

THE ST. LAWRENCE SEAWAY AND NOVA SCOTIA'S ECONOMY

A Preliminary Study

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I

Some Observations

ONE of the great difficulties of a study of this kind, whether of a preliminary or more final nature, is the problem of measurement. The historical and statistical approaches are always helpful, but have limitations in a study of this nature. History serves to give perspective and balance, but in certain aspects of this study the theory of probability seems more relevant. Again, it is important to segregate as far as possible the short and long-term aspects of the study. This is a difficult process inasmuch as the short-term is usually more readily apparent. Similarly, it is easier to measure a number of specific implications whereas the general impact is more difficult to assess.

It should perhaps be noted that it is unlikely that a number of implications of the Seaway to the provincial economy can be measured and assessed prior to the event or even in its early stages of development. Over the decades a pattern of industry and commerce has been established associated with existing transportation facilities. Inasmuch as transportation facilities and costs represent a principal factor in the location of industries, any profound change in transportation will have fundamental implications. That does not imply that the implications will be adverse, but it does suggest that the ramifications may be diverse and more complex than are capable of immediate measurement.

From the author's preliminary review of the subject, it is also clear that the problem of perspective is a very real one in any assessment of the impact which the Seaway will have on the provincial economy. On the one hand, the historical approach suggests a warning note. The record indicates very clearly that Nova Scotia has not shared fully in the growth of the national economy since Confederation; nor is there any great doubt that this is related in part to the effects of a national policy which has aided the development of the central areas of Canada somewhat at the expense of the Province. At the same time it is important to note that Canada has made great strides in development and

that Nova Scotia has, to some extent, at least, shared in that process of growth. Thus, although the beneficial effects of the Seaway Project to the Provinces of Ontario and Quebec are more readily apparent and may lead to a quick conclusion that it overwhelmingly favors development in such areas, it would seem desirable to keep in mind that a vigorous and developing Canadian economy resulting from the Seaway will inevitably reflect itself in the prosperity of other areas. Certain parts of the country may not share the development in full, but undoubtedly a measure of improvement will be generally felt.

Again, a certain pattern of industrial development in Canada has been established over the course of history. It would seem unlikely that this pattern will be seriously altered unless a factor embodying fundamental change is introduced. The St. Lawrence Seaway Project can, in effect, be considered as an extension of the facilities on which the pattern of industrial development has been built, rather than as a revolutionary change. However, although the Project does not represent a fundamental change in the Canadian economy, it could effect fundamental changes in the locational factors of any section of the economy, specifically, if it seriously alters the pattern of transportation facilities and costs.

It is important that the economy of the Province be kept in perspective when considering the possible implications of the Seaway. For example, the steel and coal industries constitute a major portion of the Nova Scotia economy. Any adverse effects, therefore, on these industries would be of primary significance. Again, speculation on any general benefits must be measured relative to any adverse effects on specific industries in order to obtain a balanced assessment.

A further matter of perspective relates to the natural tendency of human nature to fear, and sometimes to resist, change. The Seaway Project would seem to challenge the traditional habits and stability of a number of our provincial industries and there might be a natural tendency to feel that the challenge is a threat. Change may, however, present a new opportunity.

II

Some Preliminary Conclusions

A preliminary survey makes it abundantly clear that the impact of the Seaway on the Provincial economy will have to be measured as a matter of balance. It is difficult to foresee any great advantages that may accrue to any specific section of the

economy. In a number of cases, such as, agriculture, forestry, shipbuilding and shipping it would appear that if there are any effects they should be of an advantageous nature. The possible disadvantages would seem to be largely limited to our coal, steel and fishing industries. Our coal industry will face a handicap arising out of the development. In our fishing and iron and steel industries, a number of new factors will be introduced which make questionable their established advantages and may adversely affect them. It is to be noted that these are important sections of our economy. Unless the central power development bears its full cost, this aspect of the Seaway may adversely affect the development of manufacturing in Nova Scotia. Also, the position of the Province regarding future rail services and freight rates would seem to be questionable.

The development of regular and low-cost water transportation leading to improved commerce between Nova Scotia and other areas of Canada is highly speculative. The general picture as coloured by the approach of the individual may include optimistic vistas of enhanced trade for Nova Scotia, or the pessimistic view that the Seaway will further reduce the relative position of the Province. It is to be hoped that the more optimistic view will be proven by events. It should be noted, however, that this promise of advantages must be offset by the prospect of any possible disadvantage to specific and important sections of the Provincial economy.

