the continuance of independent water operations are not unfounded. " 3

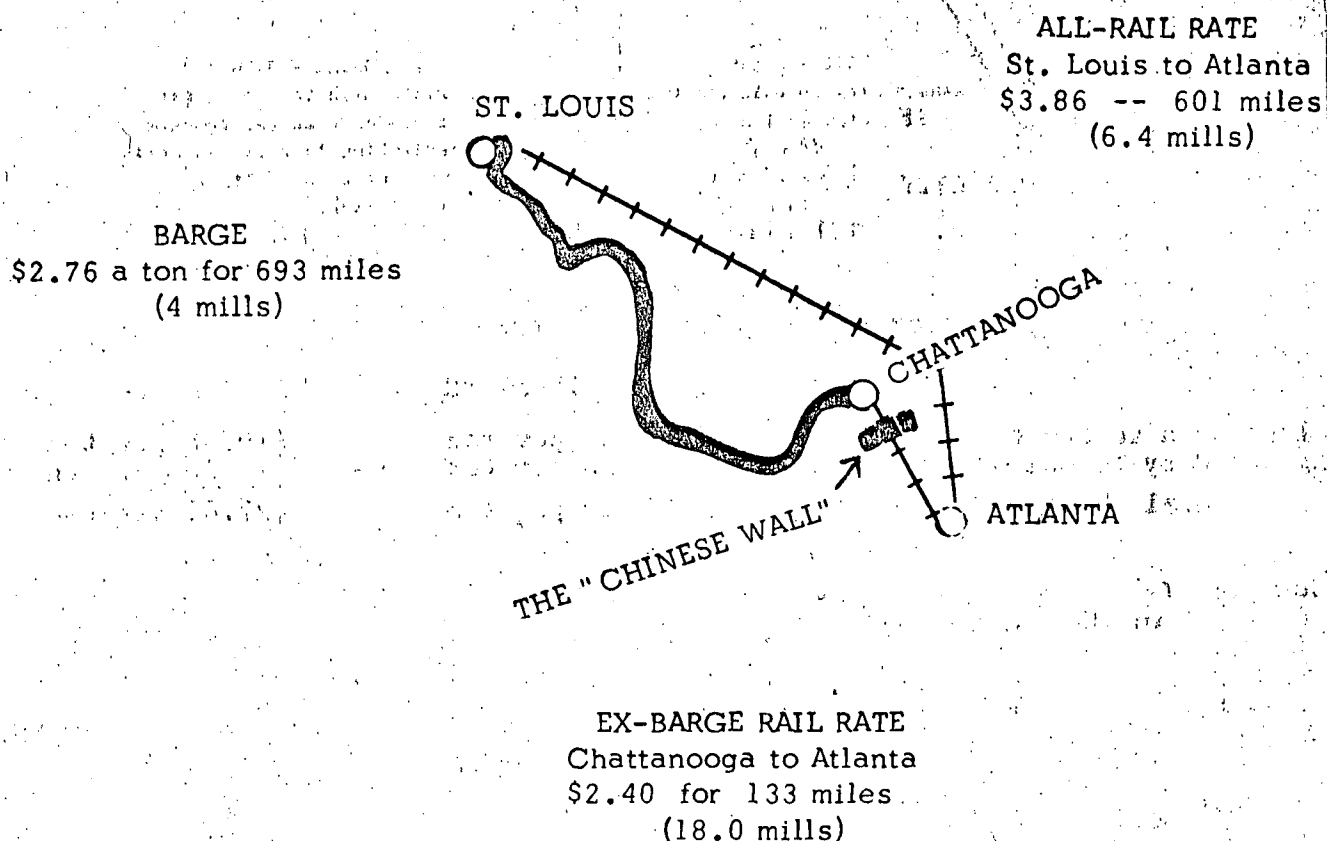
Water carriers, and the I.C.C. to a certain degree, still believe that the basic conflict of interests between competitive rail and water carriers would still prevent any meaningful water transport being developed under rail control along similar paths. Domestic inland water carriage and rail carriage are not complementary services. Both carriers are burdened with very high terminal costs. Because of the difficulty involved in co-ordinating equipment, it is almost impossible to develop a co-ordinated facility, at least with present technology, which will be of advantage to both carriers. There is little or no economic incentive for co-ordination between these modes. Water carriers feel that the motor carrier, with its short-haul advantage, can be co-ordinated with water carriage

quite effectively. Furthermore they point to the discriminatory pricing of rail service in such a way as to frustrate and prevent rail-water service under present United States regulatory policy. In almost every situation in the continental United States where co-ordinated rail-water service is actually or potentially available, there exists also an alternative all-rail route. Acting on an individual basis or in concert there have been several examples where railroads seek to keep traffic on the all-rail route.

One example is the Southern Railway grain case in which the railroad established a broad schedule of drastically reduced grain rates from origin points on the Mississippi River and the Ohio River into the southeast. Later these rates were established from the Tennessee River to the same areas in the southwest. Ingersoll ⁴² has described the effect of these rates:

" The rates for long hauls were based on a little over six mills per ton-mile -- but the minimum was \$2.40 a ton. So for short distances beyond the Tennessee ports, where most of the previous movement of waterborne grain on the Tennessee had been destined, the rates were 15 to 20 mills a ton-mile.

FIGURE 1
"THE CHINESE WALL"



As to this tactic the Interstate Commerce Commission said 'The practical effect of applying the proposed rate formula with its 240 cent minimum to the Tennessee River ports would be to build a "Chinese Wall" along the south bank of the Tennessee River through which no ex-barge grain could penetrate by rail.' "

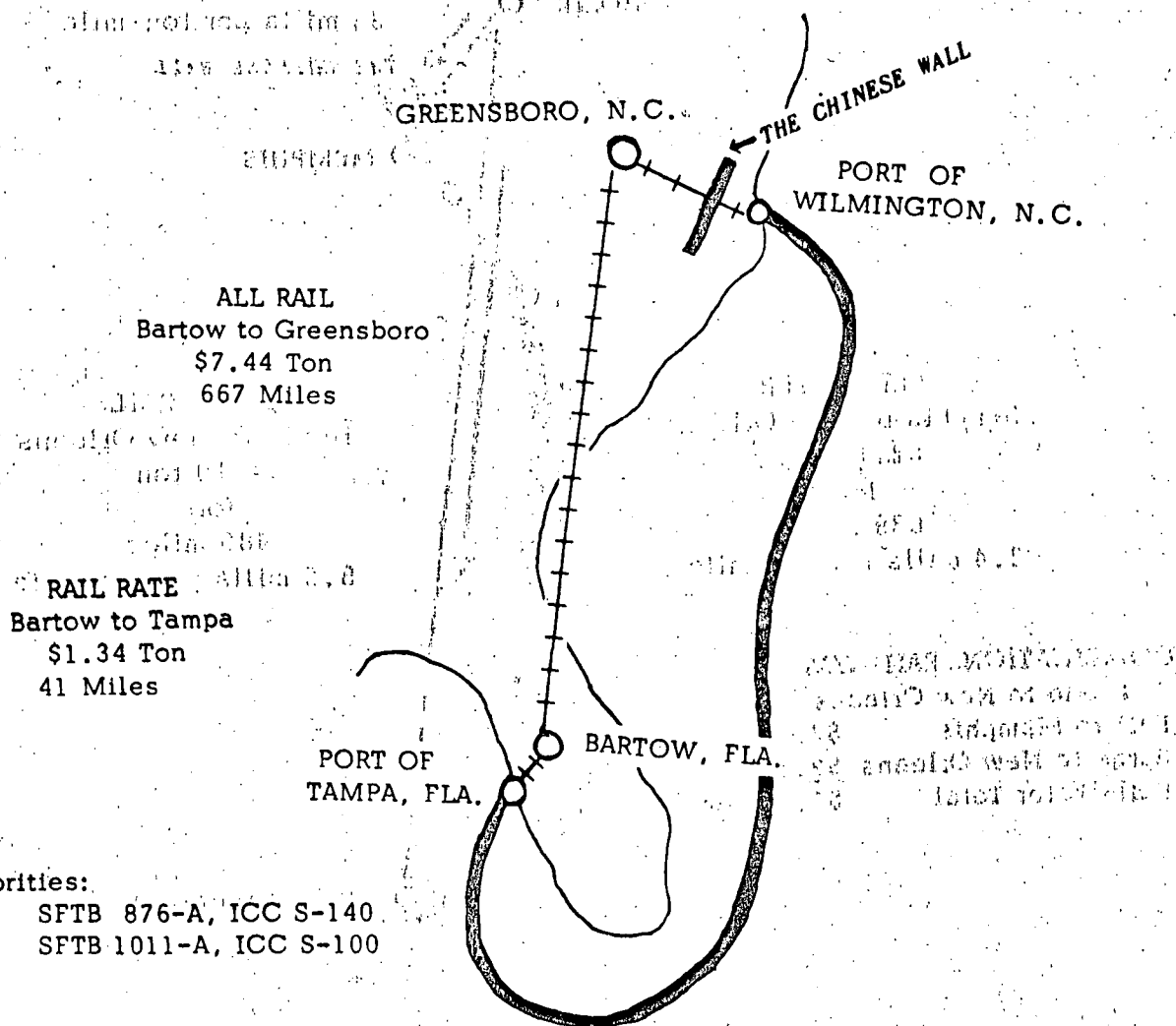
Another example of a similar "Chinese Wall" is given by Ingersoll: 5

" Phosphate, mined in Florida, is used for fertilizer in Greensboro, N.C. The phosphate could move rail-water-rail via the ports of Tampa and Wilmington. But the railroads have built a 'Chinese Wall' at Wilmington to prevent Greensboro from enjoying any of the economy of coastwise shipping from Florida to North Carolina. The rail rate from the port of Wilmington for 118 miles to Greensboro is almost as high as the all-rail rate for 667 miles all the way from the Florida mines to Greensboro. "

FIGURE II

"ANOTHER CHINESE WALL"

RAIL RATE
Wilmington, N. C. to Greensboro,
\$7.00 Ton N.C.,
for
118 miles



From these examples it can be seen that under competitive conditions the railroads have indeed put up barriers to effective rail-water co-ordination in the United States. While it is ~~true~~ that under common ownership the railroads might not try to hinder movement of freight in their own water carriers, it is not clear that the water carriers would develop as effectively under railway ownership, especially where the railroad parallels the waterway. As there are not any significant economies to be achieved under water-rail common ownership and as both modes are best suited to long-haul transport it is hard to see how the railways could make effective use of owned water carriers in co-ordinative activities. The United States' domestic water carriers industry is very small in comparison with the railroad industry, but quite effective and efficient. Instead of allowing common ownership; based on the Great Lakes case and current rate practices; it would seem that perhaps the water carrier should receive better protection in the United States.

In Canada the network of inland waterways is not as extensive as in the United States. Shipping is fairly well confined to the Great Lakes and the St. Lawrence, with a small volume on the Mackenzie. Ships carrying bulk cargo along the St. Lawrence and Great Lakes do not need to obtain licences beyond the customary certificate of

seaworthiness and other safety precautions required by the Department of Transport for the protection of property and life. Rates are not subject to regulation as in the United States with the exception of contracts for grain carriage which are subject to the approval of the Board of Grain Commissioners. As for package freight the Board of Transport Commissioners issues licences on the basis of public convenience after considering whether alternative facilities are adequate or whether the new services will be complementary.

Package freighters, such as the Canadian Steamship Lines use the same freight classification as railways. In connection with their operations the Canadian Steamship Lines operate in conjunction with the Canadian National on a joint rail-lake-rail rate basis which dates back to the time before the transcontinental rail lines traversed Ontario. They have been preserved and represent an alternative route whereby the shipper can obtain a lower rate for slower movement. These rates have been regulated by a scale of rate differentials between all rail and rail-water-rail set by the Board of Transport Commissioners. The Canadian Pacific Railway also maintains a rail-lake-rail service with its own vessels. The same competitive rates are published by the C.P. as the C.N.-Canadian Steamship joint rates.

Since there have been no complaints against Canadian Pacific Railways using their Great Lakes water carriers as "fighting ships" in the past, at this time it is not valid to say that common ownership has been detrimental to the public interest in the case of Canadian inland water carriage. It must be remembered, however, that the routes along which the railroads can compete with water carriers in Canada are not as extensive as the network in the United States. If competition were more extensive, tighter regulatory measures might be in order to prevent rail dominance of inland water carriage.

Motor Carriers' Viewpoint on the Monopoly
Powers of Railroad

The motor carrier industry in both the United States, and to some degree, in Canada argue that the railroads could gain monopoly powers in the same way that they did in the United States inland water carrier industry. They point to the vast financial resources available to the railroad as compared to the average independent trucker. If the railroad finds a profitable traffic in their trucking operations, they have the resources to purchase and place many trucks in the particularly profitable area in a short period of time. The way in which they would gain monopoly powers has been described by the American Trucking Association in their brief before the 1960 hearings on

Transport Diversification in the United States: 6

" The railroads, with the financial resources and competitive devices at their command for an all-out war against their competitors, would line up against Lilliputians. Of the motor carriers subject to economic regulations by the Commission in 1959, about 1,130 had operating revenues of \$1 million or more, about 1,800 had revenues of \$200,000 up to \$1 million, and about 14,500 had revenues of less than \$200,000. The largest motor carriers had revenues of \$71,962,727 in 1959. The largest railroad had total revenues of \$887,683,858. It is impressively true that the battle would be between carriers of markedly different strength.

³ Aggression would take the form of a series of rail drives against individual motor carriers. The strategy no doubt would be to acquire key carriers or rights for use in waging wars on independent motor carriers. Selective rate-cutting activities would afford ample opportunities to eliminate both small and larger motor carriers or to create conditions which would enable acquisitions of their properties on favourable terms. The present Commission practice, in adjudicating inter-agency rate disputes, of allowing railways to go down close to out-of-pocket costs, if not lower, places an exceptional burden on motor carriers, quite apart from the economics from any point of view of using out-of-pocket costs in the manner described by the railroads. This burden would be greatly intensified under common ownership. "

Mr. P. I. Beardsley describes how the railroads would complete their monopolization of the transport industry. ⁷

" If despite their efforts to eliminate effective competition by rate-cutting activities, a few independent motor carriers remained on the scene, the railroads could undoubtedly, if they so desired, eliminate them through the simple

expedient of buying them out. ... Once these efforts had succeeded, the rails would then be free to take the last step in their over-all program, the bringing of traffic 'back to rails' in order to protect their heavy investment in rail plant and facilities".

This argument presented by the A.T.A. is quite debatable. Even if the transportation industry were characterized by a total lack of regulation, it is quite inconceivable that the railroads could completely monopolize road transport. Considering the ubiquitous nature of the trucking industry, it is highly unlikely that the railroads could ever get to a point where all there would be left to do is buy out "the few remaining operators". Water transportation is different as the investment in equipment is considerably larger than in trucking. Furthermore it is very doubtful that even considering the "vast financial resources" of the railroads that they could really sustain operations below full costs for a long enough period of time to successfully exhaust all independent operators. Let us say that the railroads can gain monopoly power in certain geographic areas. If they then raised the rates, after gaining a monopoly, any enterprising individual could obtain a small truck with very little capital investment and compete at a slightly lower price.

The fact remains, however, that the railroads are regulated and would not be allowed to freely cut rates with their "fighting ships" so that they are consistently below

fully distributed costs. Also in both the United States and Canada there is anti-combines legislation to prevent the formation of companies which can successfully control a market. Basically, however, the railroad has a monopoly structure in that it is not economical for society to have two railroads competing in a small market where one would be sufficient. It is conceivable that in certain small geographical areas the railroad might be the only company providing transportation service, whether by rail or by truck. In certain remote areas of Canada, for example, the railroads do have a monopoly, but this is not because they want it, in fact they often lose money on these operations. In the United States railroads that have extensive "Grandfather rights" dating back fifty years have not been able to control the transportation markets in which they operate.

Competition & Technology

It is quite logical, however, that competition between the various modes is reduced by common ownership although not eliminated. By reducing competition there is the possibility that innovation and improvements in technology are also reduced. Under competition, when two industries face the same market, there is a constant stimulus to gain a larger share of the market and progress. To do this the competitive firm must improve its operations through efficiency. When there is a lack of inter-

industry competition, there is a tendency to be satisfied with progress already achieved.

Competition between rail and truck has undoubtedly forced both industries to reduce costs through more efficient service. Many feel that the trucking industry would not have progressed as far as it has today if, in the United States, railroads had freely been allowed to own and operate trucks. Under common ownership, even if a monopoly does not develop, the development of new trucking services competing with the railroad is slowed because of a glutting of the market. Similarly if the trucking services operated by the railroads are successful, the existing rail lines would be starved of capital for new railroad equipment as the railroads would invest more heavily in trucks because of a more ~~atrapidive~~ rapid return on capital. Common ownership of potentially competitive services is likely to favour too fast a withdrawal from the railway field, which ~~may not be in the interest of~~ society in the long run.

