

# Public Transport Strategy Study

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June 2017



Transport and Housing Bureau

# Public Transport Strategy Study

## Final Report

### Chapter 1 Introduction

1.1 Since 1976, the Government conducted three comprehensive transport studies (“CTS”) to map out the strategic plans for transport planning and overall development, as well as formulate development plans for infrastructures so as to cater for the socio-economic development of Hong Kong. The mass transit railway system was put in place following the recommendations of the CTS-1 completed in 1976. Subsequently, following the recommendations of the CTS-2<sup>1</sup> completed in 1989, the Government took forward a number of road and railway infrastructural projects, including the North Lantau Expressway and Lantau Link, Airport Express/Tung Chung Line, Tseung Kwan O Line, and West Rail Lin, to tie in with the development of the airport at Chek Lap Kok, the Metroplan and various reclamation studies.

1.2 **The CTS-3, completed in 1999, has laid down a number of broad directions.** Key ones include:

- (a) better use of railway as the backbone of our passenger transport system;
- (b) provision of better public transport services and facilities;
- (c) wider use of advanced technologies in transport management; and
- (d) implementation of more environmentally-friendly transport measures.

1.3 **The CTS-3 also sets out a hierarchy of the roles and positioning of the different public transport services having regard to their efficiency and functions.** At the top of this hierarchy is heavy rail as it operates on dedicated rail corridor, providing high-capacity, convenient and emission-free services. The next level comprises franchised buses and Light Rail. They serve as mass carriers and provide feeder services to heavy rail. Other public transport services basically play a supplementary role. For instance, public light buses are used for routes with a relatively lower patronage, taxis offer personalised and point-to-point services for commuters who are willing to pay a higher fare, while ferries provide outlying island passengers with essential transport services and cross harbour passengers with another modal choice through inner harbour routes. These broad directions as well as the roles and positioning of different public transport services remain applicable today.

1.4 **Public transport services are closely related to the daily life of the public. Every day, over 12 million passenger trips are made through different public transport services in Hong Kong. This accounts for over 90% of the total passenger trips each day, which is the highest in the world<sup>2</sup>.** Given that Hong Kong is a small and densely-populated city with limited road space, and the public are concerned about the impact of road traffic on air quality, it is appropriate to continue to adopt the public transport-oriented policy and the policy to use the railway as the backbone of the public transport system.

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<sup>1</sup> The study was updated in 1993.

<sup>2</sup> According to a study conducted by the Land Transport Authority of Singapore in November 2014, the public transport usage rate in Hong Kong was the highest among 27 major cities. For other major cities, the public transport usage rate was around 60% in Singapore, 70% in Seoul, 50% in Tokyo, 30% in London and New York.

1.5 In September 2014, the Government announced the **Railway Development Strategy 2014 (“RDS-2014”)**. The RDS-2014 reaffirmed the policy of using railway as the backbone of our public transport system and mapped out the development and planning blueprint of our heavy rail network up to 2031. Upon full implementation of the 7 recommended projects<sup>3</sup> which are subject to detailed feasibility studies, our railway network will cover areas accommodating some 75% of the local population and some 85% of job opportunities. A highly-efficient railway network with comprehensive coverage would not only facilitate the daily commute of the public and address passenger demand, but also promote the further development of the community, new towns and new development areas as well as facilitate passenger flow and goods flow. This would bring economic benefits and strengthen community ties.

1.6 Our public transport services have generally been working well. Operating on a commercial basis, public transport operators are able to maintain efficient and quality service and provide multi-modal choices for the community. In fact, Hong Kong was ranked first in terms of public transport services among 84 cities in an international survey<sup>4</sup>. However, **having regard to the expansion of the heavy rail network, we consider it necessary to carry out a systematic review on the overall strategic arrangements of the public transport system in order to maintain the quality and diversified public transport services and to draw up strategies conducive to the healthy and sustainable development of the trades, with a view to improving people’s livelihood, facilitating development and maintaining efficiency.**

1.7 Meanwhile, we strive to ease traffic congestion through various means. **We are taking forward progressively the series of short-, medium- and long-term recommendations by the Transport Advisory Committee in its earlier Report on Study of Road Traffic Congestion in Hong Kong to ease the traffic congestion.** For instance, upon completion of the first stage public consultation on the Central District Electronic Road Pricing Pilot Scheme this year, the Transport Department (“TD”) will appoint a consultant to conduct an in-depth feasibility study. TD will also commence a two-year consultancy study on the parking for commercial vehicles to formulate appropriate measures to meet the parking demand of commercial vehicles. The Government will continue to study measures to contain private cars growth and to combat illegal parking and other illegal activities that create traffic congestion. For public transport services that need to share road space, the alleviation of traffic congestion can help enhance their service reliability and attract more people to commute by public transport. This will in turn help further ease road traffic congestion and reduce roadside air pollution.

