

The Commonwealth of Massachusetts

DIVISION OF METROPOLITAN PLANNING,
November 30, 1926.

To the Honorable Senate and House of Representatives in General Court assembled.

This Division herewith respectfully submits the portion of its annual report for the year ending November 30, 1926 (Pub. Doc. No. 142), which contains recommendations or suggestions for legislative action.

1. CIRCUMFERENTIAL AND OTHER HIGHWAYS.

The primary highway recommendation contained in our report of last year was for the construction of what has been termed the "Circumferential Highway"; that is, the construction of certain missing links in our parkway and highway system which will give a substantially continuous route leading from the North to the South Shore and passing around the most thickly settled sections of the metropolitan area. The congestion in the central part of the city is becoming more and more serious; and it was then, and is now, our feeling that substantial relief can be afforded the down-town congestion by the construction of this circumferential route.

The Legislature of 1926 made the initial appropriations for the route and authorized the purchase of the necessary lands for the extension of the Lynn Fells Parkway to the Newburyport Turnpike and for a missing link in the Readville section. The large expenditures necessary for the completion of the northern traffic artery, the southern artery, and the Old Colony Boulevard, however, prevented the authorization of the entire route. We accordingly now repeat our recommendation of last year and urge that authorization be given for the completion of the Circumferential Highway along substantially the same lines as

indicated last year. Certain minor changes have been made in the route, but it is substantially the same route as suggested last year, starting at the Lynn Shore Drive in Lynn, near the Swampscott line, and following Eastern Avenue or other convenient streets to Western Avenue. From Western Avenue the easterly entrance of the Lynn Woods can be reached at the Great Woods Road entrance over excellent streets. From that point it is proposed that a suitable parkway be constructed through the Lynn Woods and over a portion of the Lynn water works reservation, crossing the southerly arm of the reservoir near the Lynn-Saugus line, thence over public or private ways and private lands to the Newburyport Turnpike at or near Walnut Street, and thence, by a second section of parkway from a point near the Saugus River on the Newburyport Turnpike, reach the easterly end of the Lynn Fells Parkway. The Lynn Fells Parkway and parkways in Middlesex Fells and along the Mystic River, with a short section of streets in Medford, will carry the traffic to the westerly end of the Alewife Brook Parkway at Massachusetts Avenue. It is then proposed to construct a missing link largely on land now owned by the Commonwealth from the southerly end of the Alewife Brook Parkway to the northerly end of Fresh Pond Parkway on Huron Avenue. From the southerly end of the Fresh Pond Parkway there are adequate streets and parkways leading through Boston and Brookline to the recently constructed extension of the West Roxbury Parkway, which in turn will carry traffic to the Stony Brook Parkway, which in turn will take traffic to Readville. A short connecting link is required on the westerly side of the tracks in Readville. Thence the improvement of East Milton Street and a new bridge over the Neponset River will carry traffic over existing parkways and streets to the southerly side of the Blue Hills Reservation. Several years ago authorization was granted for the construction of a highway along the southerly edge of the Blue Hills Reservation by joint action of the towns of Milton, Canton, and Braintree and the Metropolitan District. There was much delay in securing necessary local action of all of the towns

concerned. We are glad to report that all parties now as a unit desire the construction of this highway along the south side of Blue Hills; and it will constitute an important link in the circumferential route carrying traffic to South Braintree. Thence the improvement of certain streets in Braintree, Weymouth, and Hingham will carry traffic to the main arteries reaching Plymouth and other points on the South Shore.

We also recommend the construction of a missing link between the Blue Hills Parkway and Randolph Avenue, so that traffic arriving at Mattapan can pass over the Blue Hills Parkway and this missing link to Randolph, and thence via the circumferential route to the South Shore, without the necessity of passing through the crowded sections of Quincy, East Milton, and Weymouth.

In addition to the Circumferential Highway, we are this year recommending the construction of —

(a) An extension of the Fellsway East from its northerly terminus, across the Middlesex Fells Reservation to a connection with the Lynn Fells Parkway. The construction of this parkway will greatly relieve pressure on other parkways in the Middlesex Fells and shorten the distance from Melrose and towns to the north to Boston.

(b) The extension of Squires Road, Revere, from its present terminus at Broadway across private property to Revere Street, so that the large traffic now using Squires Road can have a direct outlet to Revere Beach.

(c) The Division is studying plans for the construction of a parkway across Hammond Woods, but at this time is not prepared to report its recommendations.

2. EAST BOSTON BRIDGE OR TUNNEL.

Last year in our annual report we reported, as directed by chapter 37 of the Resolves of 1925, on improved transit facilities between Boston and East Boston by means of either a vehicular tunnel or vehicular bridge. In that report, we stated:

The Division does not recommend any specific financial plan. If private capital is interested, it should present its case directly to the

Legislature. If, on the other hand, the city of Boston desires to construct a bridge or tunnel, the Division hopes the city will make known its position. This report therefore should be considered a report of progress with data as to operating expenses and probable revenue of either a bridge or tunnel, and with suggestions of various means by which it can be financed, our outstanding conclusions being that —

(a) Some additional means of direct physical connection should be constructed; and

(b) That they should be fully supported by adequate tolls.