Speaking in the House of Commons on March 23, 1960, the Hon. George Hees, on pp. 2377-2378 of Hansard, got the following impression of transportation in Great Britain during a tour:

"I was in Glasgow, and was fortunate enough to attend the Glasgow industrial exhibition. Whilst there, those who were showing me round the exhibition were very anxious that I should see the railway exhibit, to see what improvements

" the nationalized railways of England were undertaking. As I was being shown these improvements - and these improvements were very worth-while--I was told by the railway official who was showing them to me that they had been made necessary by the denationalization of the motor transport industry in England. This official told me that if the motor transport industry in England had not been denationalized, it would not be necessary for the railway industry to make any improvements at all, because when the industry was nationalized, there was literally no competition, or certainly no competition of a worrisome nature, for the railways. However as soon as the motor transport industry became denationalized by the Conservative government, then the motor carrier industry began to give the nationalized railway industry very serious competition. These very worth while changes which I was shown by this railway official were, according to him, one hundred per cent made necessary because of the competition given the railways by a revitalized, denationalized road transportation system then in existence in the United Kingdom. "

Although the completely nationalized system of Great Britain is an exaggeration of the common ownership effect on competition, it does serve to show how the incentive to progress and innovate was reduced. An interesting by-product of the nationalized period in British Transport however, is the rapid advancement of intermodal technology. It enabled the British Transport Commission to plan its new facilities on a joint working basis and in all new planning account was taken of all modes of transport. This meant that new road depots were provided with rail facilities for the through transit of some commodities by

rail while new rail depots had been planned to accommodate also the terminal facilities of road services.

In a speech given before the Canadian Railway Club by K.W.C. Grand, of the B.T.C. the improvement of container service was noted.

" ... British Railway companies are probably the biggest single owners of containers in the world -- over 50,000 in service (as of 1964). About 20 types are now to be seen on the railways. ... New uses for containers are constantly being found, and a particularly striking indication of their potentialities is afforded by the diesel-hauled Condor trains -- the first to be devoted entirely to containers -- which have been steadily winning back freight traffic to the railways. Travelling nightly between London and Glasgow in less than 10 hours, they give the fastest long-distance freight service in Britain. " 8

In the bulk materials field technological problems were also worked on:

" Transshipment of traffic in bulk is simplified if this can be accomplished by employing mechanical apparatus. Examples are the air discharge of 'Presflo' wagons and the gravity discharge of some mineral and other hoppers directly into road vehicles." 9

Mr. Grand also pointed out problems encountered in intermodal technology that exemplify partially the argument that terminal costs remain high because the railway and trucking forms of transport are basically different.

" Despite the advantages of mechanical handling, the costs of transferring traffic at stations for road delivery or from road collection are likely to remain high, especially if transshipment of the traffic is involved; these costs reflect not only the short run items of labour and fuel but in the longer term the provision and renewal of handling equipment, buildings and cartage vehicles. Urgent attention is now being given to finding means of reducing the high terminal costs of transfer between rail and road so that the advantages of the relatively low, long rail haulage costs can be combined with the flexibility of door to door collection and delivery by road haulage. "10

Continued Problems in the Railroad Industry

One of the arguments developed by the A.T.A. that is essentially similar to the previous argument is that the railroads have a lot to do in their own industry before they should be allowed to enter the trucking industry. They claim that the railroads are not in such bad financial shape, and even if they are it is not beneficial to society to allow them to waste valuable funds on outside investments when the railway system is still inefficient and obsolete in many respects. While it is true that the railroads have done quite a bit to eliminate duplicate facilities through merger and branch line rationalization there is still much to be done in the United States to eliminate some of the diseconomies proliferated in the railroad monopoly era. The railroads are essentially asking the government to protect them from the effects of economic changes and technological advancement.

The railroads have shown their confidence in the future of the basic railroad structure by the large capital outlays they have made on it. The primary responsibility of railroad management to stockholders and creditors is tied up with this structure. Present keyed-up efforts to divert traffic from motor and water carriers are in line with this prime interest in railroad plant. Some railroads have defined plans, but many reach out blindly to get into other forms of transportation. Trucking industry feels that the railroads with their large investments in fixed and other railroad facilities should be directed to concentrate their efforts on "the iron horse and not try to maintain a whole stable of horses".¹⁹ The railroad plant still includes many duplicative mileages and strongly entrenched positions.

Railroad management is traditionally individualistic which lessens the railroads' ability to provide better service to the shipping public by co-operating with each other. Consolidations provide a means of eliminating excess plant and of increasing efficiency. While there is activity in this field at present, it needs to be accentuated and encouraged. Rationalization of plant also provides widespread opportunities for economies. Particular need exists for rationalization of terminal facilities. Modernization of structure and rolling stock costs money and since the railroads have a limited amount of funds, these funds

are better spent on their own modernization programs, rather than on the acquisition of trucks.

The trucking concerns also point to the fact that the railroad industry has always fought the trucking industry and that railroad management will not change their attitude. Historically, in the United States, the railroads have fought at local, State and National levels to impose every type of restriction on the trucking indirectly in such matters as taxation, size and weight limits. An outstanding example of the onerous requirements imposed by the States on the trucking industry is the Texas law which forbade a truck with a load in excess of 7,000 pounds to operate on the highways of Texas unless it was en route to a rail terminal in which case the permissive load would double.

The fact that the railroad industry has still not done enough to achieve co-ordination and efficiency within its own ranks has been pointed out by Mr. J. P. Hiltz, vice president, operations and maintenance, of the Delaware & Hudson Railroad: 12

: ... we have yet to accomplish a unified approach to the many of our common problems. One railroad solicits all types of perishable freight and insists it makes money from handling it. The connecting line does everything possible to discourage certain types of perishable commodities and will not join in the establishment of schedules which could bring this business to the service route. ... One railroad feels that certain interline passenger service is profitable and would like to improve service and schedules. The connecting line is no longer interested in passenger service and despite the high train earnings of a particular run will not join in a program of

improvement. One railroad likes piggyback - the next one does not -- and so on, far into the night. "

Conceding that "a certain amount of disagreement is desirable " and that conditions peculiar to certain railroads cause "different outlook on certain matters", Mr. Hiltz continued:

" However I contend that none of these reasons, nor many others which could be advanced, can amount for the lack of unity in the railroad industry. I can only be accounted for, in my opinion, by shortsightedness, stubbornness and selfishness. It can only lead, and again in my opinion, to the eventual destruction of our industry --- I feel that the real reason we don't effectively compete with the trucks is because we don't know how to compete, except among ourselves. " 513

Mr. Hiltz's remarks demonstrate that certain railroad problems arise from discord within the industry. One solution to this problem has been the development of joint research facilities with the Association of American Railroads, but there is still more resistance to be broken down within the industry itself to achieve better co-operation among the various railroads.

Economies of Joint Management

One of the more logical arguments that the truckers use is that there are few economies achieved under common ownership. Basically the operations of a large trucking firm are normally highly decentralized in contrast to the

relatively centralized organization of the railways. The railroad industry is characterized by a fairly rigid formal hierarchy whereas the trucking industry is much more informal and based more on personal leadership. This leads to different managerial attitudes, which has been demonstrated by the experience of the British Transport Commission after the trucking industry was nationalized under the 1947 Transport Act.

" The process of assimilating and digesting some 4,000 undertakings was bound to occupy the greater part of the first five years; moreover at the end of the period it had become quite clear that the Road Haulage Executive wished to concentrate upon the most profitable of their activities, namely long-distance truck haulage. To this end they had instituted a system of 'Directional Groups', whereby a group in, say, the London area was entirely conceived with traffic to the Birmingham area where a second Group acted as its partner and receiving station. The paradox of this quite natural development is that, instead of road haulage being essentially complementary to the railways (as presumably it would be in a fully integrated system) under common ownership it began to develop services which were even better qualified to compete with the railways on their own special ground than those provided under separate ownership. " 14

One economy which the railroads emphasize is that of the availability of computer aids to management or accounting control on a joint service basis. The larger trucking companies can afford computer systems that will aid in their operations. The smaller company, while probably not able to afford a full computer system of their own, can

rent time on computers in service bureaus or can jointly finance such facilities with other firms. Generally speaking though the railroads are able to finance more advanced computer systems than the trucking companies.

The possibility of greater economies through joint financing has also been professed by the railroads. It is true that some trucking companies have experienced problems in obtaining capital, but most have been able to solve these problems quite satisfactorily. One of the methods of financing possible is to merge with a larger trucking firm that is able to obtain capital at a lower cost. The truckers point to the fact that each dollar invested in trucking by a railroad company represents one dollar less to be used for the modernization and improvement of the railroad facilities. The truckers fail to mention the need for co-ordinated investment in intermodal equipment.

The truckers feel that the economies of traffic solicitation are even more doubtful. They offer service on the basis of meeting specific customers' requirements more economically than other means of transportation. This, they say, requires a person who knows the industry well and has a good knowledge of the complexities of trucking service and tariffs. It is difficult for an individual to also know the complexities of railroad service and tariffs.

The difference in regulatory frameworks between the two modes further complicates joint solicitation. It does seem, however, that the transportation solicitor can offer a wider selection to the shipper. Also it would seem that less personnel would be required to effectively solicit traffic in a true transportation company.

The economies that accrue in terminal operations are also limited due to the difference in the techniques and operating characteristics of railway and highway vehicles. While it is true that loading ramps and storage facilities are somewhat different for both modes; it does seem that a consolidated terminal would offer some advantages to both modes. Inherent economies would be realized in intermodal operations such as facilities for the transfer of containers and the loading of piggyback trailers. One problem is many of the railroad terminals are old and inefficient and modernization of these facilities, designed basically for the railroad era, is quite an expensive undertaking.

In vehicle maintenance and engineering there are very few economies inherent in joint ownership. The two modes are sufficiently different so that interchange of parts and labour (other than diesel mechanics) is fairly limited. It is true, however, that certain economies of scale are attainable in the truck industry. Allan C. Flott, Director, Department of Research, A.T.A. described the

findings of the A.T.A. 15

- " A. Maintenance and terminal costs appear to increase more than in proportion to output.
- B. Depreciation and taxes rise in proportion to increases in output.
- C. Administrative and insurance costs decline in proportion to increase in output.
- D. Traffic and transportation costs (which make up about fifty per cent of total costs) decline with increases in output ... "

Other economies of scale include lower capital costs, advantages in purchasing fuel and vehicles and advanced communication systems, computers and other apparatus.

While these economies of scale may be achieved by a large trucking firm, they may also be achieved by railroad firms which are already of a large-scale nature. For example traffic and transportation costs, which comprise 50% of total costs, can be reduced by a single solicitation force espoused by the railroads. Also most railroads have advanced communication systems (such as CN-CP telecommunications) and computer systems. Costs of capital attainable by the railway firms are also presently lower than those attainable by smaller trucking firms. In Canada, where the degree of concentration in for hire trucking is not especially great, the railroads have seen the opportunity to gain

certain economies through consolidation of trucking firms.

Conflict of Management Philosophies

The railroads advocate the advantages of using the truck to provide ancillary services to the railroad. This type of utilization implies centralized control of trucking and using trucking as a non-competitive tool of the railroad. On the other hand they also claim that they will maintain competition within the firm. In other words they are saying that the trucking arm must also produce a profit and retain a certain degree of autonomy. If the railroads are not going to allow cross-subsidization between their trucking arms and their railroad operations there is a conflict of managerial philosophies. In other words how is a company to maintain competition between its branches, such as General Electric or General Motors, and still centralize operations enough to provide co-ordination with rail operations? This subject will be more adequately discussed when considering Canadian Pacific's managerial philosophy later on.

S U M M A R Y

The argument against common ownership revolves around the danger of monopoly or at least a reduction in competition. In the case of inland water carriage being owned by a railroad company the argument that a monopoly could develop is strong because these two modes of transportation are quite

supplementary along the waterways. Because of this regulatory policy prohibiting common ownership for these two modes is more logical than prohibiting railroads from owning truck companies that are complementary.

In the United States, where railroads still exhibit duplication of facilities and where the railroads have monopolized water transport in the past, regulatory policy restraining large scale common ownership has been quite logical in the past, however in the next chapter it will be seen that some of the restrictions are perhaps a bit onerous and should be modified.

F O O T N O T E S

1. -----, H.Repr. No. 423 on the Operations of the Panama Canal, 62nd. Congress., 2nd Sess. 12 (1912).
2. -----, 33 I.C.C. 699, 716 (1915)
3. -----, Illinois Cent. R.R. - Control - John I. Hay Co., 317 I.C.C. 39 (1960)
4. Ingersoll, A.C., Co-ordinated Transportation Service, A Waterway Operator's Point of View; Co-ordination of Service, Syracuse University; Business Research Center; Salzburg Lecture Series #16; p. 32.
5. Ibid., p. 33
6. Transport Diversification, op. cit. p 219
7. Beardsley, B.T., Restriction Against Rail Entry into Other Transportation Fields, Law and Contemporary Problems, Autumn, 1959, p. 10.
8. Grand, K.W.C., "Co-ordination is a Necessity", Canadian Transportation, November, 1961, p. 18.

9. Ibid., p. 18
- 10 Loc. cit. p.18
11. Transportation Diversification op.cit. p. 219
- 12 Hiltz, J.P., " R.Rs Warned: Unify or Die", Railway Age
December 15, 1959, p. 41.
13. Loc. cit. p 41.
- 14 Bonavia, M.R. The Economics of Transport , London
Chap. VI The Control and Coordination of
Transport, p. 211
15. Flott, A.C. , "Economies of Scale in Trucking,"
Transportation Research Forum Papers 1967 pp 13-15
16. Transportation Diversification op. cit. p. 211

C H A P T E R I V

COMMON OWNERSHIP IN THE UNITED STATES & GREAT BRITAIN

Common Ownership in the United States - History

Railroads in the United States, as previously mentioned, are prohibited from entering into common ownership with domestic water carriers. The railroads are the only carriers subject to these restrictions which are contained in subsections 14 through 16 of Section 5 of Part I of the Interstate Commerce Act, which sections were initially enacted in the Panama Canal Act of 1912, 37 Stat. 566. Under the provisions of the Panama Canal Act, a railroad is prohibited from having any interest whatever in ~~a~~ water operation through the Panama Canal with which it does, or may, compete for traffic.

As to operations elsewhere than through the Panama Canal, a railroad interest in such operations is prohibited if the railroad does or may compete for traffic with the rail affiliated water carrier. A railroad contemplating such an acquisition must prove to the I.C.C. that railroad interest in a particular water carrier will not prevent that water carrier from being operated in the interest of the public and that it will not reduce competition on the particular water route.

As for motor carriers, when Congress enacted the Motor Carrier Act in 1935, it placed a specific restriction in Sec. 213 (a) (1) upon the right of rail carriers and water carriers thenceforth to consolidate with or otherwise acquire motor carriers. This restriction read as follows:

" The Commission shall not enter such an order unless it finds that the transaction will promote the public interest by enabling such carrier to use service by motor vehicle to public advantage in its operations and will not unduly restrain competition. "
(U.S. 49 Stat 556).

Until 1940, both railroads and water carriers were subject to this special restriction concerning the control of motor carriers. In 1940, however, the restriction was removed from the water carriers. Early Commission cases did not restrict certificates issued to rail affiliated motor carriers in new operation cases. The Commission by later decisions, however, concluded, as a general policy, that, to be authorized, the motor carrier service must be supplemental or auxiliary to that of the rail carrier involved and that this should be assured by conditions to be imposed upon such operations. The conditions which are now standard, except for condition No.3, were formulated in Kansas City Southern Transport Co. Inc. Common Carrier Application, 10 M.C.C. 221, and were stated as follows:

- " 1. The service to be performed shall be limited to service which is ~~auxiliary~~ auxiliary to, or supplemental of, rail service.

2. No motor service shall be rendered to or from any point not a station on a rail line of the railroad.
3. Shipments to be transported shall be limited to those on a through bill of lading, including a prior or subsequent movement by rail.
4. All contractual arrangements between the applicant motor carrier and the parent railroad shall be reported to the Commission and shall be subject to revision.
5. The motor service shall be subject to such further specific conditions as the Commission in the future may find it necessary to enforce, in order to ensure that it will remain auxiliary and supplemental to the rail service. "

The original conditions were set in 1938, but in 1941, on reconsideration, the Commission substituted for condition No.3, which required prior or subsequent movement by rail, a so-called key point condition, stated as follows:

" No shipment shall be transported by applicant as a common carrier by motor vehicle between any of the following points, or through or to or from more than one of said points: Kansas City, Hume, and Joplin Mo., Pittsburg, Kansas, Shreveport and Lake Charles, La., Beaumont, Tex., Texaskana, Ark - Tex, and Fort Smith Ark. " (28 M.C.C. 5, p. 25).

The keypoints were selected as usual break-bulk points and the intention was to prevent traffic being moved by the rail affiliated motor carrier over substantial distances. Thus, in common language the following conditions were established. The first condition, the supplemental or auxiliary requirement, in effect means that all traffic moved by the motor

carrier must move on rail rates and billing. It may not move, as highway business generally does, on truck rates and billing. The second condition prevents business being handled to a point not a rail station. The third condition is either the prior or subsequent rail haul requirement or the key point restriction.

Railroads Not Subject to Regulation

State statutes usually make no distinction between rail-owned motor carriers and other motor carriers, with the result that rail motor subsidiaries can move intrastate traffic under the same conditions as their competition and common ownership between companies engaged in different modes is permissible. Rail affiliated companies which were conducting a general trucking business at the time of the adoption of the Motor Carrier Act of 1935 have "grandfather" rights in respect of the traffic so conducted, and can continue such business without any of the restrictions which have been considered. At the present time the I.C.C. occasionally grants certificates to rail affiliated motor carriers to engage in certain trucking operations free from the usual restrictions where the transportation service is limited in scope and is unattractive to other truckers. Also, in certain other areas such as the hauling of mail or exempt commodities, authority from the I.C.C. is not required and the rail-motor carrier is free to operate without

restriction.

