

**立法會**  
***Legislative Council***

LC Paper No. CB(4)1176/16-17(08)

Ref. : CB4/PL/TP

**Panel on Transport**  
**Meeting on 16 June 2017**

**Background brief on strategic studies**  
**on railways and major roads beyond 2030**

**Purpose**

This paper provides background information on the strategic studies on railways and major roads beyond 2030 ("the Strategic Studies"). It also summarizes the major views and concerns expressed by Legislative Council ("LegCo") Members on the subject.

**Background**

Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030

2. Since the 1970s, the Administration has reviewed the territorial development strategy around once every decade to embrace new needs and aspirations. The last review, "Hong Kong 2030: Planning Vision and Strategy" ("Hong Kong 2030"), was promulgated in 2007.

3. "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" ("Hong Kong 2030+"), a comprehensive strategic study to update the territorial development strategy, is built on the foundations of Hong Kong 2030, and has revisited the planning strategy and spatial development directions beyond 2030. Pursuant to the 2015 Policy Address, the Hong Kong 2030+ study commenced in early 2015 and is scheduled for completion by early 2018.

Strategic studies on railways and major roads beyond 2030

4. At the policy briefing on the Chief Executive's 2017 Policy Address of the Panel on Transport ("the Panel") held on 20 January 2017, the Secretary for Transport and Housing reported that the Administration will take forward the

Strategic Studies based on the results of the Hong Kong 2030+ study and its public engagement exercise with regard to the planning directions for Hong Kong beyond 2030. The Strategic Studies will, inter alia, explore the transport infrastructure required for the developments at Lantau, Northwest New Territories ("NWNT") and New Territories North ("NTN"), with a view to preliminarily formulating the layout of infrastructure and proposing implementation timetable for the infrastructure according to the changes in the distribution of population and employment. It is expected that the planning of major transport infrastructure can cope with the needs arising from the overall long-term land development of Hong Kong.

### Proposed supporting transport network

5. Under Hong Kong 2030+, a conceptual spatial framework is proposed (**Appendix I**). It focuses on future development with one metropolitan business core, two strategic growth areas (i.e. East Lantau Metropolis ("ELM") and NTN),<sup>1</sup> and three development axes (i.e. Western Economic Corridor, Eastern Knowledge and Technology Corridor and Northern Economic Belt), while conserving the natural assets and enhancing liveability.

6. Given the potential population and employment opportunities at the proposed ELM and its third core business district function, the Administration considers that it is crucial to connect ELM with the existing urban districts through a strategic transport network, which is shown in **Appendix II**. Subject to further detailed study, railway will be the backbone transportation mode to internally connect the major components of ELM, while externally connecting to Hong Kong Island West, Kowloon West and North Lantau, and further with NWNT via the Hong Kong Boundary Crossing Facilities Island of the Hong Kong-Zhuhai-Macao Bridge, thereby forming a new strategic railway corridor between NWNT and the Metro Area via Lantau and ELM. A new strategic highway corridor will also be required to connect ELM eastwards to Hong Kong Island West and northwards to northeast Lantau/North Lantau Highway, which can then be further connected to NWNT. This strategic transport corridor will also provide alternative access to the Hong Kong International Airport and NWNT.

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<sup>1</sup> The basic concept of ELM is to create artificial islands by reclamations in the waters near Kau Yi Chau and the Hei Ling Chau Typhoon Shelter, and to make better use of the underutilized land in Mui Wo, with the aim of creating a smart, liveable and low-carbon development cluster with a third core business district. As for the NTN development, a new town at Heung Yuen Wai/Ping Che/Ta Kwu Ling/Hung Lung Hang/Queen's Hill, together with two potential development areas at San Tin/Lok Ma Chau and Man Kam To have been identified.