Private capital did show strong interest in the project, and a bill was presented and passed by the Legislature for the construction by private capital of a bridge between Boston and East Boston. This bill was vetoed by His Excellency the Governor, not because he was opposed to a bridge or tunnel, but because he felt that in many details the bill did not adequately protect the public interest, and because he was fearful that the cost of private capital would result in excessive tolls.

We have reviewed the situation, and it is still our conclusion that a bridge or tunnel is required; we also feel that if built by public capital as a toll bridge it can be made self-supporting either at once or within a very few years. Public money can be obtained for approximately 4%. Private money will undoubtedly cost 8%; and a bridge or tunnel built with private money may not pay its way for a number of years, though we recognize fully that all statistics as to possible travel are at the best but estimates; and that thus far nearly every toll bridge — private or public — has soon become crowded to its capacity.

We believe it wise that the cities and towns who would be most directly benefited by the bridge or tunnel, to wit, Boston, Chelsea, Revere, Winthrop, and Lynn, should have an opportunity, by a referendum at the next election, to state whether they desire to be created a district for the construction, maintenance, and operation of such a bridge or tunnel. If the vote is affirmative then we believe a commission should be authorized to construct the bridge or tunnel with the State credit, and establish tolls which in their opinion will make the construction self-supporting. Such a commission should then operate the bridge or tunnel on a

service-at-cost basis, and in case of a deficit it shall be charged back upon the cities or towns of the bridge district in proportion to the assessed value of their property, or in some other equitable proportion. We have named certain cities which we know will be benefited by the construction of such a bridge or tunnel, but there may well be other cities and towns that will be benefited; and if the referendum vote is in the affirmative, then we believe that a commission appointed by the Supreme Court should decide whether other cities and towns will be benefited and should be included in the bridge district.

We do not recommend the construction of either a bridge or tunnel as a free structure, but merely as a bridge or tunnel on which adequate tolls are charged to cover all maintenance, operating cost, fixed charges, and depreciation. We also feel that provisions should be included in any bill making it a contract between the bondholders and the State that adequate tolls shall be charged until the bonds have been paid off by the sinking fund. Our estimates of cost and annual operating expense of a bridge or tunnel are as follows:

	Single Tube Tunnel with Annual Capacity of 5,000,000 Vehicles.	Twin Tube Tunnel with Annual Capacity of 10,000,000 Vehicles.	Bridge with Annual Capacity of 10,000,000 Vehicles.
<i>Tunnel or Bridge built and operated by the State.</i>			
Cost	\$9,000,000	\$18,000,000	\$18,000,000
Operating expenses	\$200,000	\$400,000	\$150,000
Interest at 4 per cent	360,000	720,000	720,000
Sinking fund 1 per cent	90,000	180,000	180,000
	\$650,000	\$1,300,000	\$1,050,000
<i>Tunnel or Bridge built and operated by a Private Company.</i>			
Cost	\$9,000,000	\$18,000,000	\$18,000,000
Operating expenses	\$200,000	\$400,000	\$150,000
Interest at 8 per cent	720,000	1,440,000	1,440,000
Sinking fund 1 per cent	90,000	180,000	180,000
	\$1,010,000	\$2,020,000	\$1,770,000

It is our feeling that under no circumstances should the average toll to be charged exceed 30 cents per vehicle, as larger tolls would probably discourage traffic, which of course can avoid the use of the bridge or tunnel by circling

to the north and west. On the basis of a 30-cent toll, our estimates of the number of vehicles and income are as follows:

	Number of Vehicles.	Income.
1930	2,500,000	\$750,000
1935	3,500,000	1,050,000
1940	5,000,000	1,500,000
1950	10,000,000	3,000,000

Our estimates are, we believe, conservative, and indicate that a bridge or tunnel built with public money would be self-supporting by 1935, and might well be so before that date. East Boston and Boston are now connected by two ferries, the annual deficit of which amounts to about \$800,000. If the bridge or tunnel is constructed it will probably not be wise to entirely discontinue ferry service, but undoubtedly ferry service can be lessened — possibly cut in two — and thus a saving of from \$300,000 to \$400,000 effected to the city of Boston.

We recommend a referendum as to the public construction of a bridge or tunnel, and providing for its construction by public money if the referendum is favorable. If the vote of the cities and towns is against construction, then the question may well be revived as to whether a charter may be granted to private interests for the construction of the bridge or tunnel.

Respectfully submitted,

DIVISION OF METROPOLITAN PLANNING.

HENRY I. HARRIMAN, *Chairman.*

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