It would seem advisable for the subject to be studied further as important sections of the economy will inevitably face periods of adjustment once the Seaway becomes a reality, and it is possible that a fuller appreciation by government of the problems of these industries will produce the necessary sympathetic consideration and encouragement required to make successful adjustments.

Once again, the preliminary nature of this survey should be emphasized, and it is suggested that, if possible, more factual information be obtained to check the conclusions and generalizations which have been made in this Study after a brief examination of the subject. It might be helpful also to secure discussion on various sections of this Study by people fully conversant with particular aspects of our economy.

It would also seem desirable to invite the Federal authorities to participate in such a study. There would seem to be a somewhat more optimistic assessment of the implications of the St. Lawrence Seaway to Nova Scotia at the Federal level. On the other hand, the national view may serve as a good corrective to

those concerned to assess the Project solely from the point of view of the Provincial economy.

The conclusions of this preliminary study would seem to justify an approach to the Federal authorities to secure assurance that the necessary corrective measures will be adopted should the impact of the Seaway be of an adverse nature. There would seem to be a real challenge to the Province to develop a constructive and imaginative approach to Ottawa reaching beyond this matter of assurance and it might be more effective to advance suggestions of projects which might be developed locally. These projects should be of a nature that would tend not only to offset any adverse effects of the Seaway Project, but to promote development equally in the national interest, while bearing heavily in the interest of the Provincial economy. Inasmuch as power and transportation are the two fields intimately linked with the Seaway Project, specific development proposals in these fields might be carefully studied. A number of examples might be cited for consideration. Any extensive development of power on which Federal support might be considered would have to relate to pithead coal production or tidal power. The availability of low-cost power is a vital factor in any economy and this might be an opportune time to review potential developments with the Federal authorities.

Regarding transportation, there are a number of matters which might be reviewed. The Annapolis Valley area has long suffered a disadvantage of a two-rail haul, and there is the interesting question whether this handicap can be overcome if assistance is given the C.P.R. covering the matter of a railway car ferry for its connection between Digby and Saint John. Similarly, there is the question of the Yarmouth-Bar Harbour ferry now in operation. Both the fishing industry and agriculture are attracted by the vast and rich markets of New England. This ferry, in so far as it facilitates the transportation of trailer trucks from Nova Scotia to New England, is an extension of our highway system and if these services were extended for a 12-month period they might greatly facilitate the growth of marketing arrangements by these industries.

III

Some Particular Applications.

Fish

Fisheries represent one of the most important segments of the Provincial economy and in recent years have been demon-

strating an outstanding capacity to expand on a sound basis. A salient feature in the steady development of fisheries in Nova Scotia in recent years has been the expanding production and marketing of fresh and frozen fish. The outlet for this production, particularly frozen fish, has moved progressively into the interior markets of the United States and Canada. In these markets our industry has been able to compete by rail and road with the highway distribution from competing points in the United States, principally Boston. Our industry is very much alive to the importance of these markets as is shown by the recent investments being made by National Sea Products in storage facilities in Central Canada and the investments in expanded or new production facilities at Petit de Grat, Louisburg and, more recently, Mulgrave.

It has been suggested that the development of the Seaway will facilitate the further development of the interior markets for our fisheries and the suggestion usually is associated with the introduction of large refrigeration ships. It is quite possible that the Seaway will lead to the development of this type of transportation of fish to these interior markets. It is not clear, however, that this will be to the advantage of our Provincial fisheries.

The Province has been in a very favored position regarding access to the fishing banks and by reason of its rail and road connection from ports to market areas has been able to match its production efficiency with a constantly improving method of distribution. The question of refrigeration ship service to Montreal or beyond has been looked into on various occasions in the past but the industry has been satisfied that on balance distribution by land has a very distinct advantage, and it is significant that our fisheries have been able thus far to ward off any effective challenge by outside competition using small refrigeration ships. The question arises therefore as to whether the industry will lose its relative advantage when the Seaway removes the natural geographical barrier to larger refrigeration ships which constitutes the advantage of our Provincial fisheries in relation to the large interior markets. On this point it is perhaps well to note that in recent years certain countries, such as Iceland and Norway, have made considerable inroads in the United States market. This development has been associated with large refrigeration ships and the development of extensive storage facilities in the United States to which the products are transferred for orderly marketing. It is true that the St. Lawrence waterway represents a seasonal operation and, therefore, the situation would not be completely parallel with previous developments in the

United States. However, the possibility of highly increased competition in the interior markets by the removal of a geographical advantage enjoyed by the Nova Scotia industry cannot be ignored.

