

## **Hong Kong Moving Ahead: A Transport Strategy for the Future**

### **Purpose**

This paper briefs Members on the progress made in implementing the transport strategy entitled “Hong Kong Moving Ahead: A Transport Strategy for the Future” promulgated by the Administration in October 1999.

### **Background**

2. In August 1997, the Administration commissioned the Third Comprehensive Transport Study (CTS-3) to assess future transport needs and to develop a balanced transport strategy that would serve Hong Kong well into the 21<sup>st</sup> Century. Based on the findings and recommendations of CTS-3, the Administration formulated a new transport strategy entitled “Hong Kong Moving Ahead: A Transport Strategy for the Future” and briefed ACE in October 1999 vide ACE Paper No. 42/99.

3. The objective is to provide a safe, efficient and reliable transport system to meet the economic, social and recreational needs of Hong Kong in an environmentally acceptable manner through a multi-faceted approach comprising the following five elements –

- Better integration of transport and land use planning;
- Better use of railways as the back-bone of our passenger transport system;
- Better public transport services and facilities;
- Better use of advanced technologies in transport management; and
- Better environmental protection.

## Progress Made

### *Better integration of transport and land use planning*

4. Our policy objective is to provide transport infrastructure in a timely manner, with due regard for the environment.
5. Integrating transport and land use planning can reduce public reliance on road-based transport, which in turn alleviates the demands put on the transport system and lessens the impact on the environment. Greater emphasis is also placed on the needs of pedestrians in transport and land use planning.
6. Our work so far includes:
  - (a) revision of the relevant Chapters of the Hong Kong Planning Standards and Guidelines, in particular, on the provision of internal transport facilities so that land developments in future can make suitable provisions for planned transport infrastructure in the areas, with due regard to the environment;
  - (b) siting intensive developments and employment centres within walking distance from rail stations. Examples include new development areas along various rail links such as Tung Chung MTR Line, etc; and
  - (c) introducing pedestrian precinct schemes where vehicles are restricted either permanently or for some specified time of the day in busy built-up areas to reduce the number of short motorised trips and the conflict between pedestrians and vehicles. Schemes in Causeway Bay, Central, Wanchai, Mong Kok, Jordan, Sham Shui Po and Tsim Sha Tsui have been in operation since September 2000. Similar schemes in the Central Business Area are being planned. The Government will continue to identify suitable locations for introduction of further pedestrian schemes.

### Review of transport infrastructure

7. CTS-3 recommended a number of strategic highways with indicative timing for their implementation. However, the actual need for individual projects and the exact timing for their implementation may vary due to changes in various aspects such as projections of economic growth, population growth and distribution, land use proposals, scale of reclamation, etc. Pursuant to the recommendation of CTS-3, the Government introduced a Strategic Highway Project Review (SHPR) System, conducted yearly, under which major highway projects are regularly reviewed on their need, effectiveness, timing and scope taking into account the latest developments and changes.

### Cross Boundary Traffic

8. The last ten years have seen significant growth in cross boundary passenger and freight traffic and the trend is forecast to continue in the years ahead as Hong Kong's economy becomes more closely integrated with the Mainland's. The planning of infrastructure must hence take into account future cross boundary passenger and freight demands.

9. Work has started on the new Sheung Shui to Lok Ma Chau Spur Line which will provide much-needed relief to the Lo Wu rail crossing. The Shenzhen Western Corridor which will provide a new road link with Shenzhen is also under construction. We have also started preliminary studies on the Hong Kong-Zhuhai-Macao Bridge to identify the most suitable alignment and landing points. We will continue to review the possibility of extending the operating hours of the crossings and enhance co-operation and co-ordination with the Mainland authorities to facilitate cross-boundary movements.

### ***Better use of railways as the backbone of our passenger transport system***

10. Railways are environmentally friendly and efficient mass carriers. It is our policy objective that railways will form the backbone of Hong Kong's transport system.

