Legislative Council Motion Debate on 1 June 2011
"Formulating a development strategy
for a low-carbon traffic and transport system"

Progress Report

At the Legislative Council meeting on 1 June 2011, the motion on "Formulating a development strategy for a low-carbon traffic and transport system" moved by the Hon Raymond HO Chung-tai and amended by the Hon KAM Nai-wai, the Hon Tommy CHEUNG Yu-yan, the Hon IP Wai-ming and the Hon CHAN Hak-kan was carried. This paper reports the progress of the related work of the Government.

Introduction

2. The overall direction of promoting a low-carbon traffic and transport system as mentioned in the motion aligns with the existing transport policy of the Government. Over the years, our transport policy has been focusing on integrating transport and town planning, expanding the railway network, improving feeder facilities to the railways, reinforcing cross-border transport infrastructure, enhancing green management of franchised buses as well as promoting green transport technology. In addition to improving the overall efficiency of our transport system, our policy also helps reduce carbon emission from traffic and improve roadside air quality. We will continue with our work in these aspects.

Integrating transport and town planning

3. Taking the vicinity of railway stations as the core areas, our development strategy is to plan and locate the facilities or land-uses of

high traffic demand within walking distance or a short feeder trip from railway stations as far as possible. For the coming new development areas, the planning of the North East New Territories New Development Area and Hung Shui Kiu New Development Area will adopt respectively the reserved Kwu Tong Station of the Lok Ma Chau Spur Line and the reserved Hung Shui Kiu Station of the West Rail Line as the core areas. The high density residential and commercial developments in the Kai Tak New Development Area will be mainly concentrated on the areas within walking distance of the Kai Tak Station of the Shatin to Central Link to reduce the road traffic flow.

Expanding the railway network

4. In 1999, we proposed to make better use of railways as the back-bone of our passenger transport system. Since then, we have been actively expanding the railway network. Up till now, we have seen the completion and commissioning of the Tseung Kwan O Line, the West Rail Line, the Ma On Shan Line of the East Rail Line, the Tsim Sha Tsui Extension, the Disneyland Resort Line, the Lok Ma Chau Spur Line and the Kowloon Southern Link. Currently, we are taking forward a number of new railway projects, including the West Island Line, the South Island Line (East) and the Kwun Tong Line Extension which are under construction, as well as the Shatin to Central Link which has been gazetted and entered the statutory consultation stage. Upon completion of the aforesaid projects, our railway network will be expanded from 220 kilometres to 250 kilometres and will cover the areas inhabited by over 70% of the population. The expanded railway network will boost the market share of railways in the public transport system from about 35% to about 45%.

5. Hong Kong has a huge population over limited land. We consider that the strategy of the "use of railways as the back-bone of our passenger transport system" will still be applicable in the foreseeable future. In view of this, we have commissioned a consultancy study to review Hong Kong's long-term railway development blueprint on the basis of the Railway Development Strategy 2000, with a view to meeting the demand for railway transport up to 2031.

6. The expansion of the railway network can attract more people to use railways; not only can it reduce the demand for more energy-consuming road transport modes, it can also help alleviate the congestion on some roads (e.g. the Shatin to Central Link can alleviate the congestion at the Cross Harbour Tunnel; the South Island Line (East) and the Kwun Tong Line Extension would help improve the traffic situation of the Aberdeen Tunnel and Nathan Road). Alleviating road congestion and keeping the roads unimpeded can directly reduce the fuel consumption of vehicles as well as the emission of greenhouse gases and various pollutants.

Improving feeder facilities with the railways

7. To fully benefit from the railway network, it is important to expand the catchment of the railway network by improving the feeder facilities. In order to facilitate the usage of railway services as far as possible, we have been adopting various linkage measures so that residents farther away from the railway stations may also have convenient access to the railway stations.

8. Interchange facilities are provided at suitable railway stations to facilitate passengers interchanging to other modes of public transport.

Currently, public transport operators have introduced various bus-rail and green minibus-rail interchange schemes offering fare concessions to passengers. Such schemes cover 54 designated green minibus routes and five designated franchised bus routes.