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<sup>3</sup> The recommended projects include the Northern Link and Kwu Tung Station, Hung Shui Kiu Station, the Tung Chung West Extension, the Tuen Mun South Extension, the East Kowloon Line, the South Island Line (West) and the North Island Line.

<sup>4</sup> Hong Kong was ranked first in terms of public transport services among 84 cities under The Future of Urban Mobility, a report published in April 2014 by Arthur D Little, a management consultancy. The report is available at:  
[http://www.adlittle.com/downloads/tx\\_adlreports/Arthur\\_D\\_Little\\_\\_\\_UITP\\_Future\\_of\\_Urban\\_Mobility\\_2\\_0.pdf](http://www.adlittle.com/downloads/tx_adlreports/Arthur_D_Little___UITP_Future_of_Urban_Mobility_2_0.pdf)

## Chapter 2 Background

2.1 The Government has rolled out the Public Transport Strategy Study (“PTSS”) since end of 2014. In tandem with the further development of the heavy rail network, the PTSS conducts a systematic review on the respective roles and positioning of public transport services other than heavy rail. It also looks into some important topical issues of the public transport sectors in detail. The objectives are to enhance the complementarity amongst the various public transport services with a view to ensuring that the public can enjoy efficient services with reasonable modal choices on one hand, and the public transport operators can enjoy long-term sustainability on the other.

2.2 The PTSS comprises two parts, namely the Role and Positioning Review (“RPR”) and Topical Study.

2.3 In the light of the broad directions laid down through the CTS-3, **the RPR** examines the roles and positioning of various public transport services, including franchised buses, Light Rail, public light buses (“PLBs”), taxis, non-franchised buses, trams and ferries, against the background of using the railway as the backbone of our public transport system and taking into account the further expansion of the railway network. The RPR seeks to review whether some service adjustments should be made to ensure the long-term and healthy development of the public transport services. The Government has commissioned a consultancy to assist in the study. RPR has been completed.

2.4 The **Topical Study** reviews 8 specified issues that are of greater concern to the public transport trades or have been given priority as they are time-sensitive. These issues include franchised bus service level, school bus service, seating capacity of PLBs, statutory cap on the number of PLBs, supply of taxis, taxi fuel surcharge, review of ferry services, as well as how people with disabilities’ access to public transport services can be further enhanced. The Government reported all the findings of the studies to LegCo Panel on Transport (“Transport Panel”). The 8 Topical Studies have been uploaded onto the LegCo website<sup>5</sup>. The measures set out in these Topical Studies, together with the findings of the RPR, have been incorporated to constitute a consolidated final report.

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<sup>5</sup> Franchised bus service level (LC Paper No. CB(4)655/14-15(04)):  
<http://www.legco.gov.hk/yr14-15/english/panels/tp/agenda/tp20150320.htm>

School bus service (LC Paper No. CB(4)763/14-15(03)):  
<http://www.legco.gov.hk/yr14-15/english/panels/tp/agenda/tp20150417.htm>

Seating capacity of PLBs (LC Paper No. CB(4)922/14-15(06)):  
<http://www.legco.gov.hk/yr14-15/english/panels/tp/agenda/tp20150512.htm>

Statutory cap on the number of PLBs (LC Paper No. CB(4)119/15-16(06)):  
<http://www.legco.gov.hk/yr15-16/english/panels/tp/agenda/tp20151106.htm>

Supply of taxis (LC Paper No. CB(4)1143/14-15(03)):  
<http://www.legco.gov.hk/yr14-15/english/panels/tp/agenda/tp20150616.htm>

Taxi fuel surcharge (LC Paper No. CB(4)1306/14-15(03)):  
<http://www.legco.gov.hk/yr14-15/english/panels/tp/agenda/tp20150717.htm>

Review of ferry services (LC Paper No. CB(4)831/15-16(03)):  
<http://www.legco.gov.hk/yr15-16/english/panels/tp/agenda/tp20160415.htm>

How people with disabilities’ access to public transport services can be further enhanced (LC Paper No. CB(4)831/15-16(05)):  
<http://www.legco.gov.hk/yr15-16/english/panels/tp/agenda/tp20160415.htm>

### Chapter 3 The Roles and Positioning of Current Public Transport Services

3.1 As mentioned in paragraph 1.3 above, the CTS-3 in 1999 sets out a hierarchy of the roles and positioning of different public transport services in accordance with their efficiency and functions. Following the broad directions laid down in the CTS-3, various public transport modes have served their functions according to their respective roles and positioning, and have maintained a delicate balance.