Some of the railroads have had very extensive grandfather rights for many years. For example the Northern Pacific Railway Co. also operates the Northern Pacific Transport Co. which has full grandfather rights in the State of Montana where the railroad serves. In Montana they operate a fully integrated service and have since 1927. As an unrestricted motor carrier they join in through routes and rates, participate in motor carrier bureau tariffs and enjoy free interchange of traffic with other motor carriers. They also have restricted rights which permit them to operate between Missoula on one hand and Portland, Oregon, Seattle, Tacoma, Washington on the other under key point restrictions.

Mr. Robert S. MacFarlane, President, has described the effect of the Northern Pacific Transport Co. 15

" From 1930 to 1958, the population of our 6 principal States served by my company increased from 6,745,000 people to 9,917,000 an increase of 47 per cent. The number of production workers in these six States 54.23 per cent. The value added by manufacturing increased 399.6 percent, and personal incomes increased from \$3,760 million to \$18,552 million, an increase of 393.4 per cent. During the period from 1925 to 1930, we handled only 24,420,000 tons of revenue freight. In 1925, we handled 575,000 tons of less-than-carload lot freight, but in 1958, we handled only 95,982 tons of this traffic. During the postwar period, the revenue freight tonnage handled on the Northern Pacific has actually declined from 27,337,00 tons handled in 1956 to the 24,420,000 tons handled in 1958. At the same time, the motor carriers operating in

the territory we serve have had a phenomenal growth. Taking the 18 principal motor carriers that compete with the Northern Pacific, we find that from 1947 to 1958 their combined revenues increased from \$46,911,000 to \$196,219,000, or 318.28 per cent. ... The history of 27 years of operations by the Northern Pacific Transport Company in the State of Montana proves that a railroad controlled motor carrier, operating without restriction, can provide a much improved co-ordinated rail and highway service without restraining to any extent motor carrier competition. "

Another company with extensive trucking operations is the Southern Pacific Railroad. A subsidiary company, the Pacific Motor Trucking Company, is engaged in the business of operating motor trucks in the States of Oregon, California, Nevada, Arizona and Texas (to El Paso). In 1959 it owned and operated 4,335 units of equipment over 14,666 miles of unduplicated authorized route. Its operating rights generally parallel the rail operations of Southern Pacific Co. and is authorized to serve a few points in off rail territory tributary to the Southern Pacific. With the exception of several operating rights acquired by purchase and a few relatively minor truck operations conducted prior to the grandfather date of the Motor Carrier Act in 1935, its interstate operating rights are restricted to the transportation of traffic moving on rail rates and billing. Conversely, practically all of Pacific Motor Trucking Co.'s State operating rights are not so restricted.

The motor service furnished by Pacific has grown to be an essential part of the Southern Pacific's rail service. It has been used to provide auxiliary services to just about the fullest extent possible. Today door to door service is offered at 2,024 stations on the lines of the Southern Pacific. The Southern Pacific inaugurated piggyback services in 1953 and built many loading ramps at terminals along its route. In addition to providing terminal service between piggyback ramps and the shippers door, Pacific provides substitute service over the highway to adjoining points where the train service is too slow or infrequent, or where volume of traffic is not sufficient to justify construction of a ramp.

Restrictions on Rail-Truck Carriage

Key-point and subsequent haul restrictions are especially bothersome to the railroads. For example in the case of the Southern Pacific because service must be confined to that which is auxiliary to or supplemental of rail service, they are not able to offer truck service directly to the public. This results in inability to enter into joint rates with other truck lines serving points beyond the scope of their operating authority. Thus they cannot offer the shipper a continuation of truck service beyond points on the rail line.

Condition requiring observance of key points or

application of the alternative condition requiring that traffic transported by motortruck must have prior or subsequent rail haul also create problems for the Southern Pacific because they set up a barrier limiting the length of haul for which substitute service can be provided. Under such conditions, substitute service cannot be provided between principal terminals, the length of highway haul is reduced which results in uneconomical operation of rail equipment where highway equipment could be used more advantageously. As an example of this, San Francisco and Stockton, Calif., which are approximately 70 miles apart, are key points. The Pacific Motor Co. operates trucks between them daily for the transportation of truck-and rail-billed State traffic. Because of this key point restriction, it is necessary to continue the operation of a rail car for handling the small amount of available interstate traffic. This results in both assignment of a rail car to a service which is uneconomic and inefficient use of truck equipment.

Key-point and other conditions on interstate operating rights also handicap rail-truck subsidiaries from being utilized to their fullest extent in making piggyback service more flexible, particularly in relation to providing substitute service for the railroad. Door-to-door service and speed are the essence of piggyback service. It is not unusual for a shipper to require a piggyback shipment to be at the destination prior to train arrival and a highway

tractor cannot be used to accomplish this on interstate traffic because of the key-point restrictions. Shippers also demand a through truck service today and not a co-ordinated rail-truck service using a rail car for part of the haul and a truck for part of the haul because of the necessity of transferring the lading. While a shipper can tender freight to a restricted rail motortruck carrier for part of the journey, because of key point and prior and subsequent rail haul restrictions he prefers to use an independent carrier who can provide the entire service without transfer of lading. The condition limiting service to points which are rail stations also limits highway transport of piggyback traffic to plants within the terminal area of a rail station. If a shipper is not within such an area, he is barred from using rail piggyback service.

The New York Central also is heavily endowed with key point restrictions - 46 all told. Mr. Perlman, President of the N.Y.C., has described the effect of two of these key point restrictions: 2.

" For example, when we have less-than-carload freight in our freight house in New York City and we would like to move it overnight to Albany rather than take 2 days by putting it into a boxcar, taking it up there and getting it back out and all, we are not allowed to take that with our own trucks from New York to Albany. We are one of the largest taxpayers in the State of New York and we cannot carry that freight -- with our own motorway service. "

Mr. Wayne A. Johnston, president of the Illinois Central Railroad has described the effect of restrictions on the company's trucking subsidiary.³

"Particularly restrictive is the requirement that what we carry in our trucks must have a prior or subsequent haul by rail. We cannot move shipments in our trucks to, from, through or between more than two keypoints, of which there are 27 on our railroad. The prior or subsequent rail haul restrictions, and the keypoint restrictions, are particularly burdensome, because as a result of them much traffic cannot be handled by truck at all.

For illustration, we have a truck operating daily from Jackson, Miss. to Vicksburg, Miss., thence north to Charlesdale, Miss. When interstate freight arrives by railroad at Jackson, destined to points north of Vicksburg on our truck route, we cannot move such shipments on from Jackson to destination in the truck we have leaving that day. Because of the keypoint restriction in our certificate, we cannot move this freight the 50 miles from Jackson to Vicksburg on our truck. We are compelled by this restriction to put these shipments in a box car at Jackson and move them by rail to Vicksburg, and then when the truck from Jackson arrives at Vicksburg the following day, put those shipments in the truck at Vicksburg. All this shadow-boxing of course means one or two days' delay. "

The various conditions and restrictions that are applied to the railroads in their use of motor carriers create inefficiency and waste and limit the usefulness of the truck to the railroad. While some of these restrictions are necessary from a regulatory point of view, many of them are just of nuisance value to the railroads. Furthermore

they are discriminatory in that only the railroads are similarly restricted and they are discriminatory among the various railroads in that some have unrestricted rights and others do not. Because of this various changes have been suggested in recent years.

Possible Changes in Policy

The railroads have continuously lobbied for greater freedom in operating motor - truck affiliates. The "Doyle" report recommended continuation of the general policy of restricting common ownership: ⁴

" Conversely, however, to permit the railroads (some of which have access to almost vast capital resources) to own or acquire other modes of transportation might very possibly convert our present transportation system into a system of huge and few transportation companies. A good argument might well have been made in favor of such transportation companies, as they exist in Canada and in other countries, at the time the newer competing modes of transportation were getting started in the 1930's. However, it would seem that the far-reaching upheaval in the present competitive situation that might take place if we were to adopt such legislation today would assume the proportions of unscrambling an egg. "

It also recommended, however, that the regulatory agencies be allowed to grant common ownership privileges to companies for a "test" period of three years. At the end of the three year period the company would have to

establish, to the satisfaction of the regulatory agency that its license to continue operations should be extended if their operation has shown itself to be in the interest of the public.

Other recent statements indicate that a change in regulatory policy might soon be in order. President Johnson, in his Department of Transportation Message, stated that the United States lacks a co-ordinated transportation system that permits efficient movement of goods from one mode to another using the best characteristics of each mode: "We must clear away the institutional and political barriers which impede adaptation and change." ⁵ In January of 1966, the Report of the President's Council of Economic Advisors stated the following: " New technological opportunities could be fully exploited by removing obstacles to combinations of modes of transport and by more ready acceptance of shipper and carrier - owned equipment by railroads and motor carriers. " ⁶

Alan S. Boyd, Secretary of Transportation, has made several comments on common ownership. In a recent speech, Secretary Boyd said: ⁷

" So in an immediate sense, we feel that the greatest transportation progress will consist of integrative and consolidating measures at the so-called transfer points. Of course, the inhibiting factors which lower intermodal efficiency are not exclusively technological, they are often institutional. For example, there

would have to be some statutory changes before the full co-ordination arising from common ownership of several modes would be possible. I do not regard that as a territory forbidden to contemplation. "

However in a recent interview with Railway Age, Mr Boyd had the following to say when asked about the Department of Transportation's position on common ownership:

" ----We have not taken any position. There is no work project in the office looking at the question.---We don't see, at the moment, any reason to devote our resources to working on a position. ---This is an area of vast interest where the impact will be of such a major nature if there are changes in the law, and where there is not a critical situation as I see it today - and where it seems to me that this should be a bubble - up sort of development of attitude, rather than a trickle - down from the Department. " 0

One Change in Policy

Prior to 1967 the Civil Aeronautics Board had restricted surface carriers from owning interest in air carriers. The C.A.B. expressed the belief that surface carriers, if allowed to get into air carriage, would emphasize their surface transportation interests and would not wholeheartedly develop the air operations. The Board adopted the principle that the operations must be shown to be supplementary to the service of the surface carriers and also an integral part of that service. One exception had been allowed over the years - the Railway Express Agency, which pioneered in air express. It began moving express in air service in 1929

and continues to do so to this day. It has, however, been denied the right to engage in air freight and in air freight forwarder transportation.

In September 1967, the C.A.B. authorized three major motor carriers -- Pacific Intermountain Express, Consolidated Freightways and Navajo Freight Lines -- to offer air freight forwarding service, either directly or through subsidiary firms. In its decision it allowed these three companies to go into the air freight forwarding business on a five year test basis. In reaching the decision (five-to-one) the Board said: ⁹

" Our purpose in instituting this investigation was to determine whether the traditional restrictions on surface carriers have become outmoded.--- As the record shows, the economies of the dynamic air cargo industry have changed drastically since those restrictions were first evolved. Upon the basis of current facts, the examiner concludes after exhaustive analysis that the applicants' entry will not lead to the ills which persuaded the Board to deny forwarder authority to some motor carriers in the past.--- By the same token, this decision should increase the intermodal carriage of freight by air and truck. The chief reason for the anemic growth of such intermodal carriage to date may well be the lack of economic incentive for surface carriers -- the lack of any reward for them with respect to that part of the journey that would be performed by air. When the incentive is provided, matters of intermodal co-ordination -- easing and facilitating the movement of freight between transport modes -- will be manageable. "

The one dissenter, Vice Chairman Robert T. Murphy sees the decision in the following way : ¹⁰

" First, it should be noted that this case has nothing to do with enhancing intermodal co-ordination-easing and facilitating the movement of freight between transport modes. Other procedures are available, or can be created, to that very worth - while end and no one seriously suggests the contrary. Thus, the applicants, as truckers, come before us with no favored status other than their acknowledged economic strength and surface experience. "

In July 1967, the Southern Pacific Railroad asked the C.A.B. for authority that would allow them to provide domestic and international air freight forwarding service at more than 3,000 cities in the western and southwestern states. In the past Southern Pacific has diversified widely - in addition to train, truck and piggyback operations, it maintains refined petroleum pipelines. It also has announced plans for a 275 - mile coal slurry pipeline, which is one of the largest yet conceived.

The Southern Pacific plans to use extensive truck service in connection with its air forwarding operations, moving air freight to and from points within 25 miles of one of the 63 airports served by scheduled airlines either in trucks operated by the air freight forwarding operation, or by one of Southern Pacific's three motor carrier subsidiaries. They plan to establish intermodal pools of containers for air freight forwarding, trucks and rail operations which would make it possible for a container to be filled with air freight and flown to one destination, refilled with rail freight for a third point. Such a system would

alleviate the need for planes to move empty containers from one point to another simply to balance supply. So far their application has not been approved by the C.A.B.

Summary

Although restrictions against common ownership in the United States have been maintained in areas of railroad interest, there are signs that regulatory policy may change more in favor of allowing common ownership in the near future. While it cannot be expected that legislation will be passed allowing the railroads to freely own and operate other carriers, there may be a liberalization of restrictions on the part of the regulatory bodies in the interest of the railroads. Perhaps the Southern Pacific Air Forwarding operation will be allowed on a five year test basis by the C.A.B.

Common Ownership in Great Britain - History

The first part of the British Transport Act of 1947, set up a body called the British Transport Commission with the general duty " to provide an efficient, adequate, economical and properly integrated system of public inland transport and road facilities " ¹¹ The B.T.C. was given the authority to carry goods by road, rail and inland waterways. It was, however, prohibited from operating taxis and maintenance facilities for cars except as a purely ancillary service to their main operations. The responsibility to operate the transportation system was put under five separate executives covering railways, dock and inland waterways, road transport and hotels. Prior to the Act the railways were decentralized under four separate ownerships. After the Act all financing was centralized and operations were divided into six regions.

Prior to enactment of the 1947 Transport Act the motor carrier industry had been highly competitive and made up of small owners. A certain amount of competition was maintained by "A" license operators, who were small operators who had a prior right to traffic they had handled for years, and "B" license operators who transported goods for the railroad under ancillary arrangements. They were allowed to continue hauling within a 25 mile radius of their operating

bases. The Act also contained two other provisions to prevent the shipper from being exploited by a public transport monopoly. It had one that would allow the shippers to complain to the executive and another that allowed complete freedom for the shipper to engage in private trucking under a "C" license.

Failure of the System

The Transportation Act of 1956 disbanded the British Road Services and the assets were sold off, ~~to~~ with the exception of 7,000 trucks to maintain the trunk network. The main problem with the Act of 1947 was that it did not restrict in any way the granting of "C" licenses. The business community, against nationalization, invested heavily in their own transport facilities. To make matters worse, strict control over railway charges was maintained and nothing was done to relieve the railways of statutory and other financial burdens inherited from their monopoly days. Finally the growth of the motor industry was encouraged and railway modernization delayed. As a result the British Transport Commission was a failure.

As mentioned in the previous chapter, the railway haulage executive concentrated on the most lucrative of truck transportation - the long haul, when the main idea in nationalizing the motor carrier industry was to achieve better utilization of the railroad facilities through co-ordination. The real problem in nationalizing road transport

did not arise from the size of the organization (about 41,000 vehicles), or the type of ownership, it was the element of exclusive monopoly, enjoyed by the road haulage executive, over public long distance carriage by road. That monopoly could have been destroyed by the British Government by lifting the 25 limit from the holders of "A","B" or "C" licenses. Motor carrier transport would then have been opened to private competition without losing the technical efficiency of the co-ordination scheme originally intended.

Basically the problem with the completely nationalized transportation system was that the government did not try to foresee the difficulties that might arise by suddenly changing the entire system. They did not invest in the modernization of railroad facilities and co-ordinated terminals. More important, they let the Road Haulage executive operate essentially as an autonomous body and did not put enough safeguards into the system to assure co-ordination between rail and road management. As a result the financial plight of the railroad continued and road transport flourished, especially in the private sector. Also road-rail relations have now become incidental to the struggle between public and private transport.

Summary

The British System was characterized by practically a total elimination of competition in areas of transport

over 25 miles in length, with the exception of private transport. This resulted in underutilization of the railway plant and consequent failure of the system. Although the basic objective in nationalizing the system was to achieve better coordination between the various modes, this objective was not attained due to poor planning. In the United States, on the other hand, competition is maintained in a wasteful manner in certain areas and good coordination has not been achieved.

F O O T N O T E S

1. Transportation Diversification , op. cit. p. 113
2. Transportation Diversification , op. cit. p. 95
3. Transportation Diversification , op. cit. p. 76
4. " Doyle" Report , op. cit. p. 144
5. Department of Transportation Message , H. Doc. No. 399
89th Cong., 2nd Sess., supra, p. 4
6. Economic Report of the President together with the
Annual Report of the Council of Economic Advisors,
January 1966, H. Doc. No. 348, 89th Cong., 2nd Sess.
7. Remarks by Allan S. Boyd, Secretary of Transportation,
Prepared for Delivery before the National Transportation
Institute of the Transportation Association of America,
Conrad Hilton Hotel, Chicago, Ill. Feb. 1, 1967
8. "The Future of Railroads: Interview with Alan S. Boyd"
Railway Age , Feb. 5, 1968, p.18
9. " Viewpoint - An Intermodal Thaw in Washington ", Railway
Age, Oct. 2, 1967, p. 38
10. " C.A.B. Authorizes Long - Haul Motor Carriers to Enter
Air Freight Forwarding Business", Traffic World, Sept.
30, 1967, p. 21
11. K.M. Gwilliam, Transport and Public Policy, Department
of Industrial Econ., George Allen & Unwin Ltd.,
Ruskin House, 1964, p. 94

CHAPTER 5

COMMON OWNERSHIP IN CANADA

The railways have always been free to acquire interest in other forms of transportation in Canada. In fact in the early 1920's the railroads first began to acquire trucks for the short haul movement of express and less than carload lots. Prior to this the railroads owned drays and cartage companies. At this time all vehicles were used in a strictly ancillary sense to the railroads. In the last thirty years, however, both the C.N.R. and the C.P.R. have acquired more and more trucks as competition from the motor carrier industry has increased. Because of this, recent Royal Commissions have looked into the question of railway ownership of trucks.

