For discussion
on 19 October 2021

Legislative Council Panel on Transport

Traffic and Transport Strategy Study

Purpose

This paper aims to report to Members on the framework of the Traffic and Transport Strategy Study.

Background

2. The Chief Executive announced in the 2020 Policy Address that the Government would carry out a comprehensive Traffic and Transport Strategy Study ("TTSS") which included surveying the latest travel patterns of the public, making reference to and introducing innovative transport modes and technologies as appropriate with a view to enhancing our public transport services to meet the demand of the public, as well as deploying different transport resources more effectively to support the sustainable development of Hong Kong and facilitate the flow of people and goods in the Guangdong-Hong Kong-Macao Greater Bay Area ("GBA").

3. The Government has all along been implementing the five "betters" set out in the Third Comprehensive Transport Study ("CTS")[1] for the timely formulation of traffic and transport policies, and early implementation of relevant projects through progressive and effective deployment of resources, in order to meet burgeoning traffic and development needs. To this end, the Government

[1] Since 1976, the Government has conducted three CTSs to establish a framework for transport planning and comprehensive development strategy, and to draw up a plan for transport infrastructure development. Completed in 1999, the Third CTS laid down five broad principles, including (i) better integration of transport and land use planning; (ii) better use of railways as the backbone of the passenger transport system; (iii) provision of better public transport services and facilities,; (iv) better use of advanced technologies in traffic management; and (v) formulation of better environmental protection transport measures. These five broad principles remain applicable today.

completed a number of individual studies, including "Railway Development Strategy 2000", "Railway Development Strategy 2014", and the "Public Transport Strategy Study" in 2017. Construction of various domestic and cross-boundary transport infrastructures has commenced as planned and these have been commissioned in succession. In addition, the Government has undertaken a series of topical studies[2] to continue to plan for future transport infrastructures and explore the introduction of suitable traffic management options.

4. Nevertheless, the tremendous and rapid socio-economic changes that have taken place in Hong Kong, the Mainland and across the globe over the years have brought new challenges and unique opportunities to Hong Kong. On the one hand, the rapid population growth in the New Development Areas ("NDAs"), the ageing population, the changing travel patterns of the public, more precious land resources, and the increasing saturation of transport space in the city centre have all posed graver challenges for Hong Kong to further improve its transport services. On the other hand, the booming development of the GBA coupled with the "Northern Metropolis" announced in the 2021 Policy Address, the creation of new land in the NDAs, the rapid advancement of transport-related technologies, and the growing public aspirations for a greener and healthier lifestyle have all brought new opportunities and impetus to Hong Kong's transport development.

5. To embrace these new challenges and opportunities, we need to seek breakthroughs while following the proven effective strategies mentioned in paragraph 3 above. We need to build on the five "betters" and conduct a high-level and more forward-looking comprehensive study to enhance Hong Kong's transport policy to meet new transport developments and demands, and to strengthen our competitiveness for future development. Hence, now is the best time to take forward the TTSS to coordinate, complement and consolidate the findings and recommendations of various transport-related studies completed and in progress in a holistic manner, as well as to seize the opportunity to comprehensively examine, review and formulate strategies on the traffic and transport issues that have all along been of concern to the community and on ways to develop and implement various new technologies and transport modes.

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[2] These include the "Strategic Studies on Railways and Major Roads beyond 2030", the consultancy on Comprehensive Transport Study Model Enhancement, and other studies relating to congestion charging for tolled tunnels, Electronic Road Pricing Pilot Scheme in Central, walkability and free-flow tolling systems.

Purpose of the TTSS

6. The TTSS will map out a forward-looking transport strategy with a planning horizon up to 2050. It will aim to complement the Government's target of achieving carbon neutrality in Hong Kong by 2050, as well as the Hong Kong Roadmap on Popularisation of Electric Vehicles, the Clean Air Plan for Hong Kong and the Hong Kong's Climate Action Plan 2050 recently announced by the Government. The purpose of the TTSS is to draw up a Transport Strategy Blueprint which lays down the visions, strategies, initiatives and action plans for Hong Kong's future traffic and transport policies, so as to ensure that Hong Kong can maintain a safe, reliable, environmentally friendly and efficient traffic and transport system. Such a system can not only meet the economic, daily and leisure travel needs of the community, but also support the sustainable development of Hong Kong and facilitate the seamless transport links with the GBA. The TTSS will organise and coordinate the progress and recommendations of various major transport-related studies conducted by the Government, and consolidate the conclusions and implementation plans, with a view to creating synergy and enhancing the convenience and benefits brought by individual transport strategies or initiatives.

Scope of the TTSS

7. The TTSS covers a wide and comprehensive range of traffic and transport issues. Its scope can be categorised into the following four key directions –

(a) <u>To Optimise the Use of Limited Road Space</u>

At present, traffic congestion often occurs during peak days and hours, especially in the city centre and on roads leading to and from the city centre. On account of scarce land space, continuous expansion of transport infrastructure to meet the ever-increasing traffic demand is unsustainable. Also, with increased emphasis on environmental protection, taking forward transport infrastructure projects has become more and more challenging. Hence, this direction aims to formulate new approaches to optimise the use of limited road space, with the objective of improving the efficiency in using road space and shortening journey time. The relevant strategies or initiatives to be explored under

this direction include –

(i) managing road use and controlling vehicle growth to promote peak spreading;
(ii) introducing technologies such as smart motorways to achieve higher spatial efficiency;
(iii) exploring the idea of mobility on demand for transport services (e.g. carpooling); and
(iv) using new technologies (e.g. autonomous vehicles (AVs) and vehicle-to-everything (V2X)) to enhance road capacity and resilience.