3.2 **Heavy rail** operates on dedicated rail corridor and provides high-capacity, convenient and emission-free services. As such, Hong Kong has been adopting the policy of using railway as the backbone of our public transport system as set out in the CTS-3. As at 2016, there are 11 heavy rail lines (including an Airport Express<sup>6</sup>) in Hong Kong. They carry nearly 4.7 million passenger trips per day and account for around 37% of the local public transport patronage.

3.3 While heavy rail is the backbone of public transport system, other public transport modes continue to play an important role, particularly for serving areas inaccessible by railways and meeting new demands from new development areas, providing comprehensive services and choices for the public. Public transport modes other than heavy rail account for around 63% of the local public transport patronage in 2016.

3.4 Among the public transport modes other than heavy rail, the **franchised bus services** have high capacity and can be deployed more flexibly, with their service patterns can be adjusted within a relatively short period to meet changes in demand. Hence, they will continue to be the mass carrier serving areas without direct railway access as well as providing feeder service connecting the railway network and inter-district service. As at end-2016, the 6 franchises under 5 franchised bus operators<sup>7</sup> operate around 580 bus routes with a total of about 5 800 buses in their fleet. They offer around 74 000 trips to serve nearly 4.1 million passengers trips<sup>8</sup> per day. These figures remain at a similar level as compared with that in 10 years ago. Currently, franchised buses account for around 33% of the public transport patronage.

3.5 The **Light Rail** plays an important role in the public transport system in Northwest New Territories (“NWNT”). It takes on dual roles: on one hand, it provides feeder service for the West Rail Line; on the other hand, it serves as an important rail-based public transport mode within Northwest New Territories (Tuen Mun and Yuen Long). As at 2016, Light Rail has 12 lines in total to carry around 490 000 passenger trips per day, which is higher than that a decade ago, accounting for about 3.9% of the public transport patronage in Hong Kong.

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<sup>6</sup> The heavy rail lines include Kwun Tong Line, Tsuen Wan Line, Island Line, South Island Line, Tseung Kwan O Line, Tung Chung Line, Disneyland Resort Line, East Rail Line, Ma On Shan Line, West Rail Line and Airport Express.

<sup>7</sup> The 5 franchised bus operators include The Kowloon Motor Bus Company (1933) Limited (“KMB”), Citybus Limited (“CTB”), New World First Bus Services Limited (“NWFB”), Long Win Bus Company Limited (“LW”) and New Lantau Bus Company (1973) (“NLB”). CTB operates two franchises, one for Hong Kong Island and Cross-Harbour Bus Network and another for Airport and North Lantau Bus Network.

<sup>8</sup> Franchised buses include KMB, CTB, NWFB, LW and NLB. The MTR bus service serving Northwest New Territories is also included.

3.6 The role of **public light buses** is to provide supplementary feeder service and to serve areas with relatively lower passenger demand or where the use of high-capacity transport modes is not suitable. As at 2016, there are 4 350 PLBs, of which 3 254 are green minibuses (“GMBs”) and 1 096 are red minibuses (“RMBs”). GMBs operate fixed route services and there are currently about 530 GMB routes. PLBs carry over 1.8 million passenger trips per day, which is similar to that in 10 years ago, accounting for around 15% of public transport patronage.

3.7 **Non-franchised buses** (“NFBs”) play a supplementary role in the public transport system through relieving the demand for franchised bus and GMB services during peak hours, and through providing services for districts where the operation of franchised buses and GMBs are not cost-effective. In addition, NFBs also provide tailor-made services for specific groups, such as students and tourists. As at 2016, there are around 7 000 NFBs. Among the services provided by NFBs, residents’ services carry over 230 000 passenger trips<sup>9</sup> per day, which is higher than that in 10 years ago, accounting for around 1.9% of public transport patronage.

3.8 **Taxis** provide a personalised, point-to-point and more comfortable public transport service at a higher fare. As at 2016, there are a total of 18 163 taxis, among which include 15 250 urban taxis, 2 838 New Territories taxis and 75 Lantau taxis<sup>10</sup>. Taxis carry over 930 000 passenger trips per day on average, which is slightly lower than that in 10 years ago, accounting for about 7.4% of public transport patronage.

3.9 **Trams** serve their supplementary role by providing emission-free and affordable public transport services along the northern side of Hong Kong Island. As at 2016, there are 168 trams, running 7 lines and carrying about 180 000 passenger trips per day, which is slightly