CONTROLLING OFFICER'S REPLY

(Question Serial No. 2946)

Head: (60) Highways Department

Subhead (No. & title): (-) Not Specified

Programme: (3) Railway Development

Controlling Officer: Director of Highways (Daniel K W CHUNG)

Director of Bureau: Secretary for Transport and Housing

Question:

What were the average passenger patronage and loading per hour of the East Rail Line (ERL) during morning and afternoon peak hours in 2017?

As the population of the New Territories North (NTN) continues to grow, residents in the North District often face the problems of crowded trains along the ERL and traffic congestion. Based on the statistics in 2016, passenger patronage of the ERL has almost reached its carrying capacity. Will the Government conduct any study on the construction of a new railway or other mass transit systems connecting the NTN and Kowloon so as to address the transport demand? If so, what are the details? If not, what are the reasons?

Asked by: Hon LAM Cheuk-ting (Member Question No. (LegCo use): 34)

Reply:

The patronage and the passenger loading of the ERL per hour per direction during morning peak hours for critical link (i.e. Tai Wai to Kowloon Tong) in 2017 are provided below:

	2017
Patronage (passenger trips)	57 800
Loading (six persons (standing) per square metre (ppsm)) (Note)	67%
Loading (four ppsm) (Note)	94%

Note: All train compartments of the existing MTR railway lines are designed based on the industry standard design adopted at the time of the construction of railway lines, and the maximum carrying capacity of train compartments is calculated based on an accommodation of up to six ppsm on average. However, it has been observed that over the years, passenger riding habits have changed. Nowadays, passengers are less willing to board a train that looks crowded even when there is still room available. They prefer waiting for the next train. This in effect reduces the carrying capacity of the trains and the railway line as a whole. In actual operation, trains running during the busiest hours on the busiest corridors achieve a passenger density of only around four ppsm.

According to the information provided by the MTR Corporation Limited (MTRCL), in normal circumstances, the highest passenger loading of a railway line (both heavy rail and the Light Rail) occurs during the morning peak hours when more passengers travel in similar time. The travelling pattern of passengers in the evening peak hours is relatively more dispersed, hence the peak loading is usually lower in the evening peak hours than that in the morning peak hours.

The busiest section of the ERL is the section from Tai Wai Station to Kowloon Tong Station, which is currently the only way to the urban areas for commuters of the ERL and the Ma On Shan Line (MOL). In this regard, the Tai Wai to Hung Hom Section of the Shatin to Central Link (SCL) scheduled for completion in mid-2019 will connect with the West Rail Line (WRL) and the MOL to form the "East West Corridor" (EWC). The 7-car trains running in WRL and 4-car trains in MOL will become 8-car trains running along EWC. With the SCL, overall carrying capacity will be increased; the loading of the ERL will also be alleviated. In 2021, the SCL will extend to Admiralty and form the "North South Corridor" (NSC) with the ERL. Upon full commissioning of the NSC, we estimate that about 20% of the passengers from the section between Tai Wai and Kowloon Tong will switch to the SCL for onward trips to Kowloon East and Hong Kong Island.

The underground utilities and foundations of buildings along the northern shore of Hong Kong Island is congested, leaving limited sites or space for the construction of railway stations. As such, trains running along the NSC connecting Lo Wu Station and Admiralty Station will have to be changed from 12-car trains currently serving the ERL to 9-car trains. With the enhancement of the signalling system, however, the headway will be shortened from about three minutes currently to about two minutes during peak hours, enabling the NSC to operate with a carrying capacity similar to that of the ERL. Coupled with the diversion effect mentioned above, we anticipate a drop of about 20% in the patronage of the ERL section between Tai Wai Station and Kowloon Tong Station in the morning peak hours after the commissioning of the SCL.

The Transport and Housing Bureau (THB) announced the Railway Development Strategy 2014 (RDS-2014) in September 2014. Having regard to transport demand, cost-effectiveness and the development needs of New Development Areas, the RDS-2014 recommends seven new railway projects, including the Northern Link (and Kwu Tung Station). According to the RDS-2014, one of the functions of the Northern Link is to divert passenger flow of the ERL. The consultant at that time assessed that the Northern Link can help divert some of the railway traffic from the northeastern New Territories (including that arising from the proposed New Development Areas), bringing about a further redistributive effect.

The MTRCL submitted the proposal for the Northern Link (and Kwu Tung Station) to the Government in end March 2017. The THB, the Highways Department and relevant bureaux/departments are evaluating the proposal and have requested the MTRCL to provide additional information and supplement details of the proposal in order to ensure that its proposal will be practically feasible and can bring maximum benefits to the community.

We aim to consult the public on the detailed alignment, locations of stations, mode of implementation, cost estimate, mode of financing and actual implementation timetable of the Northern Link (and Kwu Tung Station) within 2018.

The Development Bureau and the Planning Department are conducting the planning study, "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" on the longer term planning of Hong Kong. In accordance with the planning directions of that study, we aim to carry out the "Strategic Studies on Railways and Major Roads beyond 2030". These studies will take account of the latest planning data of Hong Kong, review the traffic demand of Hong Kong from 2031 to 2041 (or beyond), and study the required strategic transport infrastructure network (including railways and major roads) to satisfy the traffic demand of two Strategic Growth Areas (i.e. East Lantau Metropolis and New Territories North), and to improve the performance of the current major transport corridors (including railways and major roads). We will commence the studies as soon as funding is secured.

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