

1. The Ottawa route is a short, independent line which may have great value for future development, but its consideration is not now justified :

(a) It is the shortest through route between terminals and is unquestionably adapted to a navigation of considerable capacity. Comprehensive surveys will be required to determine its availability for a navigation of the first class, and until a project has been matured it will be impossible to say how far lockage and restricted channels will offset the apparent saving in distance.

(b) For a large portion of its length it runs through a region meagre in resources and the ice season is considerably longer than on the Lake Erie route.

(c) The function of the Ottawa route is as a future loop line for through business when traffic conditions shall have been sufficiently developed by the Erie-Ontario route ; provided, it shall be found capable of a radical solution.

5. The routes for shortening distance between Lake Michigan and Lake Huron and between Lake Michigan and Lake Erie are available for a moderate capacity suited to the local and coasting trade. A first-class navigation, if practicable, would be very costly and its utility would be problematical. A large vessel would probably make the longer course through the open water as quickly and the land routes would be closed earlier by ice. They would open earlier in the spring, and this would be a positive advantage, unless means are devised for breaking the ice blockage at Mackinac.

6. A ship route through Western New York along the general course of the Erie Canal is not regarded as a desirable project :

(a) It would involve 120 to 140 miles more of artificial channel than the route via Niagara Ship Canal, Lake Ontario, and the Oswego-Oneida-Mohawk Valley ; it would be crossed by a greater number of bridges and might have as many locks, owing to the conformation of the ground, and it would have a side hill location across lines of drainage for much of its course ; all of which would make the route longer for navigation, more expensive to construct, and involve greater risk in maintenance.

(b) All the important points to be reached by such a project as Rochester, Cayuga Lake and Syracuse, can be better and more cheaply served directly from Lake Ontario or by local canals.

(c) The country to be reached from both shores of Lake Ontario between Hamilton and Ogdensburg is an important consideration. Lake Ontario is comparatively isolated, and to join it with the upper lakes is conceived to be as fruitful in developing commerce as has been the union of Lake Superior, and a project for this purpose would be justified were there no possibilities of going farther in the direction of the seaboard.

(d) A moderate development of the canal through western New York with a high level through the central lakes basin may be of value as a means of water supply for a ship route through the Oswego-Oneida-Mohawk Valley.

7. The question of a trunk route is thus reduced to the natural course through the several Great Lakes. From Lake Ontario the St. Lawrence River leads to tide water at Montreal, and the Lake Champlain and Mohawk routes lead to tide water of the Hudson River at Troy.

II.—Terminal Routes.

8. The making of Lake Champlain a part of the Great Lake system is justified independently of any project for reaching the seaboard :

(a) The same considerations apply as in the case of Lake Superior and Lake Ontario, but in higher degree, on account of the very favourable position of Lake Champlain with respect to a distributive traffic through New England and the magnitude of the movement to and from this section.

(b) Except as opening up an increased territory, extension of navigation eastward gives very little advantage over Lake Erie for the transshipping and forwarding business until Lake Champlain is reached, which is more favourably situated for a part of the through service.

(c) An extension of lake commerce to Lake Champlain would add 40 to 50 per cent to the length of present lake routes, and a nearly proportional amount of territory