9. We also promote the "Park-and-Ride" scheme to encourage people living in more remote areas to drive to railway stations and change to railways for trips to and from the urban areas. At present, there are seven car parks that provide "Park-and-Ride" service in Hong Kong. For the first quarter of 2011, the average daily number of "Park-and-Ride" users is 1 143, which accounts for 42% of the total number of users of the car parks. The Review and Update of the Railway Development Strategy 2000 will also study how the "Park-and-Ride" scheme can further complement railway transport development in Hong Kong.

10. To facilitate residents walking to and from the railway stations, we have also explored the provision of relevant facilities in the vicinity of the railway stations. In this regard, the consultancy studies to work out proposals on and the preliminary feasibility of establishing new walking systems in Causeway Bay and Mong Kok have been completed, and respective technical feasibility studies are underway. For Causeway Bay, our initiative is to build a pedestrian subway, approximately one kilometre in length, which will connect the MTR station with the Victoria Park as well as the busy streets in the heart of Causeway Bay and its junction with Happy Valley. As for Mong Kok, our initiative is to connect the two railway stations (namely the Mong Kok Station and Mong Kok East Station) with a pedestrian footbridge, approximately 700 metres in length, which will pass the central area of Mong Kok and

extend to the vicinity of Tai Kok Tsui. Moreover, certain railway stations of the West Island Line under construction will be about 25 storeys below their entrances/exits; we will provide high-speed lifts for direct access to the stations so that 90% of the residents living in the Mid-Levels West can travel on foot to and from these stations.

11. We also provide bicycle parking spaces in the vicinity of railway stations to facilitate residents cycling to and from the railway stations. The Transport Department (TD) will provide additional cycle parking spaces at major transport hubs. For instance, a total of 300-odd additional parking spaces have recently been provided near two public transport interchanges in Tseung Kwan O and Sha Tin. The TD has also launched a two-year retrofitting programme to retrofit and replace bicycle parking racks near railway stations and public transport termini in accordance with the new design guidelines. One thousand bicycle parking spaces are expected to be added through the programme.

12. Thanks to the extensive coverage of our railway network, we are able to turn some existing roads into pedestrian zones. Up till end 2010, the TD has established seven full-time pedestrian streets (e.g. Paterson Street in Causeway Bay, Theatre Lane in Central, etc.), 30 part-time pedestrian streets (e.g. Sai Yeung Choi Street South in Mong Kok, Fuk Wa Street in Sham Shui Po, etc.) and more than 40 traffic calming streets (e.g. Haiphong Road in Tsim Sha Tsui, Pilkem Street in Jordan, etc.).

Enhancing cross-border transport infrastructure

13. As the traffic between the Mainland and Hong Kong has become increasingly frequent, enhancing cross-border transport infrastructure has a positive effect on the promotion of a low-carbon traffic and transport

system. For railways, the construction of the Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link is now in full swing for anticipated completion in 2015. By then, the journey time between Hong Kong and other cities in the Pearl River Delta will be greatly shortened, thereby attracting more cross-border travellers to opt for railways and reducing the reliance on road traffic modes.

14. With respect to the highway network, we intend to connect to the trunk roads in the eastern, western and northern parts of the Guangdong Province. In particular, the Liantang/Heung Yuen Wai expressway, which will connect the boundary control point with the highway network in Eastern Guangdong, is expected to complete in 2018. To the north, the Western Corridor and Shenzhen Bay Port were commissioned in 2007, and the Guangshen Yanjiang Expressway which links with the above facilities is expected to be fully operational in 2012. The Hong Kong-Zhuhai-Macao Bridge to the west will substantially shorten the travelling distance and journey time between Hong Kong and Western Guangdong. Upon completion of the road networks in these three directions, cross-border travellers and freight flow may select the most appropriate route without making detours. Not only will it reduce journey time, it will also save fuel consumption as well as alleviating pollution problems arising from traffic congestion.

