Panel on Transport
Legislative Council

Route 7

Purpose

This paper provides the information requested by Members at the meeting held on 13 July 2001 when the project Route 7 was discussed.

Background

2. At the meeting, Members requested for the following information –

(a) detailed traffic projections for Route 7;

(b) existing and projected population distribution in Southern District; and

(c) comparison of road length and number of vehicles with other cities.

Detailed Traffic Projections

3. Under the recently introduced Strategic Highway Project Review, we have conducted a review of Route 7 in terms of its need, timing and cost effectiveness.

4. The review results indicate that assuming a dual two-lane capacity, the volume/capacity ratio (v/c)[1] ratios of Route 7 are as follows –

	2011	2016
AM North Bound	0.5	0.6
PM South Bound	0.5	0.5

[1] The capacity here refers to the design capacity of the road. A v/c ratio of 1.0 or less means that the road has sufficient capacity to cope with the volume of vehicular traffic under consideration. A v/c ratio above 1.0 indicates the onset of mild congestion; above 1.2 indicates more serious congestion with traffic speeds progressively deteriorating with further increase in traffic.

5. Route 7 would be operating quite comfortably within its capacity from its commissioning up to 2016. It would provide relief to Pok Fu Lam Road and Victoria Road and provide spare capacity to cater for the future traffic growth between the southern part of Hong Kong Island and the rest of the territory beyond 2016. The dual 2-lane configuration is appropriate.

6. Route 7 would bring some relief to Aberdeen Tunnel. However, the ability of Aberdeen Tunnel to carry additional traffic in future years is constrained by the urban local road network in Wan Chai and the heavily trafficked condition of Cross Harbour Tunnel at its northern exit during morning peak hours. The v/c ratios of Aberdeen Tunnel and Pok Fu Lam Road under the scenarios of without Route 7, with the section of Route 7 from Kennedy Town and Pok Fu Lam and the whole section of Route 7 are as follows –

AM Northbound v/c ratios	without Route 7	with Route 7 (from Kennedy Town to Pok Fu Lam)	with Route 7 (whole Section)
2011			
Aberdeen Tunnel	1.1	1.1	1.0
Critical section of Pok Fu Lam Road	1.4	1.1	1.0
2016			
Aberdeen Tunnel	1.2	1.1	1.0
Critical section of Pok Fu Lam Road	1.4	1.1	1.0

Distribution of Population

7. The population of the Southern District is about 289 000 in 2000. It is forecast that the population will increase to 307 000 and further to 315 000 in 2011 and 2016 respectively. The distribution of population in different areas of Southern District is shown at the **Annex.**

Comparison of road length and number of vehicles with other cities

8. We have gathered information on the road length and number of vehicles of several major cities as follows –

Road Length in Major Cities per Capita

City	Road Length per 1 000 Population
New York State	9.97km (1998)
Tokyo Prefecture	1.96km (1998)
Greater London	1.92km (1999)
Singapore	0.98km (1999)
Hong Kong	0.28km (2000)

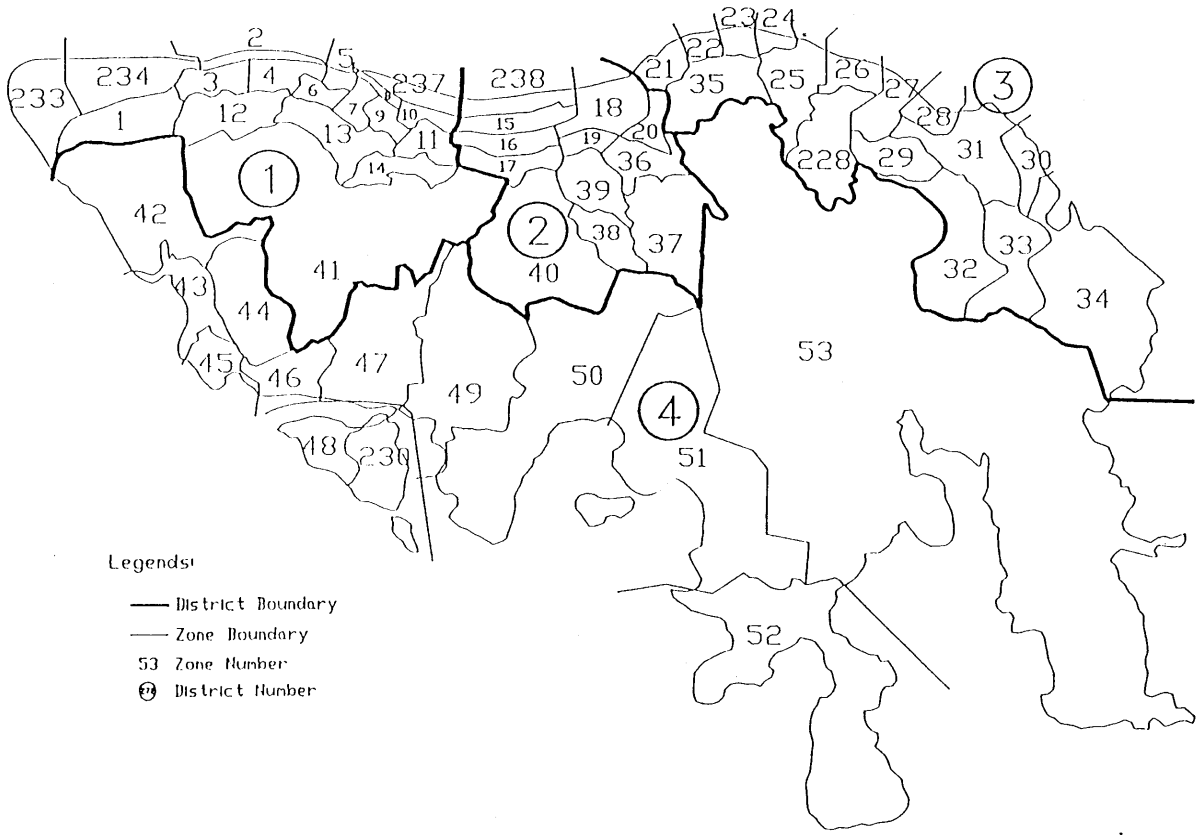
Number of Motor Vehicles and Private Cars per Capita

City	No. of Motor Vehicles per 1 000 Population	No. of Private Cars Per 1 000 Population
New York State	581.5 (1998)	422.0 (1998)
Tokyo Prefecture	311.0 (1998)	Not available
Greater London	329.9 (1999)	296.9 (1999)
Singapore	214.0 (1999)	117.0 (1999)
Hong Kong	75.3 (2000)	48.4 (2000)

Advice sought

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

Transport Bureau
September 2001



Third Comprehensive Transport Study (CE 84/96)

ZONING SYSTEM – HONG KONG ISLAND

Population in Southern District

Year / Third Comprehensive Transport Study Zone No.	2000	Territorial Population and Employment Data Matrix Scenario II	
		2011	2016
42	10400	13000	15000
43	5500	15000	14000
44	17900	17000	17000
45	49900	45000	45000
46	19400	9000	10000
47	32300	37000	37000
48	56700	53000	54000
49	24200	40000	42000
50	5500	6000	6000
51	8730	9000	12000
52	13700	17000	17000
53	10970	11000	14000
230	33840	33000	32000
Total	289000	307000	315000