

By post and by email at shirleyclleung@td.gov.hk

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Dear Ir LEUNG

Views on Toll Rationalisation Proposal

Thank you for inviting the Institution to provide views on the captioned subject. We are pleased to provide herewith our views and suggestions on the subject matters for your consideration.

Thank you for your attention.

Yours sincerely



Monica YUEN (Mrs)
Chief Executive & Secretary
The Hong Kong Institution of Engineers

Enc

MY/ML

Enclosure

**Views from the Hong Kong Institution of Engineers on
Toll Rationalisation Proposal**

The Hong Kong Institution of Engineers (HKIE) supports the proposed toll rationalisation plan of traffic distribution among the three road harbour crossings, which is expected to help yield a significant social surplus to cover the social costs due to traffic jams. We would like to put forth our views in detail in the ensuing paragraphs for consideration.

2. The HKIE considers it conducive to develop an overarching reference case to compare the impact of different options of charging scheme, while the impact of these proposals should not be worse than the overarching reference case.
3. With regard to the proposal, a review based on a cost-benefit analysis to examine the social benefit of the overall schemes has been conducted.
4. With reference to the Attachment summarising the information provided by the Legislative Council Panel on Transport, it is noted that social benefit only includes social cost savings in terms of saving in travelling distance and time as well as the reduction in the number of affected non-tunnel roads/junctions. It is estimated that additional revenue from the rationalised toll based on publicly available information would be \$0.9 billion. Hence the net cost for the subsidisation for Western Harbour Tunnel Company Limited (WHTCL) would be \$0.9 billion. When comparing the net cost with the estimated social benefit quoted, there is an overall net social benefit of \$2 billion. The analysis is presented as follows:

		\$ (Billion)
(a)	Cost (Compensation for WHTCL per negotiated package) ¹	1.8
(b)	Estimated Additional Revenue from Rationalised Toll based on Publicly Available Information by the HKIE	0.9
(c)	Net Cost (Subsidisation for WHTCL) = (a) – (b)	0.9
(d)	Estimated Social Benefit ¹	2.9
(e)	Net Social Benefit = (d) – (c)	2

However, it should be noted the alleviation of congestion can also reduce emissions of greenhouse gases from traffic and can be translated into social benefit.

5. The HKIE notes that the proposed charging scheme to the WHTCL has not covered goods vehicles. It is concerned that the WHTCL might significantly increase toll for goods vehicles. Meanwhile, the increase in toll for East Harbour Tunnel (EHT) would unfairly affect the residents in the catchment of EHT due to no other alternatives. Therefore, the Administration is recommended to set aside a funding among the toll savings under the Franchised Bus Toll Waiver Funds through fare concession to the passengers.

¹ Quoted from Legislative Council Panel on Transport: Information Note (Rationalisation of Traffic Distribution Among Six Tunnels), CB(4)17/18-19(01) at <https://www.legco.gov.hk/yr18-19/english/panels/tp/papers/tpcb4-17-1-e.pdf>

Attachment

Existing Traffic Situation

(Extracted from LegCo Paper CB(4)182/17-18(07) at

<https://www.legco.gov.hk/yr17-18/english/panels/tp/papers/tp20171117cb4-182-7-e.pdf>)

	Existing Traffic
Cross Harbour Tunnel (PM) (Northbound)	3 km
Eastern Harbour Crossing (PM) (Northbound)	1 km
Cross Harbour Tunnel (AM) (Southbound)	2.9 km
Eastern Harbour Crossing (AM) (Southbound)	1.3 km
Western Harbour Crossing	0 km
Lion Rock Tunnel (AM) (Southbound)	1.8 km
Tate's Cairn Tunnel (AM) (Southbound)	1.9 km
Lion Rock Tunnel (PM) (Northbound)	1.5 km
Tate's Cairn Tunnel (PM) (Northbound)	1.2 km
Eagle's Nest and Sha Tin Heights Tunnels	0 km

Forecast Along Connecting Roads of the Three Road Harbour Crossings

(Extracted from LegCo Paper CB(4)17/18-19(01) at

<https://www.legco.gov.hk/yr18-19/english/panels/tp/papers/tpcb4-17-1-e.pdf>)

Forecast along connecting road of Cross Harbour Tunnel in 2021		
	Forecast AM Peak (Southbound)	
	No Toll Adjustment	With Toll Adjustment
Gascoigne Road - Queue	2.9 km	2.1 km
Gascoigne Road - time to cross tunnel	31 min	24 min
Princess Margaret Road - Queue	2 km	1.2 km
Princess Margaret Road - Time to cross tunnel	26 min	18 min
Chatham Road - Queue	1.8 km	1.1 km
Chatham Road - time to cross tunnel	21 min	17 min
	Forecast PM Peak (Northbound)	
Gloucester Road - Queue	2.3 km	1.2 km
Gloucester Road - time to cross tunnel	33 min	27 min
Island Eastern Corridor - Queue	1.6 km	0.8 km
Island Eastern Corridor - Time to cross tunnel	33 min	20 min
Canal Road Flyover - Queue	1.6 km	1.2 km
Canal Road Flyover - time to cross tunnel	34 min	22 min

Forecast along connecting road of Eastern Harbour Crossing in 2021		
	Forecast AM Peak (Southbound)	
	No Toll Adjustment	With Toll Adjustment
Lei Yue Mun Road - Queue	1.2 km	1.1 km
Lei Yue Mun Road - time to cross tunnel	14 min	13 min
Kwun Tong Bypass - Queue	1.4 km	1.2 km
Kwun Tong Bypass - Time to cross tunnel	14 min	14 min
road near EHC - Queue	0.5 km	0.4 km
road near EHC - time to cross tunnel	9 min	9 min
	Forecast PM Peak (Northbound)	
	No Toll Adjustment	With Toll Adjustment
Island Eastern Corridor (Quarry Bay) - Queue	1.2 km	0.9 km
Island Eastern Corridor (Quarry Bay) - time to cross tunnel	15 min	13 min
Island Eastern Corridor (Taikoo) - Queue	0.9 km	0.6 km
Island Eastern Corridor (Taikoo) - time to cross tunnel	11 min	9 min

Forecast along connecting road of Western Harbour Crossing in 2021		
	Forecast AM Peak (Southbound)	
	No Toll Adjustment	With Toll Adjustment
West Kowloon Highway - Queue	0 km	1.4 km
West Kowloon Highway - time to cross tunnel	3 min	10 min
	Forecast PM Peak (Northbound)	
	No Toll Adjustment	With Toll Adjustment
Sai Yin Pun - Queue	0 km	0.3 km
Sai Yin Pun - time to cross tunnel	3 min	5 min
Connaught Road - Queue	0 km	1 km
Connaught Road - time to cross tunnel	3 min	8 min

	improvement
	decline