The Lessard Commission had the following comment on the fear of the railroads monopolizing road transport: ¹

" We can find no evidence that this large ownership will, except for very short periods, lead to higher prices for truck transport. Such a brief windfall can exist for any truck owner. If the danger is real, the principles enunciated below for significant monopoly can be applied, and the restrictive trade practices legislation invoked.

We have stated that, with free entry, and the ever present possibility of private trucking, the structure of the trucking industry is such that effective monopoly in prices cannot persist. With competition thus protecting shippers, the only other disadvantage of large scale trucking lies in the danger that it poses to the independent truckers. This danger can only persist if railway ownership is more efficient than either independent or private trucking. Efficiency should not be penalized.----However railway ownership of truck lines

involves two policy recommendations concerning this diversification. The first concerns the real economic advantages of combining road and rail facilities. To the extent that these exist, railways must be required to offer to all truckers rail facilities at prices and under conditions the same as are offered to rail-owned trucks ---- The second recommendation concerns the possibility of hidden subsidies from rail assets or income to trucking operations or vice-versa. The Board must be given authority to require the railways to keep strictly separate accounting of their operations intermodally. The costing section of the Board of Transport Commissioners must be able at all times to provide the Commissioners with pertinent cost separations for rail and road operations of the railway company.---- Under these conditions and with the possibility of legislative or regulatory restraint, we see no reasons to limit the entrance of railway into any mode of transport. "

The MacPherson Commission ² noted the increase in rail owned trucking also. They pointed out that, in general truck lines purchased by the railways have continued to operate as subsidiaries of the railroad. They also noted that trucks used by the railways are not used effectively as feeder services to rail box cars and there seems to be little indication that trucks can be co-ordinated effectively in a feeder role for piggyback operations.

An interesting facet of the operation of trucks by the railroads was pointed out by the Commission. In becoming part of a very large rail-truck complex, the inherent flexibility of the independent trucking firm is reduced, even though their operations are largely independent of the railroads. Because they do coordinate their operations to some degree with those of the railway and other ancillary trucking firms, they lose some of the important advantages of small firm decision-making. This is true where the railway

firm tries to provide special services to a shipper. Also there is evidence that the various Provincial regulatory bodies have objections to the railways acquiring interest in trucking firms. On the monopoly question the Macpherson Commission had the following to say:

" Independent trucking firms showed some concern about this growth of rail-owned trucking. Information obtained in the survey indicated their concern was mainly that this could lead to some degree of monopoly of surface transport by the railways. Several reported losing some traffic to rail trucking because of the extra bargaining power imputed to the railways. But most of them were less concerned with present disadvantages than with future prospects in this respect. Taking account of the handicaps, discussed above, which rail-owned trucking faces in future competition with independent truckers, there may be less cause for concern than the latter anticipated. But future trends in public policy with respect to further purchases of independent trucking franchises and the extension of existing franchises was looked upon as a critical determinant of this.----- Highway operations of rail-owned trucking may be expected to increase. But the growth of these intercity highway operations of the railways may not be as rapid as that of independent trucking because of the inflexibilities that attach to integration of highway and rail operations. Future highway operations by the railways may be affected also by the freedom they are allowed in extending their present franchises and in their purchases of additional truck lines.

Overall, the evidence does not suggest that the competitive strength of independent trucking has been or will be significantly weakened by the railways' progressive improvements. Thus far these improvements have not closed the gap in services rapidly enough to prevent an increasing loss of traffic to independent trucking. Indeed the gap may well widen during the next decade " 3

In 1967 the National Transportation Act was passed and in the Act protection for the truckers against rate discrimination or predatory rates has been established in the following way: ⁴

" Sec. 16

(2) Where a person has reason to believe (a) that any act or omission of a carrier or of any two or more carriers, or (b) that the effect of any rate established by a carrier or carriers ---- may prejudicially affect the public interest in respect of tolls for or conditions of the carriage of traffic within, into or from Canada, such person may apply to the (Canadian Transport) Commission for leave to appeal the act, omission or rate, and the Commission shall, if it is satisfied that a prima facie case has been made, make such investigation --- as in its opinion is warranted.

(3) In conducting an investigation under this section, the Commission shall have regard to all considerations that appear to be relevant, including, without limiting the generality of the foregoing, (a) whether the tolls or conditions specified for the carriage of traffic under the rate so established are such to create (i) an unfair disadvantage beyond any disadvantage that may be deemed to be inherent in the location or volume of the traffic, the scale of operation connected therewith or the type of traffic or service involved, or (ii) an undue obstacle to the interchange of commodities between points in Canada or an unreasonable discouragement to the development of primary or secondary industries or to export ~~and~~ trade in or from any region of Canada or the movement of commodities through Canadian ports; or (b) whether control by, or in the interests of a carrier in, another form of transportation services may be involved.

(4) If the Commission, after a hearing finds that the act, omission or rate in respect of which the appeal is made is prejudicial to the public interest, the Commission may....make an ordering requiring a carrier to remove such prejudicial feature

in the relevant tolls or conditions specified for the carriage of traffic or such other order as in the circumstances it may consider proper, or it may report to the Governor in Council for any action that is considered appropriate.

If a trucker could not obtain satisfaction for grievances against the railroad under this section of the act , it is possible to protest any proposed acquisition of a trucking company by a railroad under section 20 of the Transportation Act of 1967 . It reads as follows: 5

"(1) A railway company, commodity pipeline company, water transportation company or person operating a motor vehicle undertaking or an air carrier that proposes to acquire, directly or indirectly, an interest, by purchase, lease, merger, consolidation or otherwise, in the business or undertaking of any person whose principle business is transportation, whether or not such business or undertaking is subject to the jurisdiction of Parliament, shall give notice of the proposal to the Commission. (2) The Commission shall give.... such public or other notice of any proposed acquisition as it appears to be reasonable under the circumstances, including notice to the Director of Investigation and Research under the Combines Investigation Act. (3) Any person affected by a proposed acquisition or any association representing carriers or transportation undertakings affected by the acquisition may, within such time as prescribed by the Commission, object to the Commission against such acquisition on the grounds that it will unduly restrain or otherwise be prejudicial to the public interest. (4) Where objection is made....the Commission (a) shall make such investigation, including the holding of public hearings, as in its opinion is necessary or desirable in the public interest; (b) may disallow such acquisition if in the opinion of the Commission such acquisition will unduly restrict competition or otherwise be prejudicial to the public interest; and any such acquisition within the time limited therefore by the Commission ... is void "

If the Board rules that a certain acquisition is not in the public interest, the company in question would still have the right of appeal to the Supreme Court of Canada and to the Cabinet. The idea of this legislation is not to prevent co-ordination, it should tend to assure that co-ordination is the primary interest of the purchaser. So far no restrictions have been placed on the railroads by the Commissioners under the auspices of this Act, but there have been cases in Provincial Courts, which will be discussed later.

Canadian Pacific - A Transportation Company

Canadian Pacific Railroad takes pride in being described as "the world's most complete transportation system". All in all it serves both passenger and freight customers over 85,000 miles of integrated routes by land, sea and air, operating on five continents. It is the largest privately owned transportation company in the world and the largest privately owned railroad outside of the United States, with 21,000 miles of railroad in both countries. It is North America's third largest truck and truck oriented organization, operating on about 21,000 miles of truck routes. It also owns an international airline, operates steamships and owns a large interest in a pipeline.

In its other divisions, Canadian Pacific owns eleven hotels, runs Canada's largest oil and gas company, owns 854,000 acres of choice farmland, vast forest preserves

in British Columbia, thousands of acres of mineral deposits in the Northwest Territories, and major holdings in Cominco, a mining and smelting company. It also has title to many acres of expensive downtown real estate in cities across Canada, which, all-in-all make it a truly diversified company.

Despite its multi-faceted operation, Canadian Pacific is first a transportation company. With the opening of the transcontinental rail line in 1886, a vessel chartered by Canadian Pacific sailed with tea from Yokohama to Vancouver where it was transshipped for delivery to Eastern Canada. Then in 1891, Canadian Pacific started a one-carrier mail service between the Orient and Great Britain, using the railway as a "land bridge" and thus reducing the time in transit by more than two weeks, as compared to the direct sea route. In early years Canadian Pacific conducted many services that in the United States were conducted by the government. For example they at one time had an immigration department, colonization, irrigation and farm development department to help populate the Western Provinces. Canadian Pacific has always been a widely diversified company not only one which owns and operates all modes of transportation.

Essentially C.P.R. is divided into three functional groups, two dealing primarily with transportation and the

last, Canadian Pacific Investments Limited, a wholly owned subsidiary of the C.P.R., which is engaged in many operations not directly related to transportation. Chart no. 1 shows the major divisions of the company. (For relative sizes of investments see appendices I,II & III).

Highway Services

In 1948 C.P.R. began its trucking operations by buying Island Freight Lines on Vancouver Island. Then in 1958 the C.P.R. spent \$8.3 million to acquire a portion of the common and preferred stock of Smithsons Holdings Limited and Smith Transport Limited.⁶ An additional \$1.0 million was added at the same time to the company's investment in Canadian Pacific Transport Ltd. In 1960, Smith Transport and Smithson's Holdings became wholly-owned subsidiaries of the company with the purchase of the remaining common and preferred stock for \$6.8 million, resulting in a total investment in shares of \$15.1 million and ownership of Canada's largest truck company. Smith Transport embarked on a policy of traffic development and diversification after completing a major reorganization and re-equipment program in 1967. The following companies have been purchase by the C.P.R. over the years: (See table VI)

C.P.R.

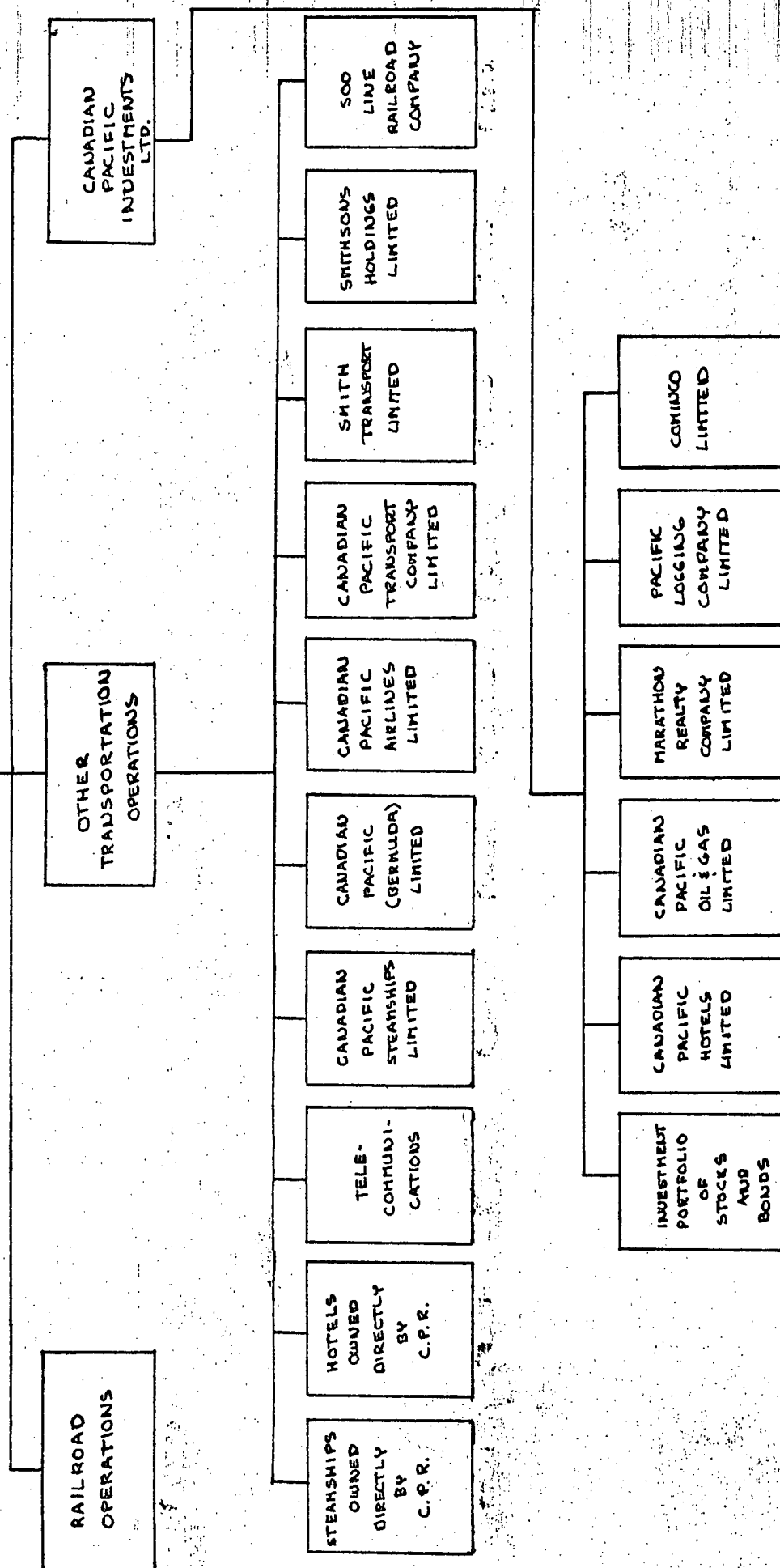


CHART #1 - ORGANIZATION OF C.P.R.

Table VI - C.P.R. Truck Companies

Canadian Pacific Transport Ltd.
Island Freight Service
Smith Transport Ltd.
Canadian Pacific Merchandise Services
DeLuxe Transport Ltd.
Norman's Transfer Ltd.
Montreal Cornwall Express Ltd.
Lawson Transport Ltd.
Brydges Transport Ltd.
O.K. Valley Freight Lines Ltd.
Dench of Canada Ltd.
Loucks Trucking Service Ltd.

Source: Personal correspondence- Canadian Trucking Associations

In Western Canada these companies have been absorbed into Canadian Pacific Transport. In the East, The Smith companies and Canadian Pacific Express handle the trucking needs of the shipper. Smith Transport remains a separate subsidiary company. The routes covered by the Canadian Pacific System, shown in figure 3, include such areas of recent development as Labrador and the northern areas of Saskatchewan, Alberta and British Columbia. In 1967 the various trucking activities of C.P.R. employed 7,980 people and used 1,757 trucks for short haul, 2,645 highway trailers and 1,251 highway tractors.

Merchandise Services

In order to further their operations as an integrated transportation company, the C.P.R. established the Department of Merchandise Services in Western Canada in 1959.

Prior to the formation of Merchandise Services, shippers used the services of Canadian Pacific and its subsidiaries to fulfil their demand for transportation. This required ~~car~~ traffic managers to be familiar with the tariffs and schedules of: Canadian Pacific rail l.c.l. freight, Canadian Pacific Express, Canadian Pacific Air Freight and Air Express, Canadian Pacific Transport, Dench of Canada, O.K. Valley Freight Lines, Island Freight Service and Smith Transport to the extent that the latter connects with Canadian Pacific Transport to provide East - West transport.

Now the traffic manager merely has to phone Merchandise Services to obtain the services available under the previously named Canadian Pacific operations. This new department was organized on the West coast and now has been extended across Western Canada to the Lakehead. The two main goals of the department are to: (1) bring about complete integration of rail, l.c.l. , express and truck operations in the handling of less-than-carload and package freight; and (2) to "provide the best possible service at maximum efficiency and minimum cost " through co-ordination under a single administration all available transport modes. The goals of the department are in keeping with Canadian Pacific's concept of "total transportation" as described by W.H. McDonald, general manager of C.P. Merchandise Services: 7

"

Our concept of total transportation is to provide a complete service which will meet the needs of various shippers whose requirements differ as to rates, schedules and equipment. This involves trains, trucks, ships, planes and any combination of these methods of transportation which enable us to offer a service from the producer to the consumer or any portion of such service as the individual shippers require. While transportation problems differ between industries, all requirements revolve around service, equipment and price. In any endeavor to solve transportation problems, these three areas must be considered. "

"Merchandise Services" has grown rapidly since its inception on Vancouver Island in 1959, particularly in the trucking field. During 1966, CPMS carried about three billion pounds of cargo and, by the end of the year, its fleet of pick-up and delivery trucks operating between the Lakehead and the Pacific Coast numbered 549. Canadian Pacific Transport Company operated on 8,960 unduplicated route miles in the year with a fleet of 290 tractors and 679 trailers.⁸ In 1965, in order to secure additional heavy hauling licences in British Columbia and entry into the northern parts of the Province, C.P. Transport purchased F.W. Loucks Trucking Services with terminals in Prince George, Quesnel and Dawson Creek. Since that time they have not purchased any additional trucking companies.

