

**For discussion
28 June 2010**

Legislative Council Panel on Transport

The Traffic Benefits from the Opening of Tsing Sha Highway

Purpose

This paper informs Members of the use and benefits of the Tsing Sha Highway (i.e. the eastern half of Route 8) upon its full commissioning in December 2009.

Background

2. Route 8 is an expressway linking the Hong Kong International Airport and Sha Tin via Tsing Yi and Cheung Sha Wan. Its alignment is shown on the plan at Annex A. Route 8 was implemented in three phases. The first phase, i.e. the section between the Airport and Tsing Yi, was completed in 1997. The second phase, i.e. the section between Sha Tin and Cheung Sha Wan, was commissioned in March 2008. The third and the final phase, i.e. the section between Tsing Yi and Cheung Sha Wan, was completed and opened to the public in December 2009. The sections under phases 2 and 3 together form the Tsing Sha Highway. As the first phase of Route 8 has been put into use for over 10 years, this paper focuses only on the use and benefits of the Tsing Sha Highway section of the Route.

3. The alignment of Tsing Sha Highway and its connections are shown on the plan at Annex B. With connections provided for convenient access to North West New Territories, the Airport, North Lantau, Tsing Yi, the container terminals in Kwai Chung and Tsing Yi, Kowloon West, and North East New Territories, the Highway could support the future economic growth and developments in these areas. Further, Tsing Sha Highway could relieve the traffic burden of the Lion Rock Tunnel (Route 1), Tate's Cairn Tunnel (Route 2) and Cheung Tsing Tunnel (Route 3), all of which have experienced or are expected to experience capacity problem in the near future due to the increasing traffic flow.

Current Usage

4. The recent traffic volume on Tsing Sha Highway is summarized below:

Sections		Dec 09	Jan 10	Feb 10	Mar 10
Cheung Sha Wan - Sha Tin	Average daily 2-way flow (vehicles)	30 600	32 079	30 991	31 931
	A.M. peak hour flow (vehicles/hour) Cheung Sha Wan-bound	1 958	2 102	2 086	2 087
	A.M. peak hour volume/capacity ratio	0.5	0.5	0.5	0.5
Tsing Yi - Cheung Sha Wan	Average daily 2-way flow (vehicles)	32 005	28 768	27 446	29 562
	A.M. peak hour flow (vehicles/hour) Cheung Sha Wan-bound	1 528	1 531	1 640	1 563
	A.M. peak hour volume/capacity ratio	0.4	0.4	0.4	0.4

5. With the continuous development of the areas mentioned in paragraph 3 above, the usage of the Highway is expected to increase progressively over time. There will be adequate spare capacity to take up the increasing traffic demand.

Benefits

6. As part of a strategic route with expressway standards, the completion of the Tsing Sha Highway has shortened the journey time between many regions served by the route. Some examples are given in the following table:

Observed Journey Time (minutes)

	Previous route	via Tsing Sha Highway	Saving [%]
From Sha Tin to Kwai Chung	16 (via Shing Mun Tunnel)	9	7 [44%]
From Sha Tin to Tsing Yi	16 (via Shing Mun Tunnel)	11	5 [31%]
From Sha Tin to Airport	30 (via Shing Mun Tunnel)	25	5 [17%]
From Sha Tin to Cheung Sha Wan	15 (via Lion Rock Tunnel)	10	5 [33%]
From Sha Tin to Tsim Sha Tsui	30 (via Lion Rock Tunnel)	18	12 [40%]

7. Without Tsing Sha Highway, both the Lion Rock Tunnel and the Tate's Cairn Tunnel would have reached their capacity especially during the peak hours. In early 2008, prior to commissioning of the section between Sha Tin and Cheung Sha Wan, traffic queues were regularly found during the morning peak hour in the Kowloon-bound direction. In normal week days, the length of the queues was about 1.7km at the Lion Rock Tunnel and 1.0km at the Tate's Cairn Tunnel. Upon commissioning of the Tsing Sha Highway, the queues at these two tunnels have been shortened to about 0.5km.

8. The Cheung Tsing Tunnel was also approaching its capacity. The traffic volume during the morning peak hour in the Kowloon-bound direction before commissioning of Tsing Sha Highway was in the order of 4 250 vehicles/hour with volume/capacity ratio at 1.0. Upon the full commissioning of the Highway, the volume is now reduced to around 3 000 vehicles/hour with the volume/capacity ratio lowered to 0.7.

9. Before the commissioning of the Tsing Sha Highway, access to the Container Terminal No. 9 had to route through the developed residential areas (e.g. via Ching Hong Road) in Tsing Yi and access to the other container terminals might have to route through some developed residential areas in Kwai Chung. After its completion, some of this traffic has been diverted to the Highway via its slip roads leading directly to the Container

Terminal No. 8 and 9. As an illustration, the traffic counts taken at the Tsing Hong Road before and after the commissioning of the Highway are tabulated below:

	Traffic Counts (0730-0930) (in vehicles)	
	Medium/Heavy goods vehicle	Container vehicle
Before Commissioning of Tsing Sha Highway	196	83
After Commissioning of the Highway	113	41
Percentage reduction	42%	51%

10. The above table shows that following the commissioning of the Tsing Sha Highway, a large proportion of medium/heavy goods vehicles and container vehicles have been diverted to the new road instead of passing through the residential area. This has helped improve the environment thereat.

Road Safety Performance

11. A total of 9 accidents occurred on the Tsing Sha Highway since the opening of the Cheung Sha Wan – Shatin section in March 2008 up to April 2010. Seven of the accidents resulted in slight personal injuries while two of them resulted in serious personal injuries. There was no fatal accident. The accident rate in this period was about 0.07 per million vehicle-kilometre, which is significantly lower than the average accident rate on expressways or the territory-wide average (which currently stand at 0.28 and 1.22 respectively). The road safety performance of the Highway is considered satisfactory. We will continue to monitor the situation.

Advice Sought

12. Members are invited to note the content of this paper.

8號幹線

Annex A

Route 8



