

HOUSE No. 1103.

Commonwealth of Massachusetts.

BOSTON TRANSIT COMMISSION,
20 BEACON STREET, BOSTON, April 13, 1899.

To the Honorable the Speaker and the House of Representatives of the Commonwealth of Massachusetts.

The Boston Transit Commission respectfully submits its reply to the following order passed by the House of Representatives and received by the Commission at its meeting on April 11:—

Ordered, That the Boston Transit Commission be requested to inform the House of Representatives forthwith whether the subways leased to the Boston Elevated Railroad Company are now being used by said company to the full capacity thereof, especially at the Park Street station, and, if not, in what manner and to what extent said subways may be more fully utilized and travel therein expedited.

The first question is whether the subway is now being used to its full capacity, especially at the Park Street station.

There are three sets of tracks in the subway. One set enters at the Boylston Street incline and forms a loop at Park Street. The second set consists of the through tracks running from Pleasant Street to Travers Street. The tracks of the third set enter the subway at Travers Street, pass up Hanover Street to Scollay Square and return again to the northern exit by way of Cornhill and Washington Street.

The loop tracks are at various points connected with the

through tracks by switches for the convenient transfer, when desired, of traffic from the one to the other. At the northern terminal these switches are controlled from an interlocking tower.

Inasmuch as the tracks within the subway are free from the interference which surface tracks suffer from foot passengers, from teams and from grade crossings, it is obvious that between stations the subway tracks have a greater capacity for traffic than surface tracks.

What is the capacity for traffic at the subway platforms?

Last fall during the first two months or so of the operation of the subway as a whole the traffic on the Park Street loop was delayed at the Park Street platforms and the public inadequately accommodated. The elevated railway company, however, soon initiated changes in the method of operation adapted to the requirements of the situation. These changes consisted in increasing the number of berths at the platforms and in notifying passengers in advance as to the exact point at which each car was to stop.

On December 9 last, before these changes were fully developed, it was found that 195 cars passed around the loop at Park Street in the hour of maximum traffic, that is, between 5 and 6 o'clock in the afternoon. This traffic did not result in congestion of cars within the subway.

The card indicator then in use could be seen only from a portion of the platform. Electric indicators at each end of the platform readily visible from all parts of the platform and from the stairs as well have since been installed, and the method of handling the traffic has in other respects been materially improved.

Since the said 9th December, 1898, this Commission has had counts made of the number of cars passing over tracks in the subway in the maximum hour on a few days only. The following is the result of these counts so far as the Park Street loop tracks are concerned: —

Thursday, Dec. 15, 1898,	176
Wednesday, Jan. 18, 1899,	187
Wednesday, March 29, 1899,	155
Thursday, March 30, 1899,	175
Tuesday, April 4, 1899,	181

It is evident that if, with the only partially developed methods of handling passengers and cars in use on Dec. 9, 1898, 195 cars per hour could be handled without congestion, the improved methods of operation now in use will permit the running of a larger number of cars, and that the limit of traffic capacity on these tracks has not been reached. Admirable as are the present methods of operation, there is opportunity for still further improvement in the future.

Complaint has been made in regard to the crowding which has occurred on the Park Street platform in the eagerness of people to get on board the loop cars. Before the present methods of operation were adopted this crowding was most objectionable and in many cases dangerous. The chief cause of the trouble was that no passenger knew where his car was going to stop until it appeared at the platform. The distribution of passengers, therefore, to the several cars had to take place practically after the arrival of the cars, and people who were at one end of the platform hurrying to the other to get their car caused much confusion, excitement and hustling. While there are still people who have not learned to avail themselves of the information furnished by the electric indicators it is believed that the difficulty above referred to is now practically remedied. It was a difficulty which was foreseen by the Commission before the plans of the subway were adopted and its solution was then worked out on the line of the device now in use.

It must be borne in mind that if there are more people desiring passage on a car than there are seats within it, they will, in their eagerness to take that particular car and to get a seat, crowd towards and upon the car platforms, no matter how large may be the open space around the car.

So far as the other two sets of tracks in the subway are concerned the number of cars requisite for present traffic does not utilize them to their full capacity. Each of these two sets has at least as great a capacity for traffic as the Park Street loop. The through tracks are now carrying about three-fifths as much traffic as is carried on the Park Street loop, and the traffic on the Scollay Square loop is still less.

The answer to the first question is, therefore, that the subway is not now being used to its full capacity.

The next question is in what manner and to what extent the subway may be more fully utilized and travel therein expedited.

The subway is utilized at the present time to the extent of the business which is brought to it. It is capable of doing more business when more business is offered. If congestion in any part should occur in the future, relief should be sought as it has been sought at the Park Street station, by improved methods of operation and also by transferring traffic from the over-burdened tracks or portions of platforms to those less heavily loaded.

The subway was carefully planned to avoid all grade crossings by cars going in different directions, but it was also planned with special reference to facilitate the transfer of traffic between tracks for cars going in the same direction.

The problems of operation which occur within the subway are not the same as those which occur on the surface, and it was not to be expected that they would be correctly solved at once or that the full benefits of the island platforms would be immediately developed.

The present method of taking up tickets and transfer checks in the cars in the subway is a source of considerable delay to traffic and inconvenience to passengers. This system is particularly prejudicial to rapid transit where the stations are so near together as they must necessarily be in the very heart of the city. If the company could devise some method to avoid these delays by taking tickets from passengers as they enter the subway, according to the system in use on the New York Elevated Railway, much would be accomplished towards promoting rapid transit, the convenience of the public would be increased, the transfer turn stiles and barriers at the Park Street platforms would be unnecessary, the special stop for the transfer station at Park Street would be done away with, and passengers could have the choice of several platforms at which they could transfer instead of being limited, as at present, to those particular platforms specially arranged for transfer service.

It is recognized that it is not a simple matter to carry out this suggestion consistently with the operation of cars outside of the subway, but it is believed that the problem can be solved and that it is not more difficult than other problems which have been solved by the company in its efforts to promote rapid transit.

THE BOSTON TRANSIT COMMISSION,

By GEORGE G. CROCKER,
Chairman.