One of the prime arguments of those opposed to common ownership is that there is a decrease in technological innovation as a result of a reduction in competition. C.P.R. has demonstrated that technological innovation is

one of their primary interests, especially in the bulk material handling field. C.P. Transport entered the bulk handling field in 1964, moving cement in pressurized tank trailers from rail cars to dam sites on the Columbia River in British Columbia. Since that time, the company has taken other steps to provide specialized equipment to meet the needs of the bulk materials shipper. One of the more unique operations has been the movement of molten sulfur by rail and then the transferral of the mineral to C.P. trucks for delivery to a customer in Gold River for pulp and paper processing. To handle the molten sulfur, which freezes at 248 ° Fahrenheit, Merchandise Services bought special highway trailers designed to keep the sulfur at 300 ° Fahrenheit.

Another operation using three modes, has been developed on an experimental basis in British Columbia to handle bulk fertilizer. The fertilizer is loaded from a specially-designed highway carriers into aircraft for fertilizing immature forests from the air. It was sent in special rail hopper cars from Calgary to Cowichan Lake, B.C., worm-fed into torpedo-like highway trailers, hauled to the airstrip and finally blown into dusting aircraft. The process eliminated the previous method of trucking bags of fertilizer from an ordinary box car and having to load the planes by hand. In other areas of trucking innovation C.P.R., with the assistance of the National Research Council, have developed an envelope-cooled refrigerated trailer.

In the development of intermodal terminal facilities C.P.R. has also been active. The first Merchandise Services terminal was opened in Vancouver on Oct. 1, 1959. Built at a cost of \$840,000 it became the prototype for other major C.P.M.S. terminals. Two large terminals were contracted in 1961 - one in Calgary at a cost of \$800,000 and one in Edmonton at a cost of \$560,000. There followed a \$730,000 terminal in Regina in 1962 and the largest terminal was constructed in Winnipeg at a cost of \$1,670,000 in 1963. This terminal, at one time, can handle 33 highway trailer vans, 33 city pick-up and delivery trucks and 24 rail freight and express cars. Smaller, but equally efficient terminals have been constructed at Nanaimo, Duncan and Trail, B.C. and at Brandon, Manitoba. In other areas existing facilities have been modified and expanded to meet Merchandise Services requirements. Finally in 1967 new terminals were constructed at Gold River and Prince George, B.C.

These terminals are completely mechanized and are very efficient. Packaged freight is unloaded from a pick-up truck, passed through a sorting center and loaded into the proper railway car in a fraction of the time required manually. Each major C.P.M.S. terminal includes a main building with adjoining rail and trailer docks to handle incoming and outgoing rail and highway shipments. Beneath the trailer and rail docks, a system of chutes and conveyor belts move the shipments from trap doors located on the dock floors to a sorting center. The conveyor belts deposit the shipments on revolving platforms and packages are then taken to the

appropriate car, trailer or delivery truck by a four wheel towcard that operates on a towline moving in a groove in the terminal floor. To assist in controlling the dispatch of trailers over wide areas of Western Canada from these terminals, principle points are linked by a high-speed tele-type circuits augmented by telex service between Winnipeg, Regina, Calgary, Edmonton and Vancouver. Mobile radios are utilized for the routing of local pick-up and delivery trucks through the city streets.

Service is very important to a shipper who has a wide distribution area. In Western Canada C.P. Merchandising has developed entire distribution programs, using both truck and rail, to permit shippers to confine inventories to one or two central points in the West and thus reduce warehousing costs. For example one large company distributing throughout Western Canada was able to reduce inventory by 30% using C.P.R. distribution service. The extensive coverage provided by C.P.'s rail and highway routes makes it possible for most shippers to cover their entire distribution area dealing solely with C.P.R. Distribution is also undertaken directly from carloads completely eliminating warehousing and frequent service schedules from the Merchandising terminals permit overnight and second morning delivery in most cases.

C.P.R. has also set up a new rate structure for the express and l.c.l. moving in rail service which relates charges more directly to the actual cost of handling the shipments. In the rate structure are incentives for individual

shippers to reduce costs by increasing the size of shipments and sending the traffic over longer distances. Now the C.P.R. is thinking of establishing agreed charges for a customer that would cover raw materials inbound to his plant and finished products outbound, including distribution. Finally sales training programs have been established, industry service representatives appointed and traffic research undertaken - all with a view to making the shipper more aware of the complete service available from C.P. and market these services to the customer.

Containerization

Canadian Pacific was the first Canadian Railroad to use containers. During the last decade C.P.R. has undertaken a number of experiments in containerization. Initially, the company started work on a container car with Strick Co. This work lead to development of the "Flexi-Van" system. About three years ago the Steadman side transfer system was perfected with the help of C.P. It permits a low cost transfer of containers from rail to road in about two minutes with one man serving as the operator.

In 1967 about 5,000 containers were used on C.P. trucks, ships and rail and a big increase in volume expected in 1968. In overseas traffic, C.P. is handling containerized mail from Rotterdam to Montreal and is shipping general cargo via container in the latest addition to the C.P. fleet - the "Beaveroak". The container facilities built into the

new ship allow it to carry ten refrigerated containers and between eighty and ninety dry cargo containers, each twenty feet long and eight by eight in cross-section.

Problems

Although Canadian Pacific has moved closer to being a true transportation company than perhaps any other railroad company in the world without government aid, it has found that there are internal problems. These have been described very aptly by W.J. Stenason, V.P. of Company Services - C.P.R.:¹⁰

" There are, of course, internal operating problems which are unique to an integrated transportation company. Transportation is inherently complex, and its physical integration particularly complex. Vested interests in certain modes exist even within the multimodal firm, and the process of disengaging from certain modes and expanding into other modes does not occur without friction. The "profit center" approach, which is vital to the dynamic management of a diversified enterprise, must be reconciled with the needs for overall system optimization at the corporate level. Labour problems are certainly not assisted by having to deal with a large number of labour organizations simultaneously, nor by the differing contract conditions and terms which ensue. "

It must be added that these problems are ones which occur in any diversified enterprise and are ones which can be solved over time.

As yet there has been no litigation or serious complaints against Canadian Pacific insinuating that they are trying to monopolize transport. The one aspect of C.P.R. that sets them apart from Canadian National is that the C.P. investment portfolio contains securities of companies that

are heavy users of their transportation services. For example, Canadian Pacific Oil and Gas is only a producer of gas and oil mainly in Alberta. Husky Oil, on the other hand, is not only in the refining and marketing areas, but also produces heavy crude and is located in Saskatchewan. By investing in Husky, C.P.I. becomes, indirectly, an integrated producer with both product and geographic distribution. A minority interest in Central Del Rio has the effect of increasing this diversification. C.P.I.'s rather large holding of Trans-Canada Pipe Lines also displays vertical integration with C.P. Oil and Gas and gives horizontal integration into this transportation field to C.P.R.

Canadian National Railroad

Canadian National is not as diversified a company as Canadian Pacific and essentially has followed the C.P.R. in their entry into other modes of transportation and their approach to service, in certain respects. They are not, as mentioned previously, diversified into fields other than those related to transportation., (see Appendix IV). C.N.'s entry into trucking was retarded somewhat by Parliament's refusal to wholeheartedly allocate capital funds for the purchase of trucks. Parliament's slow endorsement of C.N.'s trucking endeavors was influenced by the rationale that allowing a government owned railroad to purchase trucks was tantamount to nationalizing a segment of the trucking industry.

In 1960 Canadian National made its entry into the trucking field by purchasing Midland Superior Express of Calgary and East-West Transport, both long-haul truckers. In the East they purchased Empire Freightways. Since this time they have purchased other trucking companies in Central and Western Canada, as shown in table VII.

Table VII - Canadian National's Truck Lines

Canadian National Transportation Ltd.
 D. Chapman and Co. Ltd. ... British Columbia
 Eastern Transport Ltd. ... Sydney, N.S.
 East - West Transport Ltd. ... Manitoba
 Empire Freightways Ltd. Ontario
 Hoar Transport Ltd. Ontario
 Husband Transport Ltd. ... Ontario
 Midland Superior Express ... Alberta
 Scobies Transport Ltd. ... Ontario
 Sydney Transfer and Storage Ltd.
 Toronto-Peterborough Transport Co. Ltd., Ont.

Source: Personal correspondence -Canadian Trucking
 Associations

As of December 31, 1967, the Canadian National owned or leased a total of 1795 trucks, 1141 tractors, 3033 semi-trailers and 834 containers - total 6803 units. (See Appendix VI)

In 1961 Mr Gordon, then President of the C.N.R., described how the company purchased trucks and their general trucking policy:¹¹

"....the C.N.R. decided to supplement railway services with collateral trucking facilities wherever an integration of operations would effectively improve the services, and, therefore, its competitive position. In endeavoring to implement this policy, the C.N.R. is proceeding cautiously and, as a general rule, is endeavoring to enlarge its trucking facilities through a

very selective purchase of existing highway operators. In this way, it is not adding suddenly to the total transportation facilities of the country, since that would likely produce an undesirable surplus and lead to a period of uneconomic competition by the weaker operators in striving to maintain their position. Our objective is to acquire a trucking pattern so as to obtain for our own operations the benefits of co-ordination with railway facilities or even replacement of them in those cases in which the truck is the better tool.

The acquisition of the trucking companies now owned or optioned by the Canadian National is a step toward implementation of this policy. This is a logical follow-up of competitive rates, agreed charges, piggyback services and the rail-head and master agency principles of operation. Effort has been made to select those highway services that best fit into an over-all plan of making the best use of all transportation media. Thus the acquisition of truck lines, in addition to improving the competitive position of the railway and gaining access to markets not served by rails, provides opportunities of economy through integration of rail and highway facilities and substitution of rail service for highway services through increased use of rail piggyback. "

The company has not altered this policy over the years (See Appendix V).

Master Agency and Railhead Principles

The " Master Agency Principle " that Mr. Gordon used is basically C.N.'s plan for a reduction in the number of branch lines and stations now maintained by the C.N.R. Mr Gordon says: " We are using the facilities of the railway to get the maximum advantage of heavy loading of cars and bring them to a central point, almost like the hub of a wheel. " In effect they survey the area around this "hub" to determine whether or not they can better handle the traffic at the subsidiary stations around the "spokes" of

the wheel or whether they would fit naturally into the hub. In other words if they do fit into the "hub" - they will provide truck service, but if the amount of traffic is such that at any particular spoke it would still be advantageous to run a train - the train is used.

If they close an agency or station they provide a telephone system which is available to everyone in the town. A master agency is established at the key point and the residents can call long distance if necessary at no charge. At the central point the operators connect the caller to the railway department best suited to the caller's needs. This principle, along with the use of trucks hopefully will allow C.N. to serve a much larger area than they did in the past, which is quite an important consideration. Both the C.N.R. and C.P.R. have effectively increased their marketing areas through the use of trucks. Because of this the railroads are now more competitive between themselves - a further argument that competition within the transportation industry is not reduced by common ownership.

Mr Gordon says that: 12

" This is a very,very forthright effort to stem deterioration of our traffic, particularly in non-carload freight.....we decided we must eliminate the existing differential between rail and highway transportation in so far as the quality-price of service relationship is concerned. We felt that a substantial improvement in the less-carload freight situation could best be obtained by first adopting a system for handling this type of traffic that would not only increase service but reduce costs, and therefore bring about a parallel lowering of rates. "

The " railhead " plan involves the dispatch of heavily laden rail cars to a centrally situated railhead location loaded with goods for distribution by truck to various destinations. This is essentially the inverse of the "master agency" principle. Taken together these two principles are incorporated in C.N.'s " Express Freight Services " which is the parallel to C.P.'s Merchandising Services:

" The aim (of the department) is to take the best of (express and l.c.l.) services and provide one superior high speed service at rates competitive with other forms of transportation. The ultimate goal is to present the shipping public with one department and one form of documentation for all non-carload consignments. Eventually it is anticipated that the railway will have a combination of rates and services on other-than-carload traffic that will permit solicitation directed specifically to non-carload traffic with the same effort and cohesion that is now being expended on carload traffic. " 13

Originally the C.N.R. called this the department of Merchandise Services, but in recent years changed it to differ from C.P.'s department. Canadian National definitely emphasizes the railway role in their handling of l.c.l. lots:

" The purpose of the department of Merchandise Services is to rationalize and co-ordinate the various types of rail or highway transport which are or will be available in order to make the railway as competitive as good practice dictates in that area of transport where the highway carrier attracts traffic because of speed and flexibility of service, as well as in the smaller area where the highway carrier enjoys a cost advantage. " 14

However Mr. Gordon does not fail to recognize that; " There are many instances where traffic that is operating under modern

conditions is not best handled by the railway. " 15

Comparison of CN.R and C.P.R. Policy

Canadian National is prepared to handle long - haul traffic with trucks where " the truck is a better tool " and for this reason they have also established a department of Highway Services which, it is presumed, would be prepared to develop special equipment to handle the needs of the shipper. Nevertheless, their department of Express Freight Services does emphasize the railway role - at least in objectives. For example in a speech before the Canadian Industrial Traffic league, Mr. Gordon explained what the railway's role is in total distribution: 15

".....But rail transportation by itself is not sufficiently flexible to be the only service we are prepared to offer in the market place. We recognize that there is a substantial part of the transportation market where integrated truck - rail transportation is superior with respect to cost and service. To this end we have been building up the highway side of our operations by expanding our own trucking services and by acquiring a limited number of outside trucking companies. We also intend to explore the use of interline rate arrangements with independent highway carriers wherever these will best serve the needs of the market. In this process we have been careful that our expansion will be complementary to rail service and that the natural advantages of rail and highway will be preserved and developed. "

In fact Mr. Gordon emphasizes the fact that he would rather see joint rate and through route agreements:

" From a technical point of view, complete unification of rail, road, water and air into a single transportation system may be quite possible; but it may not be possible, or necessary, or desirable from an organizational and competitive point of

view. What I am suggesting is not a greater degree of common ownership or centralized control over day-to-day operations, but a voluntary arrangement under which independent units exchange ideas and information and make services available to each other with the primary purpose of providing maximum efficiency and economy in operation by avoiding wasteful duplication of services and a need for subsidizing uneconomical operations. ¹⁶

In contrast Canadian Pacific openly admits that they are interested in all phases of transportation. They too are interested in utilizing the capacity of the railroad to a greater degree, but they do not suggest that common ownership might not be desirable from "an organizational and competitive point of view." C.P. appears to believe more in intrafirm competition and C.N. believes in co-ordination with centralized control of trucking facilities, using the railroad to best advantage. Canadian Pacific does seem to make a higher profit on trucking operations than does C.N. In 1966 the net operating profit of C.N.'s trucking companies was \$1.4 million whereas C.P. netted \$7 million in 1967. ¹⁷

Summary

Basically the C.N.R. uses their trucks in the same way that the C.P.R. does, but they do emphasize that the railroad is their main interest. While they do not emphasize suiting the customer's need with specialized truck equipment, they do seem to utilize trucks quite heavily in their operations. All told both railroads haul only 5-6 % of the inter-city ton-miles moved by truck in Canada and both have the following number of trucks (See table VIII).

TABLE VIIIC.P.R. - C.N.R. Total Units of Equipment

	<u>Trucks</u>	<u>Tractors</u>	<u>Trailers</u>	<u>Containers</u>
C.P.R.	1,757	1,251	2,645	5,000 (approx.)
C.N.R.	1,795	1,141	3,033	834
	<hr/>	<hr/>	<hr/>	<hr/>
Totals	3,552	2,392	5,678	5,834

Source: Personal Correspondence(See Appendix V)

This is in comparison to the 1,266,024 powered motor vehicle units registered in Canada in 1966 or C.P. and C.N. in combination own about 0.47% of all motor powered vehicle units in Canada (trucks and tractors in the previous table.) This seems to indicate that, as yet, the railroads have not succeeded in monopolizing the trucking industry to any extent.

C.N.R. - C.P.R. Operations in British Columbia

Canadian Pacific started their "multimodal approach" to transportation in British Columbia, with the inception of Canadian Pacific Trucking and Merchandising Services. All told the C.P.R. operates 2,700 miles of railway line, 3,500 miles of highway routes and 1,100 miles of coastal shipping lanes in the Province. C.P. Merchandising Services carry all the cement and oil to the Columbia River power projects and, as

previously described, haul sulphur to the pulp mills on Vancouver Island. On other parts of the Island they provide service to nearly every small community and they are the only railroad to serve many parts of the Island. (See Map # 2). In nautical endeavors Canadian Pacific's R.B. Angus sails from B.C. to Japan with lead concentrates and lumber. In addition they are having three special bulk carriers built for charter to MacMillan-Bloedel Co. for use in the lumber trade. Each vessel is 28,000 D.W.T. with a special hull design for loading of lumber. Finally Canadian Pacific has ordered two 57,000 ton vessels to transport Canadian coal to Japan, scheduled for delivery in late 1969. These ships will presumably be used in conjunction with C.P.'s unit coal trains running from Coleman, Alberta to Port Moody, British Columbia.

The Canadian National Railroad was later getting into the British Columbia trucking industry. Prior to 1966 only a few Canadian National Trucks operated in the Province and no other trucking companies had been purchased at that time. Then in 1966, Canadian National Transportation, C.N.'s trucking arm, purchased the shares of D. Chapman and Co. Ltd., a trucking firm operating throughout the interior of the Province, (See Map # 1). At present the trucking arm is nearly as large as that of Canadian Pacific's as can be seen in Table IX.