7. According to the Administration, the Northern Link recommended under the Railway Development Strategy 2014, will serve the NTN development in the west. In addition, depending on the scale of the NTN development and subject to further study, a new railway scheme will be required to support the NTN development in the east. In the context of the highway network, the Administration has envisaged that, if under the development scenario of a lower population while having the employment maximized, NTN will not worsen the peak hour traffic demand in the Tai Lam Tunnel and on the Tolo Highway in general; yet the ultimate phase of NTN development with more population will inevitably increase traffic loading of these two strategic highways. Hence, the north-south road linkage will need to be improved under the latter scenario.

### **Major views and concerns of members**

8. Major views and concerns of LegCo Members on issues relating to the Strategic Studies are summarized in the ensuing paragraphs.

#### Railways

9. At the meetings of the Subcommittee on Matters Relating to Railways ("the Subcommittee") in the Fifth LegCo, members expressed concern about the loading of the West Rail Line ("WRL"), which in 2015 had already reached 104% during morning peak. In light of an anticipated new population of around 210 000 in Yuen Long and Tuen Mun arising from the future developments, members doubted that even with all eight-car trains deployed in WRL and the commissioning of the Shatin to Central Link to divert some passengers, WRL would still be unable to meet the traffic demands from the growing population in NWNT in the long-term.

10. Some members suggested that the Administration should coordinate the pace of housing development and transport infrastructure in NWNT to ensure that the transport needs of the residents could be met. They further proposed the construction of a new cross-harbour railway running from Tuen Mun via Lantau Island to Hong Kong Island and Kowloon. When the Panel scrutinized the Administration's funding proposal for the feasibility study on Route 11 at the meeting on 17 March 2017, members asked whether the Administration would re-consider the proposal of constructing the Coastal Railway between Tuen Mun and Tsuen Wan (Tuen Mun to Tsuen Mun Link) ("TMTWL"). On members' suggestions, the Administration advised that the need and the preliminary feasibility of constructing the NWNT-Lantau-Metro

Rail Corridor would be covered under the Strategic Studies, whereas it had no plan to re-visit the TMTWL proposal at the current stage.

11. While recognizing the prominent and effective role of Light Rail as a feeder to WRL among the various public transport modes in NWNT, some Subcommittee members were concerned that the Light Rail service could not cope with the growing population and pressing transport needs in Tuen Mun and Yuen Long in future. They suggested constructing a medium-capacity railway with small stations accommodating three-car or four-car trains to operate in parallel with the major Light Rail corridors. The alignment of this proposed railway system should cover several main roads, including Yuen Long Main Road and the major road network serving Tin Shui Wai. To overcome the constraint imposed by the open design of the Light Rail system, there was also a suggestion that tunnels at 11 junctions with busier traffic be constructed along the existing Light Rail routes.

12. In the Report of the Public Transport Strategy Study ("PTSS") published by the Administration in June 2017, it is concluded that the Light Rail should maintain its operation in the long run and continue to serve as an important road-based railway in Yuen Long and Tuen Mun. However, in tandem with continuous increase in the population in NWNT, both WRL and the Light Rail Line would inevitably become more crowded. As such, the Administration would study whether it was necessary to construct a new heavy rail to directly connect NWNT to the urban areas in parallel with WRL and Light Rail under the Strategic Studies.

#### Road network

13. At the Council meeting of 23 November 2016, a Member raised a question on the development of transport infrastructure in Lantau. He enquired whether, to tie in with the development of Lantau Island, the Administration would accord priority to road improvement projects on the island, including the construction of a trunk road linking north and south Lantau, so as to enhance the connection among the various parts of the island and alleviate the traffic burden on Tung Chung Road and South Lantau Road. He also suggested drawing reference to overseas practices and constructing a regional elevated monorail system on Lantau Island to alleviate the traffic congestion on the Airport Island and in Tung Chung town centre, and to provide residents and visitors in Tung Chung with more convenient and efficient transport infrastructure facilities.

