

Supply—Hudson Bay Railway

ence for the short period of navigation on the Hudson bay will not be any more serious than doubling or trebling the handling equipment normally in use on the prairie, in fact the labour equipment etc., could probably be utilized for an extra month in relieving the pressure of traffic to the head of the lakes after the close of navigation on Hudson bay.

The amount of traffic to be handled is another factor, it would be absolutely foolish to consider shipments limited to a million bushels or even two million bushels by this route and the elevator should handle its capacity five times instead of twice as has been suggested.

Transportation charges Saskatoon, Fort William, Georgian bay, Montreal, Liverpool.—The cost to the shipper at Saskatoon for the transportation of a bushel of wheat from that point to Liverpool via Fort William-Georgian bay ports-Montreal, on the pre-war basis (liner rate exclusive of insurance) is about 26 cents. This rate obtains so long as there is a fair amount of grain offering. When there is an excessive amount of grain to be moved the rate increases and when there is not very much grain offering the rate declines slightly.

Transportation charges Saskatoon-Port-Nelson-Liverpool.—If wheat can be transported via the Hudson Bay route at the same rate as obtains via the Georgian bay-Montreal route it would be expected to obtain a portion of the traffic, so that it will be assumed for purposes of comparison that a rate of 26 cents per bushel can be met on this route which will be subdivided as follows:

	Cents per bushel
Charges Saskatoon-Pas, $\frac{1}{2}$ cent ton mile, 300 miles..	4.0
Ocean voyage and insurance, say.. . . .	8.0
Margin left to cover expenses over Hudson Bay railway and Port Nelson terminals..	14.0
	26.0

It remains therefore to determine the minimum quantity of wheat or wheat equivalent in other grains (as the outbound traffic must necessarily consist largely of grain) which must be transported over this route to cover operating expenses and provide a fair return on capital investment. The annual fixed charges in connection with the Hudson Bay railway and Port Nelson terminals are estimated as follows:

Three per cent interest on cost of Hudson Bay railway, \$16,000,000..	\$480,000
Three per cent interest on cost of Port Nelson terminals, \$13,000,000..	390,000
Total..	\$870,000

The minimum annual maintenance expenditure required to keep the route open is:

Maintenance Hudson Bay railway, 420 miles at \$800..	\$336,000
Maintenance Port Nelson terminals (ar- bitrary)..	250,000
Total..	\$586,000

Traffic ex north Atlantic ports in terms of tonnage appears to be somewhere in the vicinity of double the tonnage into these ports as far as foreign trade is concerned. It will be assumed then that an inbound tonnage equivalent to 50 per cent of the outbound tonnage may be expected via the Hudson Bay route. On the basis of 10,000,000 bushels of wheat or

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wheat equivalent in other grains per year or 300,000 tons outbound and 150,000 tons inbound, assuming an average net load outbound of 1,200 tons and the same number of trains inbound, we have 500 trains or 210,000 train miles at \$1.40 per train mile or a cost for maintenance of.. \$ 294,000

Elevator operating expenses, $\frac{3}{4}$ cents bushel..	75,000
Unloading charges, 50 cents ton on in- bound tonnage..	75,000
	\$ 444,000

Total annual charges.. \$1,900,000

Gross receipts would be as follows:

10,000,000 bushels wheat at 14 cents.. . .	\$1,400,000
150,000 tons freight inbound at \$3.. . .	450,000
Total..	\$1,850,000

It seems evident therefore that at least 5,000,000 bushels of wheat must be handled annually to clear operating expenses and at least 10,000,000 bushels to meet both operating expenses and fixed charges at 3 per cent on money invested.

The first of the new crop would not reach Port Nelson until about September 10th to 15th, so that shipments made prior to that date would have to be from the previous year's crop.

The handling of ten million bushels of wheat in such a short period would require a large number of vessels, from 20 to 50 dependent upon tonnage, as each vessel could probably make only two trips in one season. Berthing accommodation for four or five vessels would appear necessary, and an elevator of 2,000,000 bushels storage capacity to prevent congestion and insure a steady flow of grain at all times during the short season. Almost 7,000,000 bushels of wheat passed through the government elevator at Saskatoon during the period from September 1, 1915 to August 31, 1916, so that no difficulty should be experienced in securing 10,000,000 bushels of grain, or wheat equivalent, for the Hudson Bay route from the district tributary to Saskatoon.

Attached hereto is a statement giving description of land tributary to certain Canadian Northern lines which might be considered as partly tributary to the Hudson Bay railway, also giving by car loads grain originating on each. This statement would appear to indicate that there is now at least 10,000,000 bushels within easy reach of the Hudson Bay railway.

With regard to inbound tonnage, the initial trip of the season might either be from the Atlantic coast of America, or from Europe; the second trip would of course have to be from Europe. Coal would appear to be a likely cargo inbound. Thirty-five thousand tons of bituminous coal would be required annually for the operation of the railway and terminals to handle the traffic outlined above. This coal might either be obtained at Sydney or from England and could be landed at Port Nelson at a cost of about \$5 per ton. There is no possibility however of bituminous coal imported by way of the Hudson Bay route competing with the western product from the mines in the Yellowhead or in the vicinity as the attached tables will show.

Anthracite Coal:—In the case of anthracite coal, however, the prospects are much better. The pre-war price of anthracite coal at Saskatoon was around \$13.50 per ton retail. This comes from the Pennsylvania district. I am advised that good quality Welsh anthracite compares very favourably with good quality