In summary, therefore, it does not appear that the Seaway development will offer any advantage to the industry. At the same time there is the serious question of jeopardizing an established market which also represents a great future for expansion in the industry.

Steel

Historically, the steel industry in Nova Scotia has developed from the close proximity of the essential raw materials for a primary industry in the Sydney area. This is associated with the Wabana ore deposits and limestone in Newfoundland and the bituminous coal fields of Cape Breton. Characteristically, the production of fabricated steel products has taken place in Central Canada based on the transshipment of primary steel to these markets. There is a very limited movement of supplies for primary production from Central Canada. On occasions this has involved scrap, but this is more normally brought in from Europe or from the Maritimes. Ferromanganese and ferrous sulfate are brought in by water. A great deal of the shipment of primary products is by rail, but certain products, such as nails and wire, are presently moved by small ships which enable the industry to reach into such market areas as Northern Ontario. Historically, again, ore from Wabana has been exported to Europe and in recent years this has been revived with resultant economies to the industry.

It has been suggested that the development of the Seaway will assist the steel industry in Nova Scotia in several ways. It is, however, difficult to reach such a conclusion. As the ships which bring in the raw materials from Central Canada are of convenient size for the commodities involved the Seaway would not offer any significant improvement in this movement. In recent times there has been discussion regarding the possibility of moving Wabana ore into interior markets. It is felt that the prospects of any such movement will fade in direct proportion to the development of the Labrador field as this is linked with the production of higher grade ore and the utmost efficiency in ore carriage.

On the matter of distribution of steel products, the Seaway may facilitate the movement of competing products from Europe due to the fact that trans-Atlantic shipping will then be able to

reach further into the interior. It is highly unlikely that the Seaway would promote the movement of scrap from the interior to Cape Breton inasmuch as the steel industry in the centre has always dominated the scrap market in that area. On the other hand, the Seaway might detract from the advantage of Nova Scotia in securing European scrap by allowing European shipments to proceed further into the interior. It is not impossible that Canadian and American steel products from the interior may find the Seaway helpful in reaching world markets in competition with the Nova Scotia industry which presently enjoys certain advantages from its seaboard location. The possibility of the further development of the Canadian steel industry based on low-cost power development from the Seaway and hence increased competition for the Nova Scotia steel industry cannot altogether be discounted.

On balance, therefore, it would appear that the Seaway Project offers no immediate and obvious direct advantages to our provincial steel industry. On the other hand, the more speculative considerations indicate that the industry may incur some serious handicaps.

Coal

In the more recent period of its long history the Nova Scotia coal industry has based a substantial proportion of its production on its ability to reach central Canadian markets, particularly those of the Province of Quebec. The pattern of the industry has also been set to some extent by a National Coal Policy which aided the industry in securing, in prewar days, a small proportion of the Ontario market. Thus in 1938, the last year before the disruption caused by World War II, (and, incidentally, a year which saw a decline of approximately 1,000,000 tons output compared with 1937) Nova Scotia shipped over 3,000,000 tons of coal to Central Canada or nearly 50% of its total output. In that year the Province of Quebec imported over 70% of its total requirements in bituminous coal from Nova Scotia.

The war years brought a lapse in this historical pattern. The position, however, within the last year or two is being progressively restored whereby a significant tonnage of the industry's production is finding an outlet in Central Canada. This area is largely concentrated in Quebec, where total demand for bituminous coal has gone up significantly since 1939. Shipments to Quebec are now approximately 2,000,000 tons annually. If the requirements of the steel industry are subtracted from the total output, Nova Scotia now ships approximately 50% of its output to the Quebec market.