11. With the opening of Tseung Kwan O Extension (TKE) on 18 August 2002, the existing railway network is expanded to 150 kilometres. In addition to the TKE, five more rail lines costing some HK\$75 billion, including West Rail, Ma On Shan to Tai Wai Rail Link, KCR Extension to Tsim Sha Tsui, Penny's Bay Link and Sheung Shui to Lok Ma Chau Spur Line are under construction and will be put into service between 2003 and 2007. Upon the commissioning of the above rail projects, the railway network will be further expanded to more than 200 kilometres.

12. In addition, the scheme designs for the Kowloon Southern Link and the Shatin to Central Link are being finalised. When the two rail systems are commissioned, about 45% of the population and 60% of the employment opportunities will be within a 500 m radius of a railway station. The percentage of total public transport journeys on rail is expected to grow from the current 30% to between 40% to 45%. In the longer term, the possibility of merging the West Hong Kong Island Line and the South Hong Kong Island Line will be considered.

### ***Better public transport services and facilities***

13. It is our policy objective that public transport services should be operated efficiently by the private sector, or public corporations, without direct government subsidy; and should be well coordinated to maximise efficiency.

14. Hong Kong, a highly mobile city, depends on an efficient and affordable public transport system. Each day, more than 11 million passenger journeys are made on our network of trains, buses, minibuses, taxis, trams and ferries.

15. Continuous efforts are being made to upgrade the system by rationalising and improving coordination of public transport services to better match demand, minimising wasteful competition and duplication of efforts and, in some cases, curtailing low demand services.

16. Since 1999, 114 bus routes which served the busy districts of Central, Wanchai and Yau Tsim Mong have been cancelled or rationalised through reduction of frequencies. Short-working, amalgamation, diversion and truncation, have reduced about 2 500 bus trips passing through these districts per day. Bus stops in these districts and other busy corridors in the territory have also been re-organised to enhance efficiency of bus services. The rationalisation of bus stops in various areas

in Hong Kong Island and Kowloon has reduced over 4 400 stoppings per peak hour. In addition, more bus-bus interchanges will be introduced as a means of promoting efficient use of bus resources and reducing the number of buses on the road.

17. The MTR TKE commenced operation on 18 August 2002. Transport Department implemented progressively a public transport service plan to enhance the co-ordination of different modes upon opening of the TKE. A similar plan to re-organise the external public transport service network for northwest New Territories to tie in with the opening of the West Rail (WR) before end 2003 has been developed and the public are being consulted. To better integrate other public transport modes with KCR Ma On Shan Rail/Tsim Sha Tsui Extension, public transport service plans are being developed.

18. On interchange facilities, convenient and comfortable interchange facilities at transport hubs, especially railway stations, will be included in the plans for new and major land-use or transport developments. Existing interchange facilities will be upgraded, if justified.

19. To encourage the use of public transport, provision of park-and-ride facilities near several rail stations is being investigated.

#### ***Better use of advanced technologies in transport management***

20. Our policy objective is to encourage the use of new technologies to increase the efficiency of traffic management, improve the overall capacity of the road system and enhance road safety.

21. The Government completed the Intelligent Transport Systems (ITS) Strategy Review Study in 2001 and is implementing the core projects recommended by the Study, including the Transport Information System which is a centralised data warehouse for provision of traffic information to public transport users and motorists, and the Journey Time Indication System which is a system to advise motorists of the estimated journey time from the three cross harbour tunnels on the Hong Kong Island to Kowloon. The Government will further explore the feasibility of applying advanced information technology to traffic management.

#### ***Better environmental protection***

22. Our policy objective is to provide transport infrastructure and services in an environmentally acceptable manner to ensure the sustainable development of Hong Kong.

