For discussion
on 23 January 2002

Legislative Council Panel on Transport
Supplementary Information Note

This note provides supplementary information requested by Members at the special Panel meeting on 17 January 2002.

Vehicle Composition on Route 10, Route 3 and Tuen Mun Road

2. As requested by Members, we have extracted from our model run results the proportions of goods vehicles and passenger vehicles in the peak hours for Route 10. Route 10 caters for traffic from Shenzhen Western Corridor (SWC) which is expected to have a high goods vehicle composition (80%) as well as other traffic generated in the Northwest NT area. The results show that the proportion of goods vehicles and passenger vehicles at Route 10 in 2011 would be 50/50 in the a.m. peak. The proportion of goods vehicles and passenger vehicles in 2011 a.m. peak on Tuen Mun Road and Route 3 is 30/70 and 20/80 respectively.

Sensitivity Tests for two scenarios

3. Members asked for scenario tests showing the impact on Tuen Mun Road of (a) a higher toll on Route 10 than Route 3 and (b) a high growth in traffic flow.

(a) Higher Toll on Route 10

4. The forecasts previously presented to the Panel were based on a Route 10 toll level equal to that charged at Route 3. From the forecast, the congestion on Tuen Mun Road would still be manageable at a v/c ratio of 1.01 in a.m. peak of 2011. If we charge a lower toll, the situation on Tuen Mun Road would naturally be improved.

5. If the tolls on Route 10 were to be higher than the Route 3 tolls, the Tuen Mun Road conditions would worsen. We tested two scenarios with 10% and 50% higher tolls for 2011. Under the 10% higher scenario, the changes are not significant, i.e. the v/c ratio of Tuen Mun Road in 2011 a.m. peak would increase from 1.01 to 1.04. Under the 50% higher toll scenario, the v/c ratio would be increased from 1.01 to 1.17.

(b) High Growth Scenario

6. In CTS-3, the main difference between the High and the Medium Growth Scenarios is the vehicle fleet size. The forecasts we have presented to the Panel adopt the low to medium growth scenario with a private car vehicle fleet size of 490,000 and goods vehicles of 126,000 in 2011. We have conducted a sensitivity test under the high growth scenario with private vehicle fleet size of 750,000 and goods vehicles fleet size of 212,000.

7. With this higher fleet size, the additional traffic would raise the v/c ratios on Tuen Mun Road and Route 3 from 1.0 to 1.3 and from 0.9 to 1.2 respectively in the 2011 a.m. peak.

Points Raised by Route 3 (CPS) Co. Ltd. (R3CPS) and Wilbur Smith Associates (WSA)

8. R3CPS and WSA have made various comments. We have addressed most of these in our previous submissions.

9. On WSA's allegation that the CTS-3 model is not a project specific model and is therefore not appropriate for application in this project specific assessment, we have indeed employed consultants to carry out a Traffic Impact Assessment for Route 10 Northern Section to assess the traffic impacts of the project. The transport model developed by the consultants is a project specific model. Moreover, the model was validated against the actual traffic conditions of 2000 with very good validation results. The concerned screenline produced a modelled a.m. peak hour flow of 11,300 as against an observed 11,200 vehicles per hour with a validation error of only 1%.

Transport Bureau
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