A number of important changes, however, have taken place since 1939. Production costs in Nova Scotia have gone up appreciably relative to the costs of competing coals from the United States. Again, water-borne movements have incurred significant increased cost. The industry of Nova Scotia has never competed with the United States coal on the basis of low-cost production, but gained dominance of Quebec markets through its advantage of low-cost water movement by the St. Lawrence as far as Montreal. The industry in recent years has only been able to regain a position in the Quebec market by reason of Federal subvention assistance and it is significant that this has been necessary not only in regard to rail movement, but to water movement. The following figures, which are probably an understatement, are suggestive. Whereas in 1939 Nova Scotia coal had a relative advantage over United States imported coal in Montreal of some 25c a ton, in 1952 it had a disadvantage of \$1.88. These figures refer to the prices of slack coal. Again, in the fiscal year 1951-52 it was necessary to pay an average of \$1.45 a ton on water-borne movements to enable Nova Scotia coal to compete in Quebec markets. In June 1952 the Federal authorities found it necessary to increase the subvention allowance on both rail and water movement to cover present movements. The maximum subvention rate on shipments by water having increased from \$2 to \$3 per net ton. A statement by the Dominion Coal Board, prior to this increase in subvention assistance, is perhaps worthy of note: "The average assistance per net ton paid on Nova Scotia coal shipped by water to St. Lawrence River ports in 1950-51 was \$0.647 per ton compared to about \$1.45 per ton this fiscal year during which many cargoes required a subvention of \$2 a ton. As the opening of the navigation season approached it became evident that this trend would continue and the maximum subvention rate provided by the order on the water-borne and all-rail movements would not be sufficient to place Nova Scotia coal in an equal competitive position with imported coals in many areas of the central markets. The situation was one of growing concern to the Board."

The industry is engaged in co-operation with the Dominion Coal Board in an extensive programme of mechanization which is designed to decrease cost of production. The industry is also hopeful that the normal course of events will adjust the relative costs of water and rail movements and reassert the economies of water transport. It is perhaps worth noting that the relative cost of water and rail transportation has been abnormal in the immediate periods following World War I and II and that the

precedent is for shipping costs to decline substantially as soon as the wartime effects on shipping have disappeared.

If it is assumed that the benefits of mechanization will be achieved by an increased volume of production rather than by a drastic reduction in employment, it is estimated that a sound and healthy coal industry in the Province will require an annual market outlet in Quebec for between 3¹/₂-4 million tons within the next few years. This estimate is also based on the tendency of the Maritime market to slacken further owing to the dieselization programme of the railways. Both these factors add an increased emphasis to the importance of the Quebec market.

The Seaway may be taken to offer the advantage of possible shipment of Nova Scotia coal further inland without incurring the expense of transshipment to smaller vessels or to rail. In the 1939 cost situation this would offer very considerable attraction. In view of the present situation covering necessary assistance, it would seem to be a rather limited opportunity for the industry and to be greatly overshadowed by the prospects of ship movement of United States coal into the Quebec areas in which the Nova Scotia industry might hope to reestablish its dominance. This is associated with the return voyage of the ore carriers from the United States to Seven Islands. Adjacent to the lake coal ports these carriers will be looking for return cargo and passing through such key points as Montreal, Three Rivers and Quebec City. It has been estimated that, assuming a small toll charge, these carriers could effect savings of at least \$1 a ton on the transportation of imported United States coals to these areas. It might perhaps be noted that one authority in Ottawa has estimated the saving to be at least up to \$2 a ton.

A further factor which cannot be ignored is that the Seaway Project is related to a substantial increased production of electric power. This increased production is relatively small in relation to the total power developments and requirements of the Central Provinces. Any lessening of industrial activity, however, might enable this power to compete with coal as a source of energy. Further significance would be given to this aspect of things if the power part of the Seaway project does not bear its full share of the total costs.

It is thus possible to see the Seaway encouraging the development of competition from United States coals and a lessening of the total coal market at a time when the Quebec coal markets are becoming of maximum importance to the Nova Scotia industry. The substantial assistance which the United States industry will receive in reaching these markets may be taken to

offset considerably the advantages which the programme of mechanization in Nova Scotia is designed to secure for our industry in these market areas and thus to discourage the belief that Nova Scotia coals can reassert their ability to withstand competition without assistance in these areas. In essence, the Seaway would seem to impose a permanent disability of at least \$1 a ton on Nova Scotia coal in market areas accessible to returning Seven Islands ore carriers.