14. The Administration explained that the Civil Engineering and Development Department was making preparations for the setting up of the Sustainable Lantau Office, which would be tasked with taking forward and

managing the development scheme for Lantau. The Office would conduct an overall traffic and transport study for Lantau in early 2017 for targeted completion in mid-2018. The study would mainly cover the means to improve traffic in Lantau, such as traffic network from Tung Chung Town Centre to Airport Island, feasibility of a coastal road from Tung Chung to Tai O and a trunk road connecting the north and south of Lantau. The local community and stakeholders would be consulted. The proposal of a regional elevated monorail system for Lantau might be explored in the context of the study.

15. In anticipation of the increase in traffic demand arising from future developments in NWNT, including Hung Shui Kiu New Development Area ("HSKNDA") and Yuen Long South development, members of the Panel were keenly concerned about measures to cope with the demand. At the Panel meeting on 17 March 2017, Panel members noted the traffic forecast provided by the Administration which revealed that after commissioning of the Tuen Mun-Chek Lap Kok Link, even with Tuen Mun Western Bypass, there would be severe traffic congestion on Tuen Mun Road, Tai Lam Tunnel and Ting Kau Bridge during peak hours in around 2036. Expressing concern about the lengthy time required for conducting first the feasibility study and then the construction of Route 11, members asked if the Administration would put in place interim measures before Route 11 could be in use to cope with the traffic demand.

16. The Administration advised that Route 11 would be instrumental to meeting the traffic demand arising from the future developments in NWNT in the long run. Subject to the findings of the feasibility study of Route 11 and if Route 11 could be commissioned before 2036, the traffic conditions at Tuen Mun Road, Tai Lam Tunnel and Ting Kau Bridge during peak hours would be improved.

#### Environmentally Friendly Transport Services

17. When the Panel on Development discussed the HSKNDA Planning and Engineering Study in November 2016, some members enquired about the details of the proposed Environmentally Friendly Transport Services for HSKNDA, including whether the system would share the road surface with other vehicles, as well as measures to avoid the situation that pedestrians and vehicles would compete for the same road space.

18. In the Report of PTSS, the Transport and Housing Bureau had confirmed that the latest green transport mode would be deployed to provide public transport services within HSKNDA and Yuen Long South Potential Development Area. The Administration was conducting an in-depth study to

work out the most feasible and desirable mode of environmentally friendly public transport system, possible options for which were road-based rail mode (such as Light Rail or Modern Tramway) or a road-based non-rail mode (such as electric bus). The study was expected to be completed in two years.