MAP No. 1

CN-CP TRUCK SERVICES IN BRITISH COLUMBIA

CLASS # I

----- CN TRUCK
ROUTES

----- CP TRUCK
ROUTES

CLASS # III

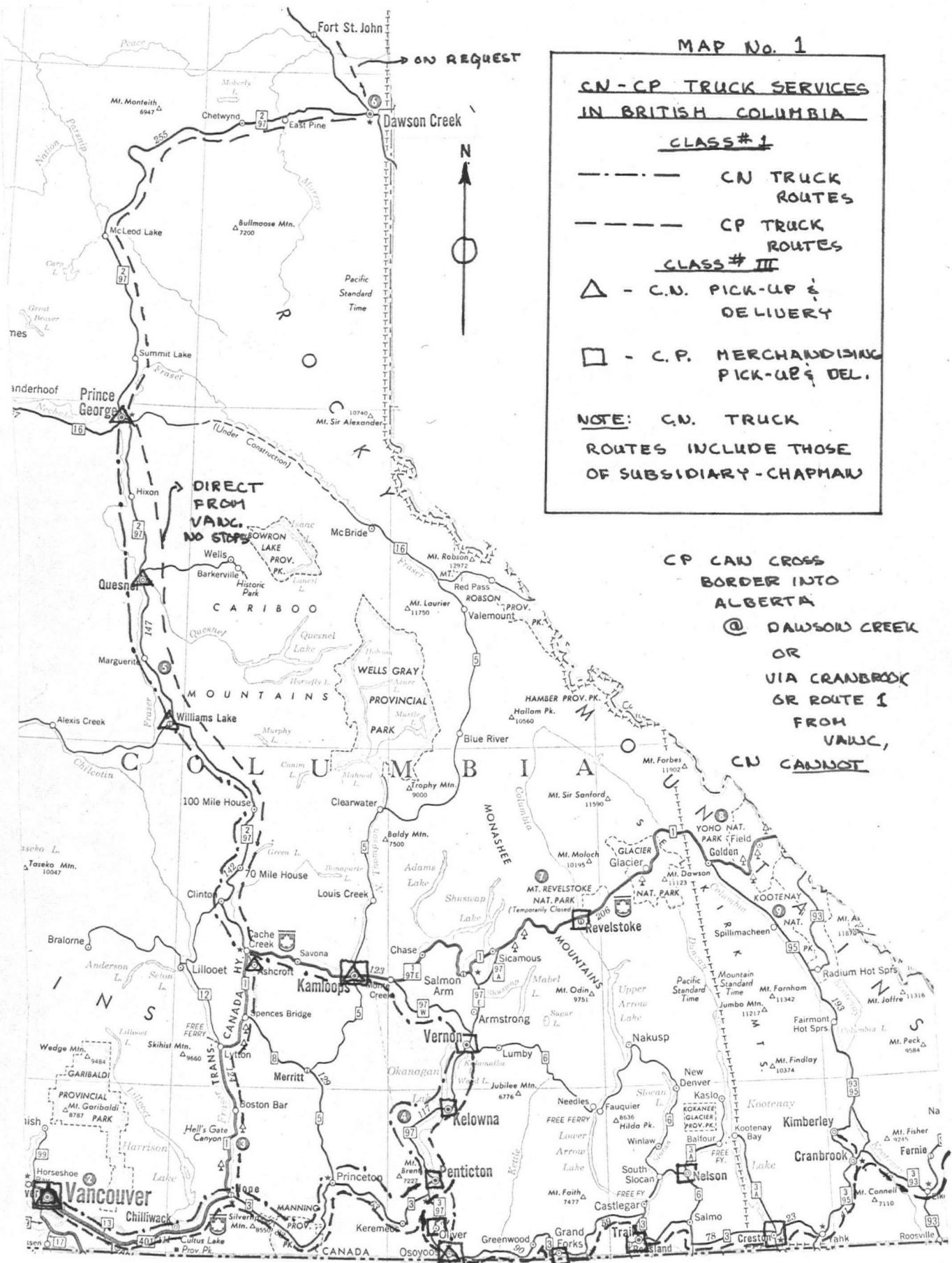
△ - C.N. PICK-UP &
DELIVERY

□ - C.P. MERCHANDISING
PICK-UP & DEL.

NOTE: C.N. TRUCK
ROUTES INCLUDE THOSE
OF SUBSIDIARY-CHAPMAN

CP CAN CROSS
BORDER INTO
ALBERTA

@ DAWSON CREEK
OR
VIA CRANBROOK
OR ROUTE 1
FROM VANUC,
CN CANNOT



MAP NO. 2

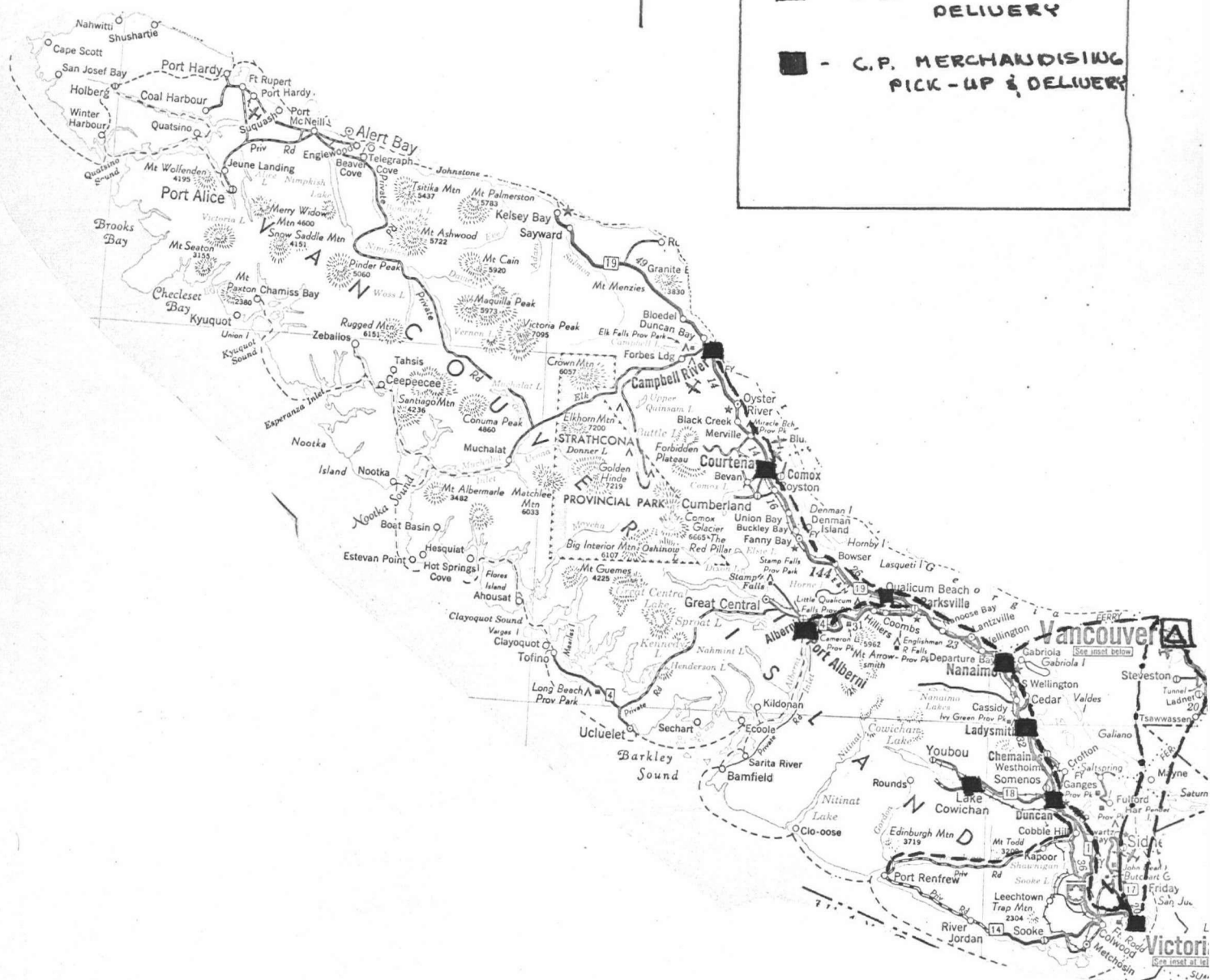
CN-CP TRUCK SERVICESON VANCOUVER ISLANDCLASS # 1----- CN TRUCK
ROUTES----- CP TRUCK
ROUTESCLASS # III△ - C.N. PICK-UP &
DELIVERY■ - C.P. MERCHANDISING
PICK-UP & DELIVERY

TABLE IXC.N.R. - C.P.R. Trucking in British Columbia

	<u>Class I*</u>	<u>Class III*</u>	<u>Total/Co.</u>
Canadian National			
C.N. Transportation	16	30	
D. Chapman Co. Ltd.	115	34	195
Canadian Pacific	165	92	257
	<u>296</u>	<u>156</u>	<u>452</u>

* Class I - Point to point, no Pickup & Delivery
 Class III - Pickup & Delivery only

Source: Files of Public Utility Commission, British Col.

Both railroads combined do not operate as many trucks in the Province as Johnston Terminals Ltd., who own and operate 478 units. Maps 1&2 show, however, that the railroads have succeeded in obtaining a fairly good market coverage in the Province.

Opposition to Common Ownership in Canada

In the beginning of the chapter it was mentioned that as a result of of trucking protestations before the government, Sec. 20 of the Transportation Act of 1967 was enacted. The opposition arguments of the Canadian Trucking Associations are the same as those used by the American Trucking Association with one exception. Here the truckers argue that the railroads are heavily subsidized by the government and should not be given a free hand to engage in trucking activities until they improve their operations to such an extent that subsidization is not required.

At the Provincial level the Province of Quebec

was the first to oppose Canadian National's entry into trucking. In a policy statement the Province expressed the following view: 18

" We are for increasing the efficiency of the railways, with trucks serving as a supplement to railway operations on a limited basis. We are against the railways acquiring a dominant or near-monopoly position in the trucking industry at the expense of independent truckers and to the detriment of the interests of the public at large. ... We would like to remind the railways that their main obligation to the Canadian people, on historical, economic and social grounds is to run an efficient and economically sound railway system, not a trucking business. Hence we expect them to stay out of the trucking business except in so far as it is essential on a limited basis to fulfill efficiently their functions as a railway. ... In our opinion, a trucking arm supplementary railway operations should not go beyond pick-up and delivery services provided by railway-owned trucks in Metropolitan centers and major urban centers. "

On June 22, 1964, Quebec showed that it meant what it said by rejecting the application of Midland Superior Express Ltd., subsidiary of Canadian National Transportation, for operating rights between points in Quebec and Manitoba and Quebec and British Columbia. The Manitoba Motor Carrier Board ruled on February 17, 1964, that there would be added to Manitoba operating rights previously held by Midland, the authority to transport freight from Winnipeg "to Montreal and Hull in the Province of Quebec, as and when authorized by the Quebec Transportation Board." 19

Prior to this decision the Quebec Board had allowed C.N.T. to purchase Midland-Superior and operate on existing routes, but in this case the Board had Said:

" It is stated that the foregoing (policy statement in the previous quote), is the policy of the government of the Province of Quebec. As no indication has been given to the Board of any change in policy with respect to application made by the railways, the Board has come to the conclusion that it is not in the interest of the public of this Province to grant the application. " 20

The next Province to reject C.N.R.'s expansion in trucking was Newfoundland. The following recommendations of the Newfoundland Royal Commission on Truck Transportation exemplify the attitude of Newfoundland to further railroad expansion into the trucking field: 21

" ...The Commission feels that the Railway does, and will continue doing, an excellent job as a carrier of bulk and heavy goods. For the national economy, all emphasis should be placed on the expansion of the operation in which the railway excels.... Accordingly the Commission is of the unanimous opinion that the C.N.R.-C.N.T. Ltd. truck operation should be confined to station - to-station, and should not be permitted to engage in direct competition with private trucking.(recommendation #1).

10.3 Not To Purchase Trucking Firms

The overwhelming preponderance of evidence submitted to the hearings showed that C.N.R.-C.N.T. Ltd. should not be permitted to purchase or control directly or indirectly private trucking operations. The truckers and other witnesses indicated that to do this would be allowing the C.N.R. to do something indirectly that they are not empowered to do directly: that is to take over and nationalize the private trucking industry.

The Commission feels that private industry should not be interfered with by the state unless it is in the public interest to do so. The Commission is of the opinion that it is not in the public interest for C.N.R.-C.N.T. Ltd. to be allowed to purchase private trucking fleets (Recommendation #2) "

Finally the C.N.R. has been opposed by the Interstate Commerce Commission in the United States. When C.N. Transportation bought control of Husband Trucking Co., they also acquired control of a subsidiary which operates in the United States - Husband International Transport. On June 7, 1968 the Commission reached the decision that:²²

"the C.N.R. (should) divest itself of 'any and all interest', directly or indirectly ', in the truck line (that) will take effect 30 days from June 7th, the date it was served.....The examiner concluded C.N. Transportation and Transport in his findings of unlawful common control, and recommended that they, as well as the C.N., be directed to dispose of all interest in International. "

Canadian Trucking Associations' Policy

Over the years the Canadian Trucking Associations, with affiliated provincial organizations across Canada, have been opposed to railway entry into trucking in general. One problem has been ~~an~~ general lack of a completely unified trucking front against railroad entry. Two problems disturbed the management of the Associations in Ottawa. One problem was the apparent willingness of the largest trucking companies to sell their assets to the railroads for a proper price. The other problem was the attitude of the Automotive Transport Association of Ontario, the largest member of the Associations. They were not opposed to railway entry into trucking provided that the railroads operate these truck lines independently of the railroad and abide by the the regulations set for other truck lines in the Province of Ontario. The Trucking Association

of Quebec, on the other hand, has remained violently opposed to railway ownership of truck lines, except for pick-up and delivery.

Recently, however, the C.T.A. has been able to solidify their policy with respect to trucking:²³

" C.T.A. policy adopted at the 1967 Annual Meeting regarding rail entry into the trucking industry (has been) amended so that, at the discretion of the President and Executive Director, C.T.A. may oppose any attempts on the part of a railway or a railway subsidiary:

(a) To acquire any further interest, directly or indirectly, by purchase, lease, merger, consolidation or otherwise in any trucking business or undertaking, whether such an undertaking is merely Provincial or not, before the Canadian Transport Commission or any Provincial regulatory agency.

(b) To extend its operating authority in the trucking business or the operating authority of trucking companies directly or indirectly owned or controlled by a railway company or railway subsidiary.

(c) Provided that the C.T.A. shall oppose under (a) and (b) where opposition has been filed on behalf of at least one trucking firm which is a member of a Provincial Association, and that in addition at least one affected Provincial Association requests C.T.A.'s intervention. "

Conclusions

Although common ownership has not been restricted in Canada, a trucker or any other carrier under the Transportation Act of 1967, may oppose further entry of the railroads into other transportation modes. As yet it does not appear that railway entry into other modes has been detrimental to the public interest. In fact, the progressive marketing approach of the C.P.R. may well be the answer to railroad problems in other countries. The C.N.R., while not moving as rapidly

into diversified activities, is also a progressive organization. All told Canada's regulatory policy, with its new precautions, is being carefully scrutinized by other countries, and may well set the trend in allowing intermodal ownership in these countries in the future.

FOOTNOTES

1. Royal Commission on Transportation, Vol. II, op. cit. p. 42
2. Royal Commission on Transportation, Vol III, op. cit. p. 76
3. Ibid. pp 76-79
4. National Transportation Act of 1967, op. cit. Chap 69, p. 10
5. Ibid. , p. 13
6. C.P.R. - Institutional Report, Burns. Bros. and Denton Ltd.
p. 39
7. " Canadians Propose 'Complete' Transportation " , Railway Age, Oct. 5, 1964, p. 38
8. CPR Institutional Report, op. cit. p. 40
9. " Multimodal Ownership "
10. W. J. Stenason, " Multimodal Ownership in Transportation " in Trans. Research Forum Papers 1967, p. 474
11. House of Commons Sess. Com. Owned by the Govt., op. cit. p. 261
12. Ibid. p. 246
13. Ibid. p. 270
14. " C.N.'s 'Man at the Top' Talks About Trucking", Canadian Transportation, June, 1960, p. 29
15. " The Railway Role in 'Total Distribution " Canadian Transp. March, 1961
16. D. Gordon, " Needed: Integrated Transportation", Canadian Transportation, Oct., 1962, p. 20
17. C.N.R. Annual Report 1966 and C.P.R. Annual Report 1967

18. " The Attitude of Quebec Towrd Trucking " Canadian Transportation , March, 1961, p. 35
- 19 " Quebec Says 'No' to Midland Superior", Canadian Transportation, Sept., 1964, p. 56
- 20 Ibid. p. 57
- 21 Newfoundland Royal Commission on Truck Transportation , Part 10, March 6, 1962
22. C.I.T.L. Traffic Notes, Issue No. 4404, June 28, 1968
23. Canadian Trucking Associations - Transport Release R-68-3

C H A P T E R VI

C O N C L U S I O N S

In Canada, the United States and Great Britain regulatory policy, concerned with common ownership, has affected the basic structures of the transportation industries in all three countries. In Great Britain regulatory policy was changed from one allowing little common ownership to one which nationalized all transportation and placed it under one controlling government agency. This experiment proved to be a failure because a theoretically optimum structure was imposed upon the existing structure without allowing for adjustment to user's needs through the forces of competition. Also the controlling body was allowed to set prices at discretionary levels for the various modes within the system and as a result a balance in the utilization of the modes was not obtained.