Shipbuilding

If the Seaway Project fulfils its promise it will lead to an increased movement of ships in the River and the Great Lakes. In considering the possible effects of the Seaway therefore two main questions appear. First, are these vessels likely to be built in Canadian shipyards and, second, will the shipyards secure an increased volume of repair work?

It is not the author's purpose to measure the effects on Canadian shipbuilding facilities outside the Province. It is interesting, however, to note that only 44 out of the 173 in the 1949 canaller fleet were built in Canada while 105 were built in the United Kingdom, 17 in the United States and 7 in other countries. Since 1902 there has been no tariff on the import of vessels from the United Kingdom although a tariff of 25 per cent applies to the United States and other foreign purchases. In so far as new construction is concerned the Seaway might have the effect of increasing competition for shipbuilders located on the Great Lakes. On the other hand, increased volume of traffic will necessarily offer the possibility of greater activity covering the repair side of the industry. This is particularly true during the period of construction which will involve the building and maintenance of dredges, derricks and such craft.

From a provincial point of view the Seaway would not seem to affect materially our shipbuilding industry. It is possible that any development of shipbuilding facilities in the Great Lakes area may increase competition for our local industry as newly-constructed vessels in those areas could then move to the ocean. However, the traditional background of the shipyards in the province, particularly Halifax shipyards, has been associated with the emergency repair of vessels moving in lines of trade which do not appear likely to change arising out of the Seaway. A second source of business, particularly of new construction, has been that of the requirements of the Royal Canadian Navy.

It is not known whether consideration is being given to the construction of repair facilities at the Seven Islands terminal

of the projected ore carrying trade. The matter of repair relates, in the first place, to the question of registry of the vessels, for national tariffs apply on repairs where these are not confined to more strictly emergency work to ensure the seaworthiness of a vessel. If the ore carriers are of United States registry, repair work of any substantial quantity is not likely to remain in Canada. On the other hand, if the vessels are to engage in any movement of goods between Canadian ports such vessels under present regulations will be required to have Canadian or British registry. The demands for flexibility would suggest that at least a part of the ore carrier fleet will carry Canadian registry and that increased repair activity in our Canadian yards is likely.

A second factor would be the matter of ship construction. If these vessels are designed for ocean-going traffic, it is possible that it may be convenient to proceed to Nova Scotia yards for repairs prior to winter charter work. If these vessels are constructed for inland water movement only, there would not seem to be a great reason to believe that repairs would be carried out in Atlantic yards.

Forest Products

The principal forest products shipped out of Nova Scotia are lumber, pulpwood, wood pulp, newsprint and pitprops.

With the existence of uninterrupted water shipment provided by the Seaway, it has been suggested that at least 100,000 tons of Quebec and Maritime lumber would find a market at Lake Ontario ports. No breakdown of this expected movement is given, but, for reasons that will follow, it is not likely that the major portion will consist of Maritime lumber. The traffic foreseen for the Seaway in upbound lumber would, in any event, be mostly an extension of seaborne movements now ending at Montreal. Such of it as now is carried in canallers may be moving at return cargo rates but, on the other hand, it involves either a transfer from a larger vessel or a complete movement in a small vessel. There is the alternative of rail movement; however, the rail rate is modified by the existence of water competition. Hence, for a conservative estimate of the savings that may result from the Seaway, only the reduction in water transportation costs from, say, Montreal to Toronto, including the elimination of one transshipment, can be considered.

Transportation costs are, however, not the sole factor militating against Maritime lumber sales in the inland markets; most of it is in grades and specifications that do not find a ready sale in Central Canada. Recent developments confirm this situation.

In the face of shrinking sales to the traditional market in the United Kingdom, Maritime lumber producers are concentrating their efforts almost entirely upon the further cultivation of the eastern United States market, and it is possible that the Seaway might assist them to extend this cultivation into the interior. However, it does not appear that the existence of the Seaway will prove to be a decisive factor for Maritime lumber in the interior United States or Canadian markets.

Pulpwood shipments to Canadian markets have been mainly to markets in Quebec and, consequently, only such movements as may be made into Ontario will be using the canal system of the Seaway. However, an increase in Nova Scotia shipments to Canadian markets, as a result of the Seaway, is not anticipated.