### **Motion passed at the Legislative Council meeting**

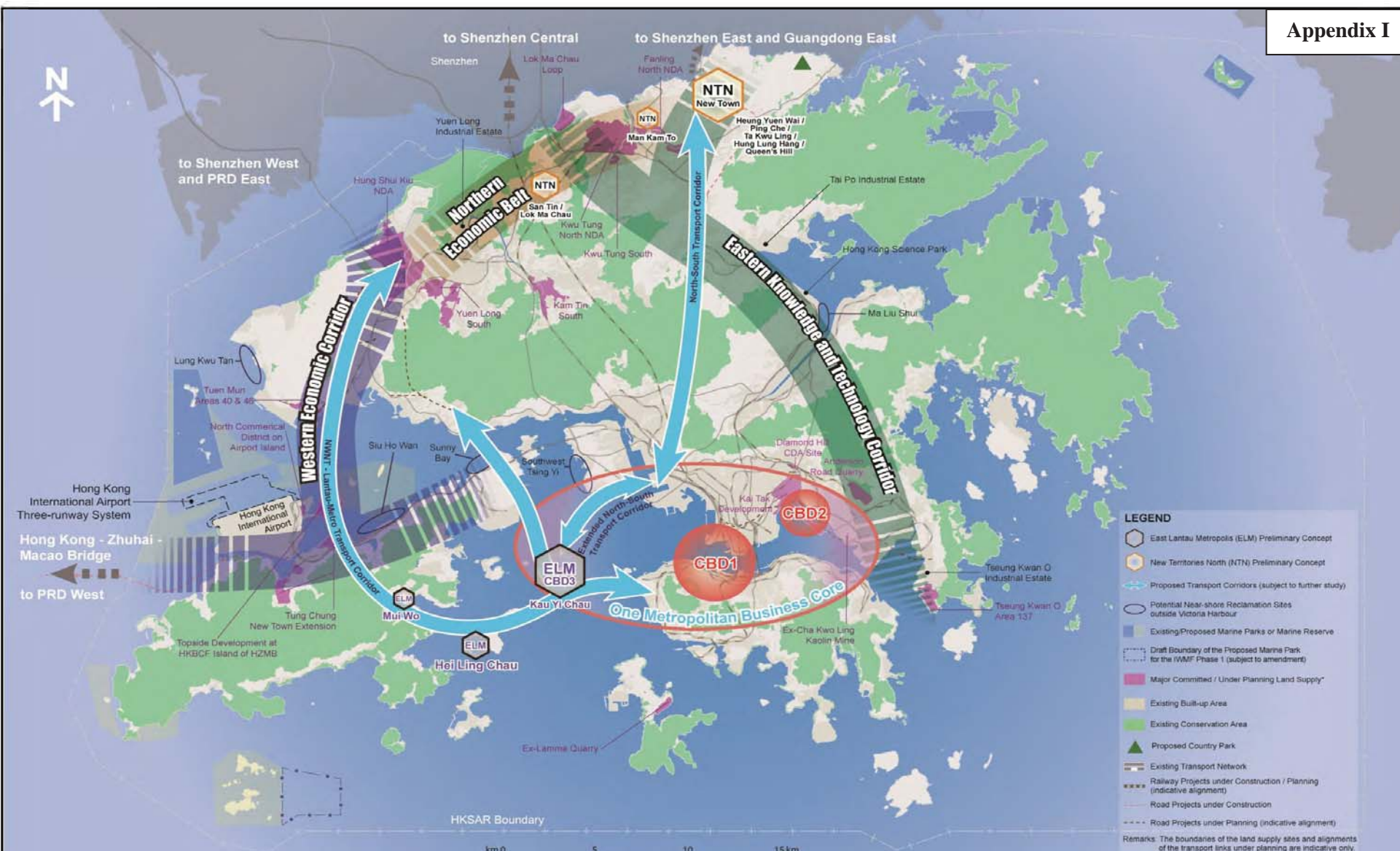
19. A motion was passed on 11 December 2013 on "Enhancing the railway service in the Northwest New Territories", urging the Administration to, amongst other thing, for the purpose of dovetailing with the existing and future development needs and after completing the relevant public consultation, expeditiously implement the planning work for the Tuen Mun South Extension and the Hung Shui Kiu Station, and conduct comprehensive studies and public consultation on the development plans for the Northern Link, the Hong Kong-Shenzhen Western Express Line, TMTWL and the extension of Light Rail line to Tuen Mun Area 54, so as to cope with the demand of the residents in NWNT for the railway service. The wording of the above motion is in **Appendix III**.

### **Latest developments**

20. The Administration plans to consult members on the funding application for commencing the Strategic Studies in the light of Hong Kong 2030+ at the meeting of the Panel to be held on 16 June 2017.