### Reducing Motor Vehicle Emissions

23. In 1999, the Administration announced a comprehensive programme to reduce motor vehicle emissions. The target is to reduce the emissions of particulate matters (PM) and nitrogen oxides (NOx) by 80% and 30% respectively. Through the following basket of measures, we have so far reduced the PM and NOx emissions from motor vehicles by 60% and 28% respectively –

(a) Stringent Motor Fuel and Vehicle Emission Standards:

Through a duty concession, we introduced ultra low sulphur diesel (ULSD) to Hong Kong in July 2000. The maximum sulphur content of ULSD is 0.005% by weight, which is a standard more stringent than the prevailing statutory standard of 0.035% of the European Community. ULSD became the only motor diesel available at petrol filling stations in Hong Kong around August 2000 and all franchised buses were on ULSD by February 2001. Since April 2002, ULSD has become the statutory motor diesel standard in Hong Kong.

We have tightened the emission requirements for newly registered vehicles. Since 2001, all newly registered motor vehicles in Hong Kong have to meet Euro III emission standards, the prevailing statutory standards in the European Community.

At present, Hong Kong's vehicle emission and motor fuel standards are the most stringent in Asia. Our motor diesel standard is also higher than that in America, Australia and New Zealand.

(b) Reducing emissions from in-use vehicles:

In addition to imposing stringent emission requirements on newly registered vehicles, we are reducing the emissions from in-use, older vehicles, through retrofitting them with emission reduction devices. In the first retrofit programme completed last year, 24 000 pre-Euro light diesel vehicles were retrofitted with particulate traps or catalysts that can reduce their PM emissions by more than 30%. The installation has become a statutory requirement for the vehicles since 1 December 2003.

In August 2002, we started the second programme to retrofit 41 000 pre-Euro heavy diesel vehicles with emission reduction devices. The programme is expected to complete by end-2004. Our plan is to make the installation a statutory requirement for the vehicles upon completion of the retrofit programme.

(c) Replacing In-use Vehicles with Cleaner Alternatives:

We have since August 2000 been providing a one-off grant for each owner who replaces his diesel taxi with one that runs on liquefied petroleum gas (LPG). 98% (17 800) of the 18 000 taxis have already been replaced by LPG ones. The relevant legislation has also been amended to require all newly registered taxis to use either LPG or petrol. Therefore, diesel taxis can no longer be registered for use in Hong Kong. In August 2002, we commenced another incentive programme to encourage the early replacement of in-use diesel light buses with LPG or electric ones. Over 80% of newly registered light buses are now LPG models. We expect more will be replaced in the run-up to the deadlines of application for the incentives.

(d) Enhanced Enforcement against smoky vehicles:

The fixed penalty for smoky vehicles has been increased since December 2000 from \$450 to \$1,000. We have implemented a number of measures to promote better vehicle inspection and maintenance, such as requiring all commercial vehicles to undergo a smoke test in the annual roadworthiness inspection, introducing the advanced chassis dynamometer smoke test for diesel vehicles, appointing over 800 new smoky vehicle spotters, and organising seminars and workshops on vehicle maintenance.

24. The comprehensive programme to reduce motor vehicle emissions is showing good results. The concentrations of PM and NO<sub>x</sub> at the roadside dropped by 19% and 16% respectively in 2002 compared with 1999. The number of smoky vehicles has also reduced substantially by 70%. We expect to see continued improvements in the coming years.

Reducing motor vehicle noise emission

25. We have been implementing a number of measures to reduce traffic

noise impact on the community –

- (a) Stringent vehicle noise emission standards:  
In 2002, we tightened the noise emission standards for newly registered vehicles to bring our statutory standards in line with the latest standards in Japan and the European Community.
  
- (b) Road resurfacing by low-noise materials:  
We have resurfaced 98% of the expressways in Hong Kong with low-noise materials. The use of these materials will be extended to urban roads. 72 existing urban roads have been identified as possible candidates for low-noise resurfacing works by end-2005.
  
- (c) Retrofit of noise barriers/enclosures:  
We have identified 32 existing roads at which noise barriers will be put up subject to technical feasibility and availability of resources.
  
- (d) Putting new roads underground as far as practicable:  
From 1997 to 2002, a total of 16 underpasses and three tunnels came into operation. We will continue to use tunnels, underpasses and depressed roads instead of surface roads as far as practicable to reduce the traffic noise impacts on the community.