Wood pulp and newsprint find a substantial market in the United States. The railways have been forced to implement water competitive rates in order to obtain the movement of these commodities from Maritime points to Ontario and United States ports on the Great Lakes. Some Canadian newsprint and other paper now moves by canallers, mainly to Chicago and South Haven from Three Rivers, Cornerbrook and even from overseas. Wood pulp now moving up the St. Lawrence is mostly from Baie Comeau to the Chicago area. While the present production of newsprint and wood pulp in Nova Scotia is readily absorbed by the large market in the eastern United States, the Seaway may provide additional markets in Chicago, Detroit and other Great Lakes cities for any surplus that becomes available.

No firm market for pitprops in the central United States appears evident.

In summary, it would not appear that the Seaway will prove of any particular benefit for Nova Scotia lumber, pulpwood or pitprops, while any benefits to newsprint and wood pulp will be dependent upon any surplus that may become available above present production.

Sugar

Discussion of the effects of the Seaway on sugar manufacture in Nova Scotia might perhaps be included more properly in a general section, such as, shipping. However, the long idleness of a large plant in Halifax and the traditional interest of the Province in such manufacture would appear to justify particular discussion rather than using the question of sugar manufacture as an illustration in a general discussion.

Historically, the economic basis of the development of a sugar industry in the Maritimes equipped to manufacture sugar

for subsequent distribution beyond the boundaries of the Maritimes is related to the question of transportation advantage covering the importation of raw materials by water over a twelve-month period. The advantage of open-water harbours and availability of suitable shipping versus the seasonal operation associated with the Central Canadian ports laid the foundation for this development. Such economies were later supplemented by the development of inter-provincial shipping facilities based on the movement of grain products from Central Canada to this area and return cargoes of refined sugar. The discontinuance of inter-provincial shipping and the competitive situation of the industry have required special consideration by the railways in the movement of manufactured sugar from the area into Central Canadian markets. Under present conditions the differential in costs of moving raw sugar to Montreal as against such Atlantic ports as Saint John and Halifax is very small.

There is little doubt that the Seaway would lessen the cost of moving manufactured sugar on large vessels moving up to the inland centres of population beyond Montreal. It is significant that it has not proven possible in recent years to develop the movement of sugar from Halifax to Central Canada on the pattern of pre-World War II days and based on two-way cargoes and small vessels. Manufactured sugar could form a substantial supply of bulk commodities available for a two-way movement of goods by water between Nova Scotia and Central Canada. The question of sugar manufacture is related closely to the development of water movement of grain and milled products and the availability of low-cost return space for sugar products arising out of the new facilities provided by the Seaway.

It should be borne in mind, however, that the waterway also facilitates the movement of raw sugar further into the interior of Canada. Maritime ports normally have a locational advantage in industrial development with respect to the importation of raw material for processing and subsequent furtherance. The Seaway could have the effect of adding this Maritime feature to important cities beyond Montreal. This possibility from a provincial point of view may have general implications as well as particular application to sugar manufacture.

Agriculture

Historically, Nova Scotia agriculture has been largely based on the supply of agricultural products to the Maritime areas with surplus supplies being exported rather than marketed in Central Canada. There have been minor exceptions in this

pattern covering such products as apples, poultry and eggs, but the exceptions are not of any great significance. There is some indication that this pattern is inevitable in view of the competitive position of the industry relative to Central Canadian markets. Moreover, Nova Scotia agriculture has always felt that its competitive position in European and New England markets is more advantageous.

A considerable proportion of agricultural supplies at present move into Nova Scotia from Central Canada by rail. These include grains and other cattle feeds. Most of the fertilizer requirements of agriculture are presently moved in by water and represent imported supplies rather than Canadian. A great proportion of farm machinery and equipment moves from Central Canada and the United States by rail from the Toronto-Detroit areas.