### **Relevant papers**

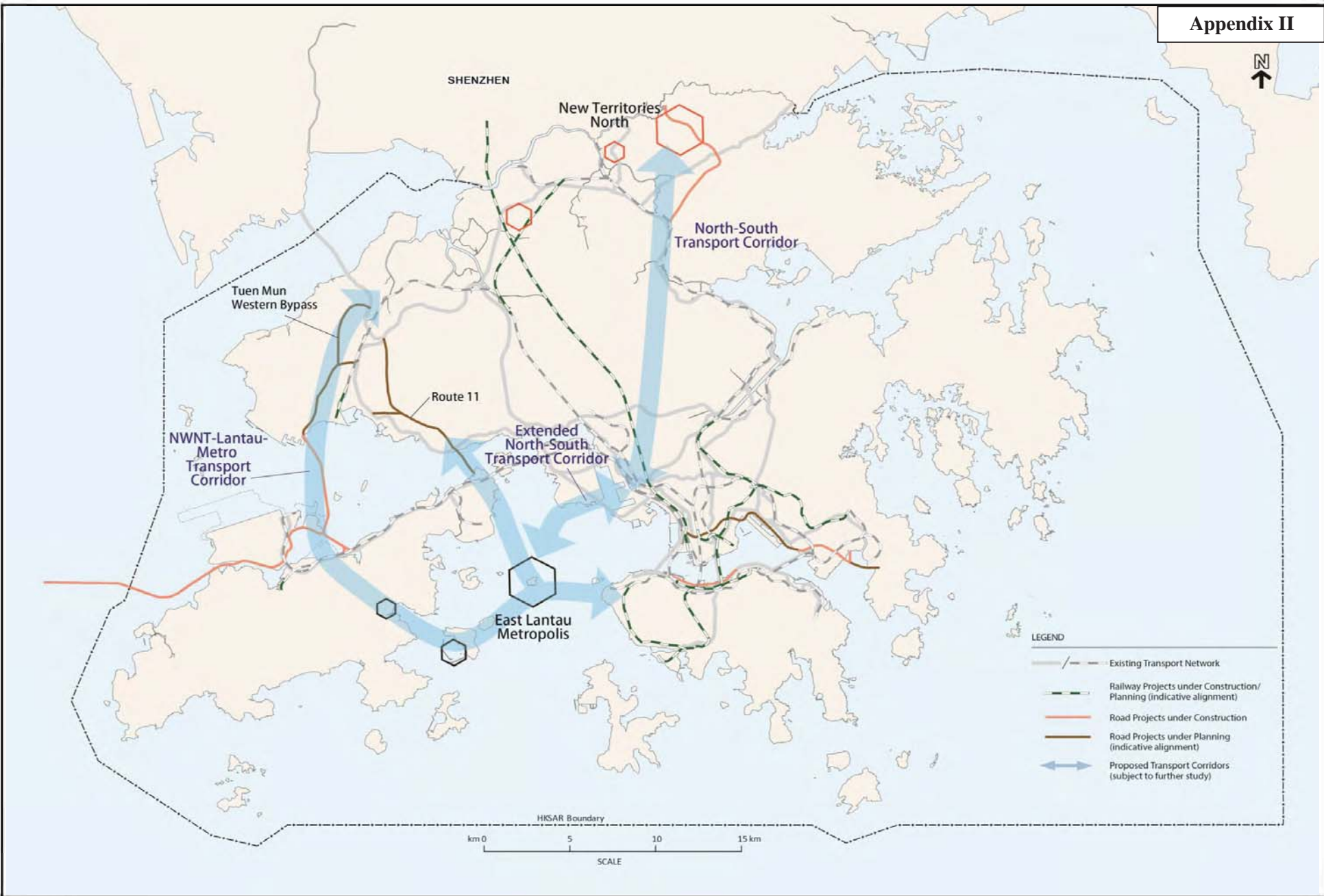
21. A list of relevant papers is in **Appendix IV**.



