# Legislative Council Panel on Transport Tsuen Wan Road Upgrading

#### **PURPOSE**

This paper seeks Members' views on the proposed implementation of "Tsuen Wan Road Upgrading".

### **BACKGROUND**

- 2. Tsuen Wan Road ("TWR") is a dual three-lane strategic trunk route connecting Kwai Chung Road and Tuen Mun Road. It also provides local links to the road network within Tsuen Wan via the Tai Chung Road Interchange, and to Tsing Yi via the Tsuen Tsing Interchange and Kwai Tsing Interchange.
- 3. To meet the growing traffic demand resulting from the developments in the North West New Territories, the commissioning of West Rail and its associated property developments in Tsuen Wan as well as other planned developments in Tsuen Wan, we need to upgrade TWR to cater for the increase in through traffic as well as for local access to the Tsuen Wan and Tsing Yi areas. We propose to widen TWR by one/two lanes¹ in each direction along its existing viaduct.
- 4. The feasibility study of TWR Upgrading completed in August 1998 established that the existing TWR would be oversaturated in the mainstream TWR, the southbound up-ramp and northbound down-ramp at the Tai Chung Road Interchange, the weaving sections for both directions of traffic between Tai Chung Road Interchange and Tsuen Tsing Interchange and the associated ground level interchanges in 2011 and 2016. Preliminary findings of the Strategic Highway Project Review being conducted by Transport Department confirm that TWR will be operating at critical volume/capacity (v/c) ratios² during the peak hours in 2011 if no upgrading

A feasibility study completed in 1998 by Territory Development Department identified that TWR be widened one lane between Kwai Tsing Interchange and Tsuen Tsing Interchange and between Tai Chung Road Interchange and Tuen Mun Road, and two lanes between Tsuen Tsing Interchange and Tai Chung Road Interchange in each direction along its existing viaduct. We will ascertain which part of the existing viaduct to be widened by one or two lanes in the preliminary design of the project.

A v/c ratio equals to or less than 1.0 means that the road has sufficient capacity to cope with the volume of vehicle traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion; above 1.2 indicates more serious congestion with traffic speeds progressively deteriorating with further increases in traffic.

works are carried out. The v/c ratios at the road in 2011 and 2016 with and without the proposed upgrading works are as follows -

TWR	Year		
	2001	2011	<b>2016</b> <sup>3</sup>
Without proposed upgrading works	1.0	1.2	1.2
With proposed upgrading works	-	1.0	1.0

#### THE PROPOSAL

- 5. We propose to proceed with the upgrading of TWR with the following scope of works
  - (a) upgrading and widening of a 2.8-kilometre part of TWR from its junction with Tuen Mun Road to Kwai Tsing Interchange;
  - (b) associated civil, structural, drainage, geotechnical and landscaping works, traffic control and surveillance systems, traffic aid and lighting works; and
  - (c) provision of environmental mitigation measures.
- 6. The part of the project we now propose to upgrade to Category A comprises -
  - (a) site investigation works;
  - (b) Environmental Impact Assessment study; and
  - (c) preliminary design for the engineering works described in paragraph 5 above.

A site plan is at Enclosure 1.

The v/c ratios for 2011 and 2016 appear to be the same due to the rounding up of decimal places. In any case, since the population increase in the Tsuen Wan district from 2011 to 2016 is only about 5% and the increase of the capacities of the container ports 1 to 9 in that same period is only about 2%, there will virtually be no significant increase in the traffic volume on Tsuen Wan Road between 2011 and 2016.

#### FINANCIAL IMPLICATIONS

7. The project is estimated to cost some \$1.5 billion. We estimate the cost of the part of the project to be upgraded to Category A to be \$43.3 million in MOD prices, made up as follows -

		\$ million	
(a)	Site investigation	25.0	
(b)	Consultants' fees for	14.2	
	(i) preliminary design	10.0	
	(ii) EIA study	3.0	
	(iii) supervision of site investigations	1.2	
(c)	Contingencies	3.9	
	Sub-total	43.1	(in September 2001 prices)
(d)	Provision for price adjustment	(0.2)	
	Total	43.3	(in MOD prices)

#### **PUBLIC CONSULTATION**

8. The project was discussed at the meeting of the Traffic and Transport Committee of the Kwai Tsing District Council on 22 June 2001. The Committee supported the project in principle. We also circulated a paper on the project to the T&TC of the Tsuen Wan District Council in June 2001. Members have no objection to the project. We will consult the District Councils again and also the Advisory Council on the Environment when we have completed the EIA study and finalized the preliminary design of the road scheme.

#### **ENVIRONMENTAL IMPLICATIONS**

9. We completed a Preliminary Environmental Review for the project in

April 1999. The proposed site investigation works and engineering design will not cause any adverse environmental implications.

- 10. The project is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499). An environmental permit is required for the project. A project profile was submitted to the Director of Environmental Protection on 5 August 1999 and an EIA study brief was issued on 14 September 1999. We will carry out an EIA study to meet the requirements of the Ordinance. We will incorporate all the measures to be recommended in the EIA study report into the detailed design and relevant works contract, and will apply for an environmental permit before the project construction work commences.
- 11. The proposed site investigation works and consultancy will only generate a minimal amount of construction and demolition ("C&D") materials. We will require the consultants to plan and design the works to minimize the generation of C&D materials during the construction phase and to reuse/recycle C&D materials as much as possible.

## LAND ACQUISITION

12. The proposed site investigation works and engineering design do not require any land acquisition.

### THE WAY FORWARD

13. We plan to seek the approval of the Public Works Sub-Committee of the Finance Committee to upgrade the site investigation, EIA study and preliminary design for the project to Category A in January 2002. We plan to start the works in May 2002 for completion by November 2003. We will in due course proceed with the detailed design of the proposed works in December 2003 for completion by August 2005. We intend to commence construction works in late 2005 for completion in late 2009.

#### **ADVICE SOUGHT**

14. Members are invited to provide comments on the project before we seek the approval of the Public Works Sub-Committee.