In any consideration of the possible effects of the St. Lawrence waterway on Nova Scotia agriculture it is important to bear in mind the present arrangement regarding assistance to feed grains. In recent years it has been a national policy to provide for the laid-down cost to Nova Scotia farmers of grain feeds to be equivalent to that paid by the farmers of Ontario and Quebec. If the Seaway facilitates the movement of grain feeds by water, the effect on Nova Scotia agriculture would seem to be indirect in that it would reduce the cost of the present policy to the Federal government. Such a movement, if it would facilitate the return movement of sugar from Halifax, might offer an advantage to the Province. Regarding the movement of farm products to Central Canadian markets by water, the Seaway does not seem to offer any new facilities destined to change the pattern of present marketing arrangements unless it proved possible to establish large-scale storage facilities for apples in these areas. The marketing of apples on any scale in these markets would entail shipping bulk supplies by water prior to the freeze-up and provisions for subsequent orderly marketing. Under present conditions it has not been found feasible to market with a radius of 80 miles of Toronto owing to competitive conditions, and it is perhaps significant that the industry has developed its storage facilities in the Province rather than in Montreal, a Central Canadian area available for such water movement under present conditions.

If it can be assumed that the present feed grain assistance policy is an established feature of our economy, the net advantage foreseeable for agriculture would relate to the potential water movement of farm machinery and equipment. Such a movement

is, of course, dependent on the development of a suitable pattern of shipping, which is, as noted elsewhere, a highly speculative question.

Ports

Normally Maritime ports during the season of open navigation on the St. Lawrence handle only a negligible amount of export and import traffic from and to interior ports; thus Halifax, in common with other Maritime ports, is mainly a winter port.

It has been suggested that feed grains and grain for local consumption might move from rail to water by reason of the greater economies associated with larger vessels. As mentioned elsewhere, however, the movement of feed grain by rail is now associated with a policy of freight assistance. It should perhaps be noted that such movement to Halifax implies that the vessels are constructed to meet the conditions of the Atlantic seaboard. Alternatively, if such vessels are not available, such a movement might lead to the development of increased port facilities at points on the north shore of Nova Scotia, such as, Pictou. The volume of business entailed would not indicate any great significance in such speculation.

It has also been suggested that the Seaway might facilitate the transportation of grains and other commodities from the Lake areas to Halifax for furtherance by fast trans-Atlantic vessels. This would seem to be very conjectural and improbable, for it overlooks the high cost of transfer of cargo and appears to cut across the established pattern of shipping and existing storage facilities. On the other hand, the Seaway offers the possibility of a greatly enhanced summer movement of grains to Montreal and thence via the Atlantic. This movement is based mainly on the increased capacity and economies associated with the movement of larger vessels from the Lakes to Montreal. This tendency would be strengthened by any increase in the number of trans-Atlantic ships plying the Seaway as a result of the improved waterways. Such a development might decrease the volume of grains moving through such Maritime ports as Halifax.

It should perhaps be noted that in recent years considerable outlays have been made to keep the St. Lawrence River open for as long a period as possible and that the disabilities of such ports as Montreal are being aggressively offset by ice-breaking operations. There will be a natural tendency for these expenditures to be increased as the importance of the port facilities of the new hinterland grow in importance in the new pattern of trade and

commerce in Canada. Such a development would have the effect of curtailing local port activity by contracting the natural length of the winter season.

Briefly, in so far as the Seaway leads to the development of Canada and a subsequent general increase in the volume of commerce necessary to sustain the Canadian economy, the Seaway Project might, subject to the above qualifications, lead to a general increase in the volume of activity in the port of Halifax. This activity would probably follow the traditional seasonal pattern.

Rail Freight Rates

Despite the existing facilities for water movement from Nova Scotia to Montreal it is an outstanding feature of the provincial economy that historically rail services and freight rates have proved of the utmost importance to its welfare. It is a matter of record that this has been of major concern to Federal and Provincial Governments as well as the businessmen of the province, and the enactment of the Maritime Transportation Act, providing for special arrangements in regard to the movement of goods from Nova Scotia westward, signifies general acceptance of this thesis. It would appear that despite vigorous protests the transportation provisions covering freight rates, established by that Act, have been steadily encroached upon. This context is important in any consideration of the effect of the Seaway on railway services and possible changes in freight rates.

The Seaway development would undoubtedly effect changes in railway services and revenues in Canada inasmuch as the Seaway is specifically designated as an alternative route to railway and other land-transportation facilities. This may not mean a total loss in revenues and over a long period may well increase the total business activity of the railways.