In the United States regulatory policy was designed for an era in transportation where the railroads were dominant. The approach is to preserve the weaker modes from the predatory attacks of railroads by restricting the railroads' rights to acquire competing modes. In following this approach the United States has attempted to preserve competitive rate-making through the Interstate Commerce Commission while at the same time encouraging coordination of the modes by ad hoc joint rate-making. Intermodal competition has been preserved, but the voluntary co-ordination sought has been more wistful than factual. More energy has been expended in preserving the "rights" of each mode than in providing

the best intermodal service possible with today's intermodal techniques. Furthermore the logic behind allowing railroads with "Grandfather Rights" in trucking to freely own and operate trucks and not allow railroads without these rights to truck is dubious, to say the least.

In Canada, competition has been preserved between two companies, once primarily railroads, now increasingly general transportation companies - the Canadian Pacific and the Canadian National. Each has always been free to enter any form of transportation that will move the traffic to the satisfaction of the shipper and meet the profit criteria of its owners. Although both railroads have increasingly entered the trucking field in recent years, both still face vigorous competition from a very young and aggressive trucking industry. It is ironic that in all three countries competition has given rise to such technical improvements as piggyback that obsolete the need for segregation of the modes. Of the three approaches to regulation, the Canadian approach holds the greatest promise of meeting today's transportation needs with the best techniques available. This approach is not based on preserving historical systems of transportation.

Several problems have been noted in the Canadian approach. One problem is the railroads might gain too large a share of the Canadian trucking industry and therefore may be able to successfully control rates and competition. It is not realistic to assume that the railroads could gain

true monopoly powers under the regulatory policies adopted by the Canadian government, but it is possible that the railroads could gain a degree of oligopolistic control of the Canadian trucking industry. Since they now are the largest truckers in the country the rates set by the C.N.R. and the C.P.R. may merely be adopted by smaller truckers that compete in the same market. In other words instead of "cut-throat" competition reducing rates below compensatory levels the danger may be that rates are "stabilized" at levels that are not minimal and the shipper may pay too much for the service he receives. To prevent this from occurring the regulatory agencies in the country must have available to them the most accurate cost information to determine whether or not rates are too high. More information is needed on economies of scale and joint ownership in trucking to aid the regulatory bodies in deciding what should be a maximum and minimum rate for a particular movement. Both railroads should be required to keep separate accounting records for their trucking and rail operations.

Another problem that develops is a problem of corporate structure. If the objective is to retain a high degree of competitiveness within the transportation firm while at the same time co-ordinate the various techniques within the firm - there is an apparent conflict of objectives. Actually this problem is more apparent than real because with proper organization it should be able to be overcome. Since the overall

objective of the transportation company is to earn maximum total profits for the entire firm, top management must make the decision as to what mode will be used for a particular haul or part of a haul. If it is most economical to use a truck for a particular long haul because of the value of the commodity or the poor opportunities for co-ordination of truck and rail for the particular routing, then the truck should be used. If the shipper wants his movement to be accomplished in two days and this cannot be done by a combined rail-truck movement or even truck movement then perhaps the shipper will be willing to pay for air freight. All in all if management seeks to use the most economic means of movement available, without bias toward a particular mode, then both the company and the shipper will benefit. If a particular mode is not contributing to overhead it should be abandoned or improved. Technological innovation will arise from the need to suit the shippers requirements. Separate accounting records for each mode should be maintained to determine whether or not profit criteria are being met.

In the United States the one effect of restricting common ownership that has been of benefit to the overall public is that the railroads have been forced to seek solutions to their financial problems within the industry itself. While some of the railroads may never be able to compete against trucking and may end up bankrupt, undoubtedly a more

efficient transportation system will result. The problem is, however, that the economy of the country continues to grow and eventually it might be found that the railroad capacity that had been eliminated might well have been utilized. If the railroads were allowed to enter into common ownership arrangements without restriction, they would have to decide within the firm whether a particular branch line should be abandoned or truck used instead. This type of branch line rationalization would undoubtedly lead to a further reduction in unnecessarily duplicated facilities than is possible solely through the merger movement.

In any country common ownership may lead to more efficient utilization of the available transport facilities if allowances for common ownership are judged by the following criterion:

1. Common ownership should not be unduly restrictive to competition in the transportation field.
2. Common ownership should not be used to hinder the development of any mode.
3. Any common ownership proposal should provide tangible and demonstrable benefits to the public over and above those available from the carriers working separately.
4. A common ownership proposal should provide for integrated physical and financial operation with minimal subsidization of one mode by another.

Basically the judgement as to whether or not competition is unduly restrained by common ownership is a value judgement and should be treated as such. Market control is

only possible where all competition is eliminated and where no new competition can economically arise. In these areas the railroads are providing a service which no one else is willing to undertake, which is hardly a desirable situation to be in.

In the United States, where it is felt the railroads would gain too much control of the trucking industry if common ownership were not restrained, one sees the development of various brilliant techniques to improve intermodal transfer of goods at transfer points, but sadly these techniques are not utilized to the extent they should be. Voluntary cooperation fails in many instances because of vested interests in a particular mode. Regulatory policy is based on the assumption that common ownership is not in the public interest. Other than the evidence given by the Lake-Link Case, taken from a past era in transportation, regulatory authorities have no other evidence to give in support of their beliefs. In fact if these same regulatory authorities looked to Canada, they would see that so far common ownership has enabled two railroad companies to improve their services in the public interest, while at the same time trucking has maintained its growth. The United States should follow Canada's example rather than continuously oppose the theory that common ownership does benefit the shipping public.

A P P E N D I C E S

Appendix I

Canadian Pacific Railway Company Balance Sheet

ASSETS	1966	1965	LIABILITIES	1966	1965
	(millions)	(millions)		(millions)	(millions)
Current Assets:			Current Liabilities:		
Cash and Temporary Investments	\$ 65.5	\$ 48.4	Accounts Payable and Wages		
Dividend Receivable from Canadian Pacific Investments Limited	10.0	12.9	Accrued	\$ 76.5	\$ 69.7
Accounts Receivable	80.0	69.4	Deposits by Affiliated Companies (Net)	22.1	13.8
Material and Supplies	39.6	34.4	Income and Other Taxes Payable	23.5	6.5
	<u>\$ 195.1</u>	<u>\$ 165.0</u>	Dividends Payable	23.0	22.3
			Debt Maturing Within One Year	30.6	21.5
			Other Current Liabilities	27.2	25.9
				<u>\$ 203.0</u>	<u>\$ 159.9</u>
Other Assets			Deferred Liabilities	\$ 13.7	\$ 4.8
Aircraft Deposits	\$ 37.1	\$ 0.8			
Special Refundable Corp. Tax	3.6	—			
Other Deposits	3.1	3.8			
Unamortized Discount on Funded Debt	1.5	1.7	Deferred Credits:		
Other Deferred Charges	1.2	0.9	Deferred Income Taxes	\$ 122.0	\$ 118.8
	<u>\$ 46.5</u>	<u>\$ 7.1</u>	Other	0.4	0.3
Insurance Fund	\$ 13.9	\$ 14.2		<u>\$ 122.4</u>	<u>\$ 119.1</u>
			Insurance Reserve	\$ 13.9	\$ 14.2
Investments:			Investment Reserves	\$ 3.8	\$ 8.8
Canadian Pacific Inv. Limited	\$ 310.8	\$ 303.5			
Canadian Pacific Air Lines, Ltd.	22.8	22.8	Funded Debt	\$ 123.4	\$ 103.2
Other Subsidiary Companies	107.7	97.2			
Other Investments	46.5	45.6	Debenture Stock	\$ 292.5	\$ 292.5
	<u>\$ 487.8</u>	<u>\$ 469.1</u>			
Properties:			Shareholders' Equity:		
Railway	\$2,221.3	\$2,160.2	Preference Stock	\$ 137.6	\$ 137.3
Telecommunications	109.7	104.9	Ordinary Stock	358.3	358.3
Hotels	25.3	42.3	Premium on Stock	38.5	38.5
Steamships	63.2	62.7	Donations and Grants	80.1	80.0
Aircraft	44.6	54.0	Retained Income	735.5	705.1
Other Properties	11.9	12.8		<u>\$ 1,349.7</u>	<u>\$ 1,319.2</u>
	<u>\$2,476.0</u>	<u>\$2,437.0</u>			
Less: Accumulated Depreciation	1,096.8	1,070.7			
	<u>\$1,379.2</u>	<u>\$1,366.3</u>			
	<u>\$2,122.5</u>	<u>\$2,021.7</u>		<u>\$2,122.5</u>	<u>\$2,021.7</u>

Appendix II

Canadian Pacific Investments Limited and Subsidiary Companies

Consolidated Balance Sheet

ASSETS	1966	1965	LIABILITIES	1966	1965
	(millions)			(millions)	
Current Assets:			Current Liabilities:		
Cash & Temporary Investments	\$ 2.3	\$ 2.7	Accounts Payable & Accrued		
Deposits with Canadian Pacific			Chgs Canadian Pacific Railway		
Railway Company	2.1	1.1	Co.	\$ 1.3	\$ 2.0
Dividends and Accrued Interest			Other	9.0	7.0
Receivable			Notes & Accrued Interest Pay-		
Cominco Ltd.	7.8	7.7	able	23.0	—
Other	0.9	0.8	Income & Other Taxes Payable	2.4	2.4
Accounts Receivable	8.4	6.9	Dividend Payable	10.0	12.8
Inventories, at the lower of cost					
or market	2.4	1.9		\$ 45.7	\$ 24.3
Prepaid Expenses	0.1	0.1	Deferred Liabilities:		
	\$ 24.1	\$ 21.2	Severance Taxes Payable	\$ 3.1	\$ 3.9
			Other	0.1	—
				\$ 3.2	\$ 3.9
Other Assets:			Deferred Credits:		
Deferred Accounts Receivable	\$ 0.8	\$ 1.1	Deferred Income Taxes	\$ 14.2	\$ 11.2
Land Contracts Receivable	0.5	0.6	Unapplied Rentals	0.8	0.7
Special Refundable Corp. Tax	0.3	—	Other	—	0.3
Other	2.0	0.8			
	\$ 3.6	\$ 2.4		\$ 15.0	\$ 12.2
Investments:			Shareholders' Equity:		
Cominco Ltd.	\$ 145.2	\$123.7	Capital Stock—n.p.v. common shares		
Other Partly-owned Subsidiary Cos	3.4	3.9	Authorized—40,000,000		
Other Investments, at cost	210.3	206.5	Issued—		
	\$ 358.9	\$334.2	31,082,016 (1965: 30,353,116)	\$ 310.8	\$303.5
Properties, at cost:			Paid-in Surplus	81.8	81.8
Oil, Gas and Other Minerals	\$ 70.7	\$ 59.3	Retained Income	90.1	59.9
Timberlands and Related Facil-					
ities	32.2	31.6			
Hotels	54.4	32.2			
Real Estate	19.1	13.5			
Miscellaneous	3.6	3.3			
	\$ 179.9	\$139.9			
Less: Accumulated Depreciation,					
Depletion & Amortization					
(depletion—1966—					
\$9,408,373; 1965—					
\$5,998,151)	19.9	12.2			
	\$ 160.0	\$127.8		\$ 482.7	\$445.3
	\$ 546.6	\$485.6		\$ 546.6	\$485.6

Appendix III

C.P.I. Investment Portfolio as of Dec. 31, 1966

		<i>Number of Shares</i>	<i>Cost</i>	<i>Approximate Market Value</i>
STOCKS				
<i>Preferred:</i>				
Canadian Power & Paper Securities Limited	Cum. Red. \$1.30 Series "A"—Par Value \$25	25,000	600,000	450,000
Canborough Limited	Cum. Red. Series "A" 5¼ %—Par Value \$100	12,500	1,250,000	1,087,500
	Cum. Red. Series "B" 5 %—Par Value \$100	4,150	415,000	344,450
The Consumers' Gas Co.	Cum. Red., 5 %—Par Value \$100	12,500	1,250,000	1,150,000
Debhhold (Canada) Limited	Cum. Red. Series "A" 6 %—Par Value \$100	15,000	1,500,000	1,395,000
Great Britain & Canada Investment Corp.	Cum. Red. 5 %—Par Value \$50	25,485	1,260,757	1,000,268
Husky Oil Canada Ltd.	Cum. Red. Series "B" 6 %—Par Value \$50	10,655	544,929	511,440
	Cum. Red. Conv. Series "C", 5¼ %—Par Value \$50	15,000	750,000	810,000
Industrial Acceptance Corporation Limited	Cum. Red. 5¾ %—Par Value \$25	20,000	500,000	460,000
Northern and Central Gas Company Limited	Cum. Red. First \$2.60 1965 Series—Par Value \$50	15,000	750,000	675,000
Power Corporation of Canada Limited	Cum. Red. First 4¾ % 1965 Series—Par Value \$50	13,000	617,500	511,875
Rio Algom Mines Limited	Cum. Red. First \$5.80 Series "A", Par Value \$100	11,000	1,088,500	1,076,625
Trans-Canada Pipe Lines Limited	Cum. Red. \$2.80, Par Value \$50	30,000	1,485,000	1,380,000
Union Gas Co. of Canada Ltd.	Cum. Red. Series "C" 5 %—Par Value \$50	50,000	2,500,000	2,275,000
Victoria & Grey Trust Company	Cum. Red. Series "A" 5.35 %—Par Value \$50	10,000	500,000	460,000
Other			2,374,136	2,046,480
			17,385,822	15,633,656
<i>Common:</i>				
Central-Del Rio Oils Limited		1,597,010	13,807,119	20,761,130
The Great Lakes Paper Company Limited		138,810	3,667,979	3,157,928
The Huron & Erie Mortgage Corporation		528,260	6,953,456	4,622,275
Husky Oil Canada Ltd.		448,600	4,881,996	5,719,650
MacMillan Bloedel Limited		1,510,372	48,384,295	35,116,149
Montreal Trust Company*		329,500	6,640,634	4,530,625
Provincial Bank of Canada		116,230	6,235,360	4,445,798
Rio Algom Mines Limited		599,690	9,544,274	14,242,637
Texas Gulf Sulphur Company		60,100	3,680,179	6,824,355
Trans-Canada Pipe Lines Limited		1,157,752	44,850,085	28,364,924
Union Carbide Canada Limited		527,250	12,624,329	10,347,281
Other			1,239,148	1,499,228
			162,508,854	139,631,980

*Subsequently exchanged for 500,000 common shares of The Investors Group.

Appendix III

		<i>Principal Amount</i>	<i>Cost</i>	<i>Approximate Market Value</i>
BONDS, DEBENTURES AND NOTES				
Bell Telephone Company of Canada	First Mortgage Series "F"—3¼% due 15/2/73	\$6,000,000	\$ 5,196,250	\$ 5,070,000
	Series "G"—3¾% due 1/6/75	350,000	294,875	279,562
	Series "I"—3½% due 1/5/76	600,000	507,000	477,000
British Columbia Electric Company Limited	First Mortgage Series "D"—3¾% due 15/3/68	1,000,000	948,000	947,500
T. Eaton Realty Company Limited	First Mortgage—3½% due 15/3/68	1,800,000	1,717,425	1,728,000
Industrial Acceptance Corporation Limited	6.90% Note due 1/2/67	500,000	500,000	500,000
C. Itch & Company Limited	Convertible Unsecured Debentures—6¼% due 31/3/84	U.S. 1,000,000	1,081,250	924,500
Province of Nova Scotia	6.56% Note due 10/1/67	1,000,000	1,000,000	1,000,000
Quebec Hydro-Electric Commission	3% Bonds due 1/9/69	900,000	820,125	821,250
The Municipality of Metropolitan Toronto	3½% Deb. due 15/6/69	350,000	327,880	327,250
City of Winnipeg	3½% Deb. due 1/12/69	200,000	186,100	185,000
	Sinking Fund Debentures—2¾% due 1/12/67	100,000	94,680	96,750
Other			1,057,373	1,043,915
Total bonds			13,730,958	13,400,727
Total bonds, preferred and common shares			\$193,625,634	\$168,666,363

		<i>Number of Shares</i>	<i>Cost</i>	<i>Approximate Market Value</i>
Investments of Wholly-Owned Subsidiaries				
STOCKS				
<i>Common:</i>				
Central-Del Rio Oil Limited		1,696,754	\$ 14,848,844	\$ 22,057,802
Other			1,164,050	
BONDS, DEBENTURES AND NOTES				
Foundation Scottish Properties Ltd. 6% Note		\$600,000	600,000	*
Other		26,923	26,923	*
			\$ 16,639,817	\$ 22,057,802
			\$210,265,451	\$190,724,165

*Unquoted

APPENDIX IV**Companies Included in the Canadian National System**

Canadian National Railway Company
Canadian National Express Company
Canadian National Railways (France)
Canadian National Realities, Limited
Canadian National Steamship Company, Limited
Canadian National Telegraph Company
Canadian National Transfer Company
Canadian National Transportation, Limited
The Canadian National Railways Securities Trust
The Canadian Northern Quebec Railway Company
D. Chapman and Co. Limited
Eastern Transport Limited
East-West Transport Ltd.
Empire Freightways Limited
The Great North Western Telegraph Company of Canada
Hoar Transport Company Limited
Husband Transport Limited
Midland Superior Express Limited
The Minnesota and Manitoba Railroad Company
The Minnesota and Ontario Bridge Company
Mount Royal Tunnel and Terminal Company, Limited
The Northern Consolidated Holding Company Limited
The Quebec and Lake St. John Railway Company
Scobie's Transport Limited
The Toronto-Peterborough Transport Company, Limited
Central Vermont Railway, Inc.
Central Vermont Transportation Company
Duluth, Rainy Lake & Winnipeg Railway Company
Duluth, Winnipeg and Pacific Railroad Company
Duluth, Winnipeg and Pacific Railway Company
Grand Trunk-Milwaukee Car Ferry Company
Grand Trunk Western Railroad Company

- In addition, the property of the Canadian Government Railways is entrusted to the Canadian National Railway Company as part of the System.

