

annum, and it might even exceed this. This heavy annual charge is a most serious objection to the Inner Harbour scheme. It would—if the above estimate is correct—eat up all the rents produced by £207,000 worth of reclaimed lands.

As regards harbour layout and operation from the landward side, the Inner Harbour scheme presents some advantageous economic features. The site of the wharves is more immediately contiguous to existing warehouses and bulk stores, and also to the road and the State railway transport system. There is also land or ground which could be reclaimed in the vicinity, available for the future expansion of commerce and industry. Furthermore, the problem of haulage from warehouse to ship's side and *vice versa* is more easily handled, and the distance from half a mile to a mile less than it is in the case of the Outer Harbour; and, generally speaking, owing to the Inner Harbour having always been the main shipping-point both for roadstead and coastal trade, the present layout of both public and private facilities, which has grown up around that harbour, would require comparatively little adaptation to the working of the Inner Harbour as a deep-sea port.

On the other hand, the Outer Harbour is about a mile distant from the present bulk stores and warehouses. It has at its immediate base no land for the buildings, &c., and this space would require to be provided by reclamation from the sea-front. Even then such space would be probably so comparatively limited that it would require to be reserved rather for the use of the Harbour Board than for private enterprise. This is, however, perhaps not so essential, as it is apparent that, for many years to come, wool and other heavy goods will continue to be handled and warehoused in the existing stores situated close to the terminal point of the State railway.

These conditions entail continuous additional haulage to and from the wharves at the Outer or Breakwater Harbour and the State railway terminal or the bulk stores adjacent thereto, while in the case of cargo such as meat, which is railed direct from country loading-points to ship's side, there would be, in loading at the Outer Harbour, the disadvantage of one mile extra railage. There is certainly a set-off against this, in so far as merchants with business places in Napier and Hastings are concerned, as in such case the transport by road of goods from the Outer Harbour to and from their premises would be less than to and from the Inner Harbour, but the net cost of extra haulage to and from the Outer Harbour, as compared with the Inner Harbour, would probably amount to several thousands of pounds per annum.

Taking the various economic factors into consideration, however, it is apparent that the higher capital cost and the heavier annual charge for maintenance in case of the Inner Harbour outweigh very considerably the lesser disadvantage of the extra cost of haulage to and from the breakwater. The disability of there being less space available at the Outer Harbour for stores and warehouses than at the Inner Harbour will be less seriously felt as time progresses, and transport and wharf facilities become better developed and more easily operated. It is impossible to lay out any large main port so that private bulk stores and warehouses shall all be close to the various wharves, and, taking the Inner and Outer Harbours at Napier as component parts of a general harbour scheme, and visualizing the expansion of the port in the more distant future, it is apparent that in time to come, the general layout of transport, warehouse, and harbour facilities will be quite as efficient and satisfactory as at any other main port in the Dominion. In fact, the eventual development of the port with the deep-sea wharves and overseas sorting-sheds at the breakwater, the road and railway transport system along the sea-front to the State railway-yards, and the bulk warehouses and stores adjacent both to these yards and to the coastal loading-berths at the Inner Harbour, with plenty of space in the background available for future industrial development, will be really a more compact and workable system than exists or can exist at most other main ports in the Dominion.

This will be more obvious if the ultimate position of Napier be compared with that of other main ports. The business centre of the city itself will be within a mile to a mile and a half from either the overseas or the coastal berths, with good access by road; and the various harbour facilities, both overseas and coastal, will impinge upon a sea-frontage of about a similar length, with sufficient space on the landward side for road and railway transport and for warehouse accommodation. In the matter of proximity and accessibility Auckland and Wellington are no better off; while Lyttelton, Dunedin, and Invercargill are much less favourably situated. From an economic point of view the problem of ultimate harbour-development at Napier on the lines indicated has distinctly attractive features.

PART 14.—CAN THE CONSTRUCTION OF THE RECOMMENDED HARBOUR BE JUSTIFIED FINANCIALLY AND ECONOMICALLY ?

The next question submitted to us is, "Can the expenditure of the money necessary to construct such a harbour (taking into account the amount already expended) be justified from the financial and economic aspect?"

The words "such a harbour" mean the harbour which under the immediately preceding heading we have recommended—viz., the Breakwater (or Outer) Harbour. The words "to construct such a harbour (taking into account the amount already expended)" we take as meaning to complete the existing Breakwater Harbour in accordance with the general description which we gave in Part 12, when we decided that it was practicable to complete the Breakwater Harbour.

In round figures, the amount already expended upon the Breakwater Harbour is £448,000, and, again in round approximate figures, the cost of completing it according to the description adopted above, is £448,000. The factors to be taken into account in deciding whether this additional expenditure can be justified from the financial and economic aspect, and in the light of the above estimate of the cost of completion, are, on one side, (1) the extra interest charge involved, after