However the precedent, as viewed by the outlying areas of Canada, is for the railways to recover any loss of revenue from increased competition in Central Canada from rates charged in the East and the West. In any short-run view, therefore, there must be some concern that any immediate loss arising out of the Seaway will adversely affect freight rates between this area and Central Canada. Again, if the projected Seaway leads to the development of new patterns of shipping, thus facilitating the movement of cargoes to and from the Maritimes and Central Canada, this will inevitably mean a loss of revenue to the railways from this area. Such loss will require either a curtailment of service to reduce costs or that charges on goods moving by rail will have to be increased.

Briefly, a preliminary appraisal of the situation would suggest that, regardless of the Seaway, rail services and freight rates will remain a vital factor in the welfare of the Province. The alternative of substantial water movement of Maritime Canada relative to other forms of transportation and the probability of enhanced competition arising out of the Seaway, it would appear that even greater emphasis will have to be given to the provisions of the Maritime Freight Rate Act once the Seaway is implemented.

Shipping

The one tangible effect of the creation of the Seaway, as it affects shipping, would be to change the incidence in the direction of cargo moving on the St. Lawrence. One of the most important developments in fostering the Project is the plan to move 10 — 20,000,000 tons of ore yearly from Seven Islands to ports on the Erie. Such a movement would require a large fleet of vessels and would probably entail the loading of at least four 10,000 ton vessels a day (8 for 20,000,000 tons). This introduction of the large-scale movement of iron ore would give a vast preponderancy to upbound traffic. The net effect, normally, would be to expect a lowering of downbound cargo rates at least in so far as concerns bulk commodities which could be carried in ore carriers.

How far this foreseeable pattern will be affected by new movements of commodities by water related to the economies of larger vessels moving along the St. Lawrence must remain largely a matter of conjecture. It is noteworthy that at present the emphasis in cargoes is on bulk commodities and it is reasonable to assume that such an emphasis will form the basis of any new pattern which may evolve.

Coal and grains have been suggested as suitable cargoes for the ore vessels returning to Seven Islands; the implications of such movements have been discussed elsewhere in this Report. It is not expected that such commodities, if they do move in this way, will saturate the facilities of the returning ore carriers; although it has also been suggested that a number of other bulk commodities, such as, automobiles and farm machinery, moving eastward might take advantage of these facilities, it is difficult to foresee their movement in significant quantities by ore carriers.

It would seem reasonable to assume that grain, flour and other mill products might move at substantially lower cost by water to Nova Scotia if these services can be developed. It is perhaps important to note that, historically, such an inter-provincial service did develop prior to World War II and that

this service was based on the two-way movement of grain and sugar. However, such a service has not been in operation since the War despite considerable interest in its revival. No other suitable return cargo has been forthcoming to replace sugar, the supply of which terminated with the closing of the Halifax plant. Apparently, the revival of such a shipping service depends upon the development of bulk commodities moving in each direction. Unfortunately, it is not readily apparent that the introduction of larger ships would materially alter the situation. The question would seem to hinge on the practicability of large grain vessels returning with such commodities as coal, gypsum and possibly lumber or the revival of sugar manufacturing in Halifax, a matter discussed elsewhere in this Study. However, if a pattern of shipping develops on the basis of such bulk commodities, certain capital and consumer goods would probably move by this form of transportation as complementary cargo and the Province would secure the benefits of these lower transportation costs. Such cargoes to Nova Scotia might include automobiles, refrigerators, household appliances, furniture, machinery, etc. Equally, Maritime manufactured goods could travel by water to a greater extent to Central Canada.

The advantages of such a development are obvious. The situation, however, would not represent sole gain. It cannot be overlooked that a number of industries in the area have been developed to supply a local market. In so far as new shipping patterns offset a locational advantage of such industries and submits them to the overwhelming competition of large-scale operation (now augmented by new transportation economies), the effect might be to curtail industrial development in Nova Scotia. Similarly, any reduced cost of moving goods from the centre to the Maritime areas may postpone the development of new local industries to supply local markets. Any measurement of the advantages, therefore, is a matter of balance.

The steady decline of coastal shipping in the past would suggest that the expectation of substantial inter-provincial water transshipment of goods between Nova Scotia and Central Canada is highly speculative and that the two-way movement of the ore carriers on the St. Lawrence is by far the most significant pattern which will emerge from the Seaway in any relatively short-term period.