Consolidated Balance Sheet at December 31, 1966

Assets

Current Assets	Cash	\$ 53,539,728	
	Accounts receivable	107,892,997	
	Material and supplies	76,835,257	
	Other current assets	34,007,884	
	Government of Canada—Due on deficit account	8,593,217	\$ 280,869,083
Insurance Fund			16,326,528
Investments in Affiliated Companies not Consolidated	Air Canada	240,819,500	
	Jointly operated rail and terminal facilities	47,885,450	288,704,950
Property Investment	Road	2,651,467,657	
	Equipment	1,464,560,536	
	Other physical properties	143,940,532	
		4,259,968,725	
	Less recorded depreciation	1,016,161,115	3,243,807,610
Other Assets and Deferred Charges	Other investments	4,689,126	
	Prepayments	2,123,816	
	Unamortized discount on long term debt	14,580,334	
	Other assets	7,685,786	
	Deferred charges	11,373,097	40,452,159
			<u>\$3,870,160,330</u>

Liabilities

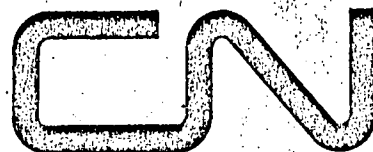
Current Liabilities	Accounts payable	\$ 106,981,158	
	Accrued charges	50,344,308	
	Other current liabilities	9,799,135	\$ 167,124,601
Provision for Insurance			16,326,528
Other Liabilities and Deferred Credits			38,097,315
Long Term Debt	Bonds	1,327,485,264	
	Government of Canada loans and debentures	445,354,762	1,772,840,026

Shareholders' Equity

Government of Canada	6,000,000 shares of no par value capital stock of Canadian National Railway Company	359,963,017	
	1,070,008,366 shares of 4% preferred stock of Canadian National Railway Company	1,070,008,366	
	Capital investment of Government of Canada in the Canadian Government Railways	441,455,292	
		1,871,426,675	
		4,345,185	1,875,771,860
Capital Stock of Subsidiary Companies Owned by Public			<u>\$3,870,160,330</u>

The notes on page 30 are an integral part of this Balance Sheet.

W. R. Corner,
Comptroller.

APPENDIX VCanadian National RailwaysDepartment of
Highway ServicesF. A. Gaffney, Vice-President

February 20, 1968.

Our File: 5030-17

Mr. John, W. Fitch,

Dear Mr. Fitch:

I have your letter of February 15th on the subject of common ownership of two or more modes of transportation by one company.

Canadian National's objective is to offer the kind of transportation service that is best suited to public demand, both in terms of cost and efficiency. To further this concept, the company decided to supplement its railway services with collateral trucking facilities wherever close co-ordination of operations would effectively improve its services, and, therefore, its competitive position. In implementing that policy, Canadian National has been proceeding cautiously and, as a general rule, has endeavoured to enlarge its trucking facilities through a very selective purchase of existing highway operators. In this way, it is not adding suddenly to the total transportation facilities of the Country since that could produce an undesirable surplus, and lead to a period of uneconomic competition by the weaker operators striving to maintain their position.

The company does not regard competition between the railway and commercial truckers as a fight for survival - it is not in any way interested in driving the independent trucker out of business! Both the railway and the truck are tools of transportation, and in the best interests of the shippers and receivers - the users of the service - each tool should be used as it is best suited.

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- 2 -

The very size of the for-hire trucking industry indicates how remote is the possibility that the railways could ever obtain a monopoly of it, even if they wanted to do so. If an examination is made of estimates by the Dominion Bureau of Statistics regarding inter-city commercial trucking operations in Canada, it will be found that the railways' total Canadian trucking operations - and this would include all the railways in Canada and not just the Canadian National - represent no more than five or six percent of the total inter-city highway business. If private trucking is also taken into consideration, the percentage of the railways' share of the inter-city trucking industry accounts for only two to three percent of the total. Thus it is apparent how remote is the possibility that the railways could ever monopolize the trucking field. Added to this is the fact that provincial regulatory boards make a strong point of ensuring that there is competition on highway routes, and it is most unlikely that they will change this policy to favour railway-owned trucking operations.

I hope the foregoing will be of some value to you in the writing of your thesis.

Yours truly,

Vice-President

APPENDIX VI

Canadian National Railways
Express Freight Services

4 July 1968.

Mr. John W. Fitch,

Dear Mr. Fitch:

Reference is made to your letter of June 23rd concerning highway units operated by or on behalf of Canadian National Railways.

As at December 31, 1967, the Canadian National owned or leased, for the haulage of express and freight, a total of 1795 trucks, 1141 tractors, 3033 semi trailers and 834 containers - total 6803 units.

A breakdown by type and assignment follows:

Operated by C.N.T.L.

	<u>Owned</u>	<u>Leased</u>	<u>Total</u>
Tractors - line haul	478	90	568
Tractors - city P & D	265	24	289
Trucks - city P & D	204	18	222
Semi trailers - line haul	1403	-	1403
Semi trailers - city P & D	<u>74</u>	<u>-</u>	<u>74</u>
Total - C.N.T.L.	2424	132	2556

Operated by C.N.T.L. (Rail)

Tractors - line haul	142	-	142
Trucks - line haul	371	-	371

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- 2 -

Operated by C.N.T.L. (Rail) (Cont'd)

	<u>Owned</u>	<u>Leased</u>	<u>Total</u>
Semi trailers - line haul	267	-	267
Semi trailers - plan II piggyback	<u>528</u>	<u>-</u>	<u>528</u>
Total - C.N.T.L. (Rail)	1308	-	1308

Operated by C.N. Express

Tractors - city P & D	142	-	142
Trucks - city P & D	1202	-	1202
Semi trailers - city P & D	761	-	761
Containers	<u>834</u>	<u>-</u>	<u>834</u>
Total - C.N. Express	2939	-	2939

Canadian National Transportation Limited represents the nine trucking subsidiaries owned by the railway and are operated independent of rail operations. C.N.T.L. (Rail) are those inter-city highway operations manned by railway employees for the transportation of express traffic. Units assigned to Plan II piggyback services, i.e. railway transportation of trailers owned by the railway, are accountable to this branch of the railway. Insofar as vehicles for C.N. Express are involved, trucks, tractors and semi trailers are utilized in local pick-up and delivery operations. The 834 containers listed with this group, are used exclusively for the inter-city transportation of express shipments either via rail or highway.

With respect to the total number of powered vehicles registered in Canada, the most recent release by the Dominion Bureau of Statistics indicates a total of 1,266,024 units licenced in the year 1966. Thus the 2936 trucks and trailers owned or leased by the C.N.R. represent an infinitesimal portion of the total registrations.

I trust the information supplied herein meets with your requirements.

Yours truly,

Vice President.

BOOKS:

- Alberts and Segall, The Corporate Merger, The Graduate School of Business, Univ. of Chicago, Chicago, Ill., 1966
- Bonavia, M.R. , The Economics of Transport , London, 1960
- Currie, A.W. , Canadian Transportation Economics, Univ. of Toronto Press, Canada, 1967
- Drayton, Emerson and Griswold, Mergers and Acquisitions: Planning and Action, Financial Executives Research Foundation, Inc. New York, 1963
- Fenelon, K.G., Transport Co-ordination, P.S. King and Son Ltd., Orchard House, Westminster, 1929
- Foster, C.D., The Transport Problem, Blackie and Son Ltd., Lon., 1964
- Fulda, Carl H., Competition in the Regulated Industries: Transportation, The Trade Regulation Series, Boston, 1961
- Hay, W.W., An Introduction to Transportation Engineering, John Wiley and Sons Inc., New York, 1961
- Koontz and O'Donnell, Readings in Management, McGraw Hill, New York, 1959
- Mason, E.S., Economic Concentration and The Monopoly Problem, Harvard University Press, Cambridge, Mass., 1959
- Myles. Mace and Montgomery, Management Problems of Corporate Acquisitions, Harvard University Press, Boston, 1962
- Nelson, Ralph L., Merger Movements in American Industry, Northwestern Univ. Princeton Univ. Press, Princeton N.J., 1959

GOVERNMENT DOCUMENTS

- Lessard, Royal Commission on Transportation, Vol. II, Queen's Printer and Controller of Stationary, Ottawa, December, 1961
- Carr, D.W. and Associates, Royal Commission on Transportation Vol. III , Queens's Printer and Controller of Stationary, Ottawa, 1962
- Chap. 69 - National Transportation Act of 1967, Queen's Printer and Controller of Stationary, Ottawa, 1967
- Chap. 234 - An Act Respecting the Railway - Queens Printer, Ottawa, 1960

- 1959 Sessional Committee on Railways, Air Lines and Shipping
Owned by the Government, Queen's Printer, 1960
- 1960 Sessional Committee on Railway's, Air Lines and Shipping
Owned by the Government, Queen's Printer, 1961
- 1961 Sessional Committee on Railways, Air Lines and Shipping
Owned by the Government, Queen's Printer, 1962
- 1963 Sessional Committee on Railways Airlines and Shipping
Owned by the Government, Queen's Printer, 1964

United States

- Jurisdictional Conflicts and the Coordination
of Transportation - Interstate Commerce Commission
Statement No. 606 - U.S. Govt. Printing Office: 1959
- Transportation Diversification, Hearings before
a Subcommittee of the Committee on Interstate and
Foreign Commerce, House of Repr., Eighty-sixth
Congress, Second Session on H.R. 7960, H.R. 7961,
H.R. 7962, H.R. 9279, H.R. 9280 and H.R. 9281,
U.S. Govt. Printing Office: 1960

PERIODICALS

- "After Defeat - Rearmament " Canadian Transportation, April, 1963
- " The Attitude of Quebec Towards Trucking ",
Canadian Transportation, March, 1961
- " Attitude of the Long - Haul Trucker" Can. Trsp.
January, 1962
- Barbon, Marvin F. , "The Second Transportation Revolution ",
Harper's Magazine, March, 1957
- Barriger, John W., "The Effects of Merger on Competition ",
Transportation Journal, Vol. 7, No. 3, Spring 1968
- Beardsly, P.T., "Restrictions Against Rail Entry into Other
Transportation Fields ", Law and Contemporary Pro-
blems, Autumn, 1959
- Beardsley, P.T., " Integrated Ownership of Transportation
Companies and the Public Interest", The George
Washington Law Review, October, 1962
- " Britain's Failure with Rails Poses a Question
for Canada, Transportation Topics, Sept. 24, 1962

- Bunting, W, "Common Goals for Common Carriers - A Blueprint for Intermodal Co-ordination ", I.C.C. Practitioner's Journal, Sept, 1963
- "C.A.B. Authorizes Long-Haul Motor Carriers to Enter Air Freight Forwarding Business" Traffic World, July 1967 Sept. 30, 1967
- " Canadian National Adds 15,000 Route-Miles ", Canadian Trsp., July, 1960
- " C.P.- a Total Transportation System ", Can. Trsp., January, 1968
- " C.P.R. ' Merchandising Services' - Railway Age, Oct. 5, 1964
- " Canadian's Propose 'Complete' Transportation ", Railway Age, Oct. 5, 1964
- " C.P. Puts Emphasis on Integration ", Can. Trsp., February, 1968
- " Canadian Pacific Railway Company " , Institutional Report, Burns Bros and Denton Co. N.Y. July, 1967
- " Canadian Pacific - The Restless Multi-modal Colossus to the North ", Railway Age, Dec. 18/25, 1967
- " Canada's Rail Aids ", Transport Topics, Nov. 12, 1962
- " Canadian Railways Increasing Ownership of Motor Carriers ", Transport Topics, Feb. 19, 1962
- " Coordination of Service" Syracuse University, Business Research Center, Salzberg Lecture Series # 16.
- " Containerization " Can Trsp., Nov. 1963
- " Debate: Should Railways Engage in Transcontinental Trucking ?", Can. Trsp., Jan. 1962, pp. 18-23
- Dodge, William H., " Common Goals of Common Carriers - A Blueprint for Intermodal Coordination ", I.C.C. Practitioner's Journal, Oct. 1963
- " Full Text of Piggyback Rules Proposed by I.C.C. Examiners ", Transport Topics, Sept. 12, 1963

- Gaffney, F.A. " Canadian National's Trucking Policy" Can. Trsp., Nov., 1961
- Gordon, D. " C.N.'s ' Man at the Top Talks About Trucking ", Can. Trsp. June, 1960
- Gordon, D., " Changes Proposed in Grain Handling", Can. Trsp., June, 1960
- Gordon, D., " The Railway's Role in 'Total Distribution'", Can. Trsp., March, 1961, p.18
- Gordon, D., " Needed: Integrated Transportation " Can. Trsp., Oct. 1962
- Harrison, Carter M. , " Co-ordination: A Blueprint", I.C.C. Practitioner's Journal, Dec. 1963
- Holubowitz, R.P., " The Transmodalist", World Ports, Oct. 1967
- " How the C.N.R. Sees its Trucking Role", Can. Trsp. Jan., 1962
- " Integrated Services ; C.P.'s Progress " Can. Trsp. Aug. 1964
- " Integrated Transport Systems" Railway Age, Nov.2,1959
- " I.C.C. Balks Canadian Railway Attempts to Get Truck Rights", Transportation Topics, Sept. 24, 1962
- Loomis, Daniel P., " Transport Diversification", The Financial Analysts Jour., Nov.-Dec., 1960
- McDonald, W.H., " C.P.'s 'Total Transportation' Concept", Can. Trans., Nov. 1964
- MacMillan, N.J., " How C.N. Fared in 1967 ", Can. Trsp., Feb., 1968
- Moulton, Harold G., "Transportation Companies and Coordination", Amer. Econ. Rev. Supplements, 1933
-, " P.M.T.A. Verdict - Ruling Holds Rail Activity Was Lawful", Transport Topics, Feb. 27, 1961
-, " Quebec Says 'No' to Midland-Superior", Can. Trsp. Sept. 1964
-, " Rail Bid for Water Carrier Puts Public Interest Question to I.C.C." Transport Topics, Sept. 19, 1960

....., "Railway Invasion of Highway Transportation
Inches Forward." Pacific Report-Motor Carrier
Jan. 1963

..... " Rail's Monopoly Attempts Exposed in Record of
Successful Anti-Trust Suit by Riss and Co. ", Trans-
port Topics , Nov. 21, 28 Dec. 5, 12 & 19, 1960

Ramsay, R., "Needed a Unified Trucking Front " Can. Trsp.,
Jan. 1962

Shinn, Glenn L. , " Public Transportation and Federal Regulation"
Traffic World , January 21, 1961

..... " Southern Pacific Co. Seeks C.A.B. Authority for
Vast Air Freight Forwarding Operation " Traffic
World , Aug. 5, 1967

..... Terminals: Slick Handling for L.C.L. " Can. Trsp.,
Nov. 1963

..... "Transmodalist' Concept of Containerization to be
Discussed at ICHCA Technical Session " , Traffic
World , Aug. 5, 1967

..... " Trucking's Next Step: Challenge the C.P.R. " Can.
Trsp., Apr., 1963

Williams, Dr. Ernest, " Some Problems of Intercarrier Competi-
tion " I.C.C. Practitioner's J., Nov. 1959

CONFERENCES

Anderson, A.G., " Integrated Transportation - A Shipper's
Viewpoint ", Trans. Research Forum April, 1960-Miami

Arpaia, A. " Let's Stop Driving Nails in the Common Carrier's
Coffin ", Miami Valley Traffic Club, Feb. 16, 1961

Beardsly, P.T. " Mergers and Common Ownership Among Carriers",
Univ. of Alabama Trans. Forum, May 10, 1967

Beardsly. P.T. "Twin Evils - Incremental Cost Ratemaking and
Common Ownership ", Sem. on Trans.; Univ. of
Louisville , April 14, 1966

Flott, Allan C. " Economies of Scale in Trucking " Trans.
Res. Forum 1967, Montreal

..... Newfoundland Royal Commission on Truck Transportation Report, March 6, 1962, Parts 3&4-Verbatim extract.

Magee, John, Transport in Crisis - An Address delivered to the Westmount Rotary Club, Montreal, May 10, 1961

Parke, G.M., "Railway Subsidization and the Trucking Industry" an address delivered to the Kitchener Traffic Club, Kitchener, Ontario, May 18, 1961

Prince, G.G., Ownership of One Mode by Another, speech before the Transportation Law Comm. of the Federal Bar Assoc. Conv., Phila., Pa. 1963

Sender, Stanton P. " Review of Congressional Policy on Trucking Coordination " Trans. Research Forum, Mont. 1967

PHAMPHLETS

- American Trucking Assoc.

Fort, J.T. " Common Sense Ownership "

Frantz, W.M. " A Blank Check for the Railroads "

Freund "T.G. " No Company Store in Transportation "

..... "Green Light for Monopoly in Transportation "

..... " Rules for Ruin in Transportation "

Rentzel, D.W. " The Big Squeeze "

- Association of American Railroads:

..... " One Package Transportation "

..... " The Gathering Transportation Storm "

..... " Railroad Operations 1967 "

- Canadian National Annual Report, 1966

- Canadian Pacific Annual Report , 1967