LCQ6: Congestion problem at road harbour crossings

Following is a question by Dr the Hon Chan Han-pan and a reply by the Secretary for Transport and Logistics, Ms Mable Chan, in the Legislative Council today (January 22):

Question:

It has been one year since the Government implemented improvement measures to alleviate the congestion problem at the three road harbour crossings (RHCs) and the road sections in their vicinity. In this connection, will the Government inform this Council:

(1) of the average daily vehicular flows of each of the three RHCs at present, and the average percentages of their vehicular flows during the morning and evening peak hours to the total vehicular flows; whether it has assessed if it is necessary to fine-tune the definition of peak periods of the three RHCs in view of their current traffic volumes, such as deferring the peak periods of the Western Harbour Crossing (WHC), so that motorists will set off earlier as a result; if so, of the details and the timetable; if not, the measures in place to resolve the congestion problem at the three RHCs during peak periods;

(2) as it is learnt that there are frequent traffic congestions at the entrance and exit of WHC and the road sections in its vicinity, and that the Government proposed last year to construct an additional lane at the exit of WHC on Hong Kong Island towards Central and Sheung Wan, of the progress and timetable of the project concerned; if the Government will not take forward the project, of the short, medium and long-term measures in place to resolve the relevant congestion problem; and

(3) whether it has plans to grant the toll plaza sites at the three RHCs for the provision of charging stations and park-and-ride facilities, or to the bus companies for non-farebox revenue purposes; if so, of the timetable; if not, the reasons for that?

Reply:

President,

The Government has implemented time-varying tolls at the three road harbour crossings (RHCs) to suppress and divert the excessive traffic demand of cross-harbour private cars during peak hours, so as to rationalise the cross-harbour traffic flow and better utilise the capacity of the three RHCs. The Government has been closely monitoring the traffic situation at the three RHCs. Since the implementation of the new tolls in December 2023, with the co-operation of motorists and their adjustments to commuting pattern, the overall traffic queues and congestion at the tunnel portals have been alleviated, thus effectively achieving the policy objectives and expectations.

Having consulted the Transport Department (TD), my reply to the question raised by Dr the Hon Chan Han-pan is as follows:

(1) During the period from December 2023 to November 2024, the total traffic volume of the three RHCs was similar to that before the implementation of time-varying tolls, averaging about 272 000 vehicles per day. The distribution of traffic flows across the three RHCs was as follows: traffic flow at the Western Harbour Crossing (WHC) increased by approximately 18 per cent to about 103 000 vehicles; traffic flow at the Cross-Harbour Tunnel (CHT) decreased by approximately nine per cent to about 95 000 vehicles; and traffic flow at the Eastern Harbour Crossing (EHC) also decreased by about seven per cent to 73 000 vehicles. Our data shows that after the implementation of the new tolls, the daily cross-harbour traffic remained stable without inducing additional traffic. Meanwhile, the cross-harbour traffic was more evenly distributed among the three RHCs, thereby better utilising the capacity of each tunnel.

Apart from geographical diversion of traffic, the new tolls also facilitated re-distribution of traffic among different time periods. The proportion of peak-hour traffic out of the total daily traffic of the three RHCs dropped slightly by one per cent from 38 per cent before the implementation of time-varying tolls to 37 per cent after the implementation of time-varying tolls. The overall cross-harbour traffic during peak hours also generally decreased by one per cent to four per cent as compared with that before the implementation of the new tolls. Generally speaking, the traffic flow at the three RHCs during peak time slots registered a decrease, while there was an overall increase in traffic flows of three RHCs outside the peak time slots, reflecting a change in the commuting habits of some motorists who chose to travel during the time slots with lower tolls.

The above situation is in line with our expectation. In the past, the traffic flow at CHT was high throughout the day while WHC, which has the highest capacity, had not been well utilised for most of the time in a day. The current tolls have driven an effective utilisation of the capacities of the three RHCs, and rationalisation of the unevenly distributed traffic caused by the tolls in the past. The congestion at both the CHT and EHC during peak hours was alleviated, and the non-cross-harbour traffic condition near the tunnel portals had also improved significantly. During normal and off-peak time slots, which account for nearly 80 per cent of the day, the overall cross-harbour traffic was significantly smoother than before. I believe many motorists have noticed that the traffic queues at the CHT and EHC during peak hours have generally reduced by more than one kilometre and 0.5km respectively.

We have also assessed the potential impact on cross-harbour traffic if the start time of peak time slot at the WHC is deferred. According to our traffic data, at present, the traffic flow of the three RHCs has already exceeded their capacities, and hence queues emerged during the transitional time slot when entering the morning peak time slot. If the peak time slot for WHC was postponed, it would be tantamount to lowering the tolls during the transitional time slot, which is expected to induce additional traffic flow and attract some vehicles to divert to the WHC, thus lengthening the queues at the WHC during that time slot.

The TD is now collecting and compiling the cross-harbour traffic data for the whole year of 2024, for the purpose of analysing and reviewing the existing arrangements for peak time slots for each tunnel, which is expected to be completed by the middle of this year. Subject to the outcome of the review, the TD will follow up in accordance with the toll adjustment mechanism under the existing legislation. If the cross-harbour traffic demand frequently exceeded tunnel capacity and resulted in congestion, and if the resulting traffic queues continuously affected critical junctions or interchanges, thereby blocking non-tunnel traffic or traffic across districts, the TD will be able to consider adjusting the tolls of the RHCs for private cars during the peak time slots in accordance with the statutory mechanism.

(2) To enhance the capacity of Hong Kong Island exit section of the WHC and reduce the need for vehicle weaving, thereby smoothing the traffic flow at the tunnel portal and its vicinity, the TD and the Highways Department are actively pursuing the construction of an additional lane at the tunnel portal on the Hong Kong Island side towards Central and Sheung Wan. The relevant construction works commenced last month for completion estimated to be the middle of next year. Upon completion of the works, we expect that the traffic at Hong Kong Island exit of WHC will improve, thus significantly alleviating traffic condition at the southbound of WHC during peak time slot.

(3) The Government will make use of the freed-up space following the implementation of HKeToll at the three RHCs to improve public transport services and traffic at tunnel portals. These include improvements on bus pick-up and drop-off arrangements, as well as widening and straightening of traffic lanes to facilitate smoother pedestrian and vehicular flows near the tunnel portals.

It is noteworthy that the freed-up space following the implementation of HKeToll at the three RHCs are mainly located in the fast lane areas. Therefore, the provision of appropriate vehicular accesses, pedestrian crossing facilities or public transport interchanges should be premised on road safety. The Government will continue to actively consider options to tie in with the development of the surrounding areas as far as traffic conditions permit.

Thank you, President.