(b) <u>To Provide People-centric and Efficient Public Transport Services</u>

The Government is taking forward the planning of various major transport infrastructure projects concerning railways and major roads, so as to tie in with the expansion of the NDAs and new towns. This direction aims to explore how to seize the opportunities arising from the planning of new major transport infrastructure to introduce innovative measures and strategies to enhance the coordination and healthy competition among and within transport modes, with a view to providing efficient and affordable public transport services with railways as the backbone. In addition, given that there is a growing public demand for better taxi services, this direction will also examine ways to enhance taxi services. The relevant strategies or initiatives to be explored under this direction include –

(i) coordinating the roles played by various public transport modes and promoting their healthy competition to tie in with the development of new railways and road networks (especially in the NDAs), in order to maintain an effective public transport system with railways as the backbone;
(ii) exploring the introduction of suitable new public transport systems in the NDAs (e.g. trolleybus, Bus Rapid Transit systems, AV systems, etc.);
(iii) exploring the idea of mobility on demand for public transport services;
(iv) constructing a new generation of Transport Interchange Hubs

("TIHs") with a wide range of facilities[3] under the "single site, multiple use" principle to improve overall transport connectivity;

(v) exploring feasible options to enhance taxi service quality; and

(vi) exploring the use of revenue from the road management and vehicle growth control measures to improve public transport services and stabilise fares.

(c) To Advocate Green and Active Transport as Healthy Lifestyles

With growing public aspirations for a cleaner environment and alternative green transport services, there is still much room for development of green and active transport in Hong Kong. The Government considers that green and active transport development should be prioritised to tie in with the policy on carbon neutrality. The Environment Bureau is now actively taking forward the Roadmap on Popularisation of Electric Vehicles, the proposals in which are closely connected to transport policies. The use of new and smart transport technologies (such as AVs with V2X incorporated) to provide green transport services can not only enhance the efficient use of road space, but also reduce the need to widen the road surface in dense urban areas. This direction aims to create a green transport environment to encourage the wider use of innovative green and active transport modes as the preferred choice of travel. The relevant strategies or initiatives to be explored under this direction include –

(i) reviewing and formulating relevant standards and guidelines to set aside more space for green and active transport development;

(ii) tapping into the opportunity of electric vehicle popularisation to promote green transport and a new generation of transport technology; and

(iii) encouraging active transport and reducing the use of motorised transport.

(d) To Embrace Opportunities to Enhance Transport Connectivity with Other Cities in the GBA

The Chief Executive proposed in the 2021 Policy Address the development of the "Northern Metropolis", the economy of which will be driven by the innovation and technology industry, enabling Hong

[3] Apart from providing interchange facilities for public transport, the TIHs could also provide other facilities such as car parks, bicycle parking spaces, and shopping and catering facilities.

Kong to better integrate into the development of the country. Under this overall framework of development, enhanced transport connectivity between Hong Kong and other cities in the GBA helps Hong Kong integrate into the "one-hour living circle" within the GBA, facilitates the flow of people and goods in the GBA, promotes economic development and regional cooperation, as well as helps Hong Kong achieve jobs-housing balance. In line with the proposals in the Policy Address, this direction aims to work closely with Shenzhen and other GBA cities to explore enhancing, strengthening and expanding cross-boundary connecting transport services and facilities, in order to improve the overall efficiency, capacity and accessibility of cross-boundary transport between Hong Kong and Shenzhen. The TTSS will aim to develop a one-hour commuting network between Hong Kong and Shenzhen, and examine the provision of diversity of choices for residents of these two places to facilitate cross-boundary trade, work, residence, study, travel and access to living services, as well as the establishment of better cross-boundary facilities and seamless connections within the transport network. The relevant strategies or initiatives to be explored under this direction include –

(i) enhancing and coordinating various cross-boundary public transport services to enhance the overall efficiency and quality of services and to strengthen the synergy among Boundary Control Points (ports); and

(ii) keeping in view the latest development of traffic and transport services in the GBA and recommending suitable domestic ancillary transport facilities for faster and more convenient freight and passenger transport services.

8. Considering that the TTSS covers extensive and complex issues involving specialist areas and will make recommendations on legal, regulatory and institutional frameworks, the Transport Department ("TD") will engage consultants to assist in conducting the TTSS. The consultancy services include conducting transport modelling and surveys, analysing transport network performance, carrying out technical assessment of transport infrastructure, programming and calibrating computer models, formulating pilot schemes and trials, as well as conducting financial assessments and sensitivity analyses of the recommendations.

Timetable for the TTSS

9. The TD is now formulating the detailed arrangements for the TTSS, and has commenced the consultant selection and appointment exercise with a view to

awarding the consultancy in end-2021. Afterwards, the TD will conduct a territory-wide Travel Characteristics Survey in 2022, with a view to finishing concluding the survey findings in 2023 for updating the CTS Model for traffic forecasting purposes. The TTSS, with an extensive and thorough scope, is expected to be completed by 2025. In the process of conducting the TTSS, the TD will accord priority to conducting topical studies on certain traffic and transport issues that are relatively new or of public concern (such as enhancing taxi service quality mentioned in paragraph 7(b) above), in order to explore and propose relevant policies and measures. Subject to the actual progress of these topical studies, the TD will consult stakeholders on the interim findings in phases for some of the stand-alone topics, with a view to formulating relevant traffic and transport policies and introducing feasible and appropriate measures as early as possible.

10. Members are invited to note the content of this paper and give their views.

Transport and Housing Bureau
Transport Department
October 2021