\*Major Committed / Under Planning Land Supply includes:

Kai Tak Development, North Commercial District on Airport Island, Tung Chung New Town Extension, Topside Development at HKBCF Island of HZMB, Yuen Long South, Hung Shui Kiu NDA, Kam Tin South, Lok Ma Chau Loop, Kwu Tung North NDA, Fanling North NDA, Anderson Road Quarry, Diamond Hill CDA Site, Ex-Lamma Quarry, Ex-Cha Kwo Ling Kaolin Mine, Tuen Mun Areas 40 & 46, Kwu Tung South and Tseung Kwan O Area 137

# Conceptual Spatial Framework for Hong Kong 2030+



- LEGEND**
- Existing Transport Network
  - Railway Projects under Construction/ Planning (indicative alignment)
  - Road Projects under Construction
  - Road Projects under Planning (indicative alignment)
  - Proposed Transport Corridors (subject to further study)

## Supporting Transport Network

DEVELOPMENT BUREAU



PLANNING DEPARTMENT



Reference No. M/SP / 16 / 443

PLAN

DATE 31. 10. 2016

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(Translation)

**Motion on  
“Enhancing the railway service in the Northwest New Territories”  
moved by Hon LEUNG Che-cheung  
at the Council meeting of 11 December 2013**

**Motion as amended by Dr Hon KWOK Ka-ki, Ir Dr Hon LO Wai-kwok,  
Hon Frankie YICK, Hon SIN Chung-kai and Hon Albert CHAN**

That, in the consultation document entitled ‘Our Future Railway’ Stage 2 public engagement exercise released in February this year, the Government put forward local railway enhancement schemes such as the Tuen Mun South Extension and the Hung Shui Kiu Station, etc. to integrate into the existing railway network and dovetail with the development plan for the Hung Shui Kiu New Development Area; the population in the Northwest New Territories increases rapidly, and many residents in the district need to work across districts and thus rely heavily on the existing railway and transport link for commuting to and from urban areas; in this connection, this Council urges the Government to, for the purpose of dovetailing with the existing and future development needs and after completing the relevant public consultation, expeditiously implement the planning work for the Tuen Mun South Extension and the Hung Shui Kiu Station, and conduct comprehensive studies and public consultation on the development plans for the Northern Link, the Hong Kong-Shenzhen Western Express Line, the Coastal Railway between Tuen Mun and Tsuen Wan and the extension of the Light Rail line to Tuen Mun Area 54, so as to cope with the demand of the residents in the Northwest New Territories for the railway service; the Government should also request the MTR Corporation Limited to expeditiously adopt effective measures to comprehensively improve the existing West Rail and Light Rail services, including reducing fare, increasing service frequencies, increasing and procuring more train cars, improving station facilities, improving the ‘Monthly Pass Extra’ scheme, and enhancing the Light Rail system and other connecting transportation arrangements, etc.; at the same time, the Government should, by comprehensively considering factors such as Hong Kong’s long-term population development trends, land and housing supplies and overall urban infrastructure planning etc., and based on the findings of the public consultation on ‘Our Future Railway’, expeditiously review and formulate Hong Kong’s long-term railway development blueprint, and implement the planning concerned in a practical and orderly manner, so as to ensure Hong Kong’s sustainable development; the Government should also expeditiously launch the Fourth Comprehensive Transport Study to enable the expansion of railway network to dovetail with the clear positioning of various modes of public transport, so as to provide people with more comprehensive

transport network support; this Council also urges the Government based on the local enhancement schemes mentioned in the 'Our Future Railway' Stage 2 public engagement exercise to construct the North Island Line, Siu Sai Wan Line and South Island Line (West) etc., so as to improve the connection of the Northwest New Territories with other regions; this Council also urges the Government to expeditiously construct a railway between Tuen Mun and Chek Lap Kok, so that every 50 000 to 80 000 people in New Territories West may use one large-scale railway station, thus bringing the ratio of railway stations to population in New Territories West on a par with that in urban areas, and introduce bus interchange services at all large MTR stations and the entrances and exits of major highways, tunnels and flyovers.