Enhancing green management of franchised buses

15. We have adopted a series of measures to encourage franchised bus companies to reduce greenhouse gas emissions and air pollution from buses –

(a) **Trial of low-emission buses** – We have obtained the approval of the Finance Committee of the Legislative Council to fund the full cost of procuring six hybrid buses for trial by the franchised bus companies along busy corridors, which is expected to start in 2012. We are also discussing with franchised bus companies the proposal to test out electric buses. We hope to reach a consensus as soon as possible and then seek funding approval of the Finance Committee of the Legislative Council in order to launch the trial as early as possible. Our ultimate target is to have zero emission buses running across the territory;

(b) **Retrofitting of emission reduction devices** – We are now working with the franchised bus companies to conduct a trial of retrofitting selective catalytic reduction (SCR) devices to Euro II and III buses, which is expected to commence in the third quarter of this year. If the results are up to expectations, our target is to complete the retrofitting by 2015. The time required will be shorter than that for replacing all these buses with new models and more cost-effective. Retrofitting these buses with SCR devices, together with the diesel particulate filters already installed on the buses, could upgrade the emission performance of the buses to the levels of Euro IV or V buses, and help alleviate the nitrogen dioxide pollution problem at roadside; and

(c) **Route rationalisation** – We will continue to discuss route rationalisation with the district councils and adopt measures such as cancelling, merging or shortening bus routes, and reducing bus frequencies to further improve the efficiency of the bus networks

and reduce roadside air pollution, noise pollution, traffic congestion as well as energy consumption.

Promoting green transport technology

16. Moreover, we are also actively promoting green transport technology, with details as follows –

(a) **Pilot Green Transport Fund** – As of the end of June 2011, the "Pilot Green Transport Fund" has received 16 applications during the first three months since its establishment. The applications included the trial of electric buses and goods vehicles. We expect to complete the assessment of these applications by September this year. The successful applicants may then commence their trials in 2012. We will share the trial results with relevant trades and collaborate with them to promote the use of green and innovative transport technologies;

(b) **Promotion of electric vehicles** – We will continue to work closely with electric vehicle (EV) manufacturers all over the world to conduct trials on EVs and invite different manufacturers to introduce their EVs to Hong Kong. For example, government departments are conducting trials on a plug-in hybrid vehicle in the first half of this year and from August to October 2011;

(c) **Promotion of environment-friendly vehicles** – To promote the use of environment-friendly petrol private cars with low emission and high fuel efficiency by the public, the Government has reduced the first registration tax of environment-friendly petrol private cars. Currently, the reduction in first registration tax is

45% with a cap of $75,000 per vehicle. Since the introduction of tax concessions, the number of newly registered environment-friendly petrol private cars represents about 14% of the newly registered private cars (i.e. about 21 000 registered environment-friendly private cars) and there are about 50 environment-friendly car models available, which have increased by more than three times as compared with the 13 models available before commencement of the scheme; and

(d) **Incentive scheme for replacing Euro diesel commercial vehicles –** The Government launched a three-year subsidy scheme for the replacement of pre-Euro and Euro I diesel commercial vehicles. During the operation of the scheme, 30% qualified vehicles were replaced upon subsidy, while more than 11 000 pre-Euro and Euro I diesel commercial vehicles were scrapped voluntarily without participating in the scheme. Up to now, about 45% of pre-Euro and Euro I diesel commercial vehicles have been retired when compared with the number of these vehicles before commencement of the scheme. For the remaining pre-Euro and Euro I diesel commercial vehicles, we considered that it was necessary to introduce suitable disincentive measures (such as increasing the licence fee of old diesel vehicles) to further encourage vehicle owners to replace them.

For the Euro II diesel commercial vehicles replacement programme, the Government has approved 1 670 applications up to the end of June 2011. The scheme will end in June 2013, and we will strive to promote the scheme to encourage qualified vehicle owners to replace their vehicles.

Conclusion

17. We will continue with our existing transport policy and actively promote a low-carbon traffic and transport system with various measures in order to meet both transport development and environmental protection needs.

Transport and Housing Bureau

Environment Bureau

August 2011