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**List of relevant papers**

<b>Date of meeting</b>	<b>Meeting</b>	<b>Minutes/Paper</b>	<b>LC Paper No.</b>
17.7.2013	Council meeting	Hon LEUNG Che-cheung raised a question on train services of MTR West Rail Line and Light Rail	<a href="http://www.info.gov.hk/gia/general/201307/17/P201307170208.htm">http://www.info.gov.hk/gia/general/201307/17/P201307170208.htm</a>
11.12.2013	Council meeting	Motion on "Enhancing the railway service in the Northwest New Territories" moved by Hon LEUNG Che-cheung	<a href="http://www.legco.gov.hk/yr13-14/english/counmtg/motion/cm1211-m2-wordings-e.pdf">http://www.legco.gov.hk/yr13-14/english/counmtg/motion/cm1211-m2-wordings-e.pdf</a>
		Progress report	<a href="http://www.legco.gov.hk/yr13-14/english/counmtg/motion/cm1211-m2-prpt-e.pdf">http://www.legco.gov.hk/yr13-14/english/counmtg/motion/cm1211-m2-prpt-e.pdf</a>
28.1.2015	Council meeting	Hon LEUNG Che-cheung raised a question on Light Rail service	<a href="http://www.info.gov.hk/gia/general/201501/28/P201501280459.htm">http://www.info.gov.hk/gia/general/201501/28/P201501280459.htm</a>
17.7.2015	Panel on Transport	Administration's paper on planning of transport infrastructure in Northwest New Territories	CB(4)1306/14-15(04) <a href="http://www.legco.gov.hk/yr14-15/english/panels/tp/papers/tp20150717cb4-1306-4-e.pdf">http://www.legco.gov.hk/yr14-15/english/panels/tp/papers/tp20150717cb4-1306-4-e.pdf</a>
		Minutes of meeting	CB(4)228/15-16 <a href="http://www.legco.gov.hk/yr14-15/english/panels/tp/minutes/tp20150717.pdf">http://www.legco.gov.hk/yr14-15/english/panels/tp/minutes/tp20150717.pdf</a>

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
--	Subcommittee on Matters Relating to Railways	Administration's response on the three items proposed for discussion by the Subcommittee in the 2015-2016 session (Railway Development Strategy 2014; future development of the Light Rail; and construction of a fifth cross-harbour railway system)	CB(4)274/15-16(01) <a href="http://www.legco.gov.hk/yr15-16/english/panels/tp/tp_rdp/papers/tp_rdp20151023cb4-274-1-e.pdf">http://www.legco.gov.hk/yr15-16/english/panels/tp/tp_rdp/papers/tp_rdp20151023cb4-274-1-e.pdf</a>
19.4.2016	Subcommittee on Matters Relating to Railways	MTR Corporation Limited's paper on capacity and loading of trains in the MTR network	CB(4)854/15-16(07) <a href="http://www.legco.gov.hk/yr15-16/english/panels/tp/tp_rdp/papers/tp_rdp20160419cb4-854-7-e.pdf">http://www.legco.gov.hk/yr15-16/english/panels/tp/tp_rdp/papers/tp_rdp20160419cb4-854-7-e.pdf</a>
		Minutes of meeting	CB(4)1282/15-16 <a href="http://www.legco.gov.hk/yr15-16/english/panels/tp/tp_rdp/minutes/rdp20160419.pdf">http://www.legco.gov.hk/yr15-16/english/panels/tp/tp_rdp/minutes/rdp20160419.pdf</a>
22.6.2016	Council meeting	Hon LEUNG Che-cheung raised a question on West Rail Line of MTR	<a href="http://www.info.gov.hk/gia/general/201606/22/P201606220473.htm">http://www.info.gov.hk/gia/general/201606/22/P201606220473.htm</a>
8.11.2016 16.12.2016 10.3.2017	Panel on Development	Administration's paper on Hung Shui Kiu New Development Area Planning and Engineering Study – Revised Recommended Outline Development Plan	CB(1)51/16-17(05) <a href="http://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20161108cb1-51-5-e.pdf">http://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20161108cb1-51-5-e.pdf</a>
		Administration's paper on Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030	CB(1)51/16-17(07) <a href="http://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20161108cb1-51-7-e.pdf">http://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20161108cb1-51-7-e.pdf</a>

Date of meeting	Meeting	Minutes/Paper	LC Paper No.
		Administration's follow-up paper	CB(1)537/16-17(01) <a href="http://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20161216cb1-537-1-e.pdf">http://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20161216cb1-537-1-e.pdf</a>
		Minutes of meetings	CB(1)289/16-17 <a href="http://www.legco.gov.hk/yr16-17/english/panels/dev/minutes/dev20161108.pdf">http://www.legco.gov.hk/yr16-17/english/panels/dev/minutes/dev20161108.pdf</a>  CB(1)579/16-17 <a href="http://www.legco.gov.hk/yr16-17/english/panels/dev/minutes/dev20161216.pdf">http://www.legco.gov.hk/yr16-17/english/panels/dev/minutes/dev20161216.pdf</a>
23.11.2016	Council meeting	Hon Holden CHOW Ho-ding raised a question on transport infrastructure in Lantau	<a href="http://www.info.gov.hk/gia/general/201611/23/P2016112300486.htm">http://www.info.gov.hk/gia/general/201611/23/P2016112300486.htm</a>
		Hon LEUNG Che-cheung raised a question on Tuen Mun-Chek Lap Kok Link and Tuen Mun Western Bypass	<a href="http://www.info.gov.hk/gia/general/201611/23/P2016112300495.htm">http://www.info.gov.hk/gia/general/201611/23/P2016112300495.htm</a>
20.1.2017	Panel on Transport	Administration's paper on transport-related policy initiatives of the Transport and Housing Bureau under the 2017 Policy Address and Policy Agenda	CB(4)413/16-17(03) <a href="http://www.legco.gov.hk/yr16-17/english/panels/tp/papers/tp20170120cb4-413-3-e.pdf">http://www.legco.gov.hk/yr16-17/english/panels/tp/papers/tp20170120cb4-413-3-e.pdf</a>
8.2.2017	Council meeting	Hon LEUNG Che-cheung raised a question on traffic situation in Northwest New Territories	<a href="http://www.info.gov.hk/gia/general/201702/08/P2017020800489.htm">http://www.info.gov.hk/gia/general/201702/08/P2017020800489.htm</a>

<b>Date of meeting</b>	<b>Meeting</b>	<b>Minutes/Paper</b>	<b>LC Paper No.</b>
10.2.2017	Subcommittee on Matters Relating to Railways	Paper on the deployment of coupled-set Light Rail Vehicles provided by the Administration and MTR Corporation Limited	CB(4)500/16-17(09) <a href="http://www.legco.gov.hk/yr16-17/english/panels/tp/tp_rdp/papers/tp_rdp20170210cb4-500-9-e.pdf">http://www.legco.gov.hk/yr16-17/english/panels/tp/tp_rdp/papers/tp_rdp20170210cb4-500-9-e.pdf</a>
5.4.2017	Finance Committee (Special meeting)	Replies to initial written questions raised by Finance Committee members in examining the Estimates of Expenditure 2017-2018 (Session No.: 13) (Questions Serial Nos. 4483, 4644, 4645 and 6814)	<a href="http://www.legco.gov.hk/yr16-17/english/fc/fc/w_q/thb-t-e.pdf">http://www.legco.gov.hk/yr16-17/english/fc/fc/w_q/thb-t-e.pdf</a>
16.6.2017	Panel on Transport	Administration's paper on Public Transport Strategy Study	CB(4)1176/16-17(03) <a href="http://www.legco.gov.hk/yr16-17/english/panels/tp/papers/tp20170616cb4-1176-3-e.pdf">http://www.legco.gov.hk/yr16-17/english/panels/tp/papers/tp20170616cb4-1176-3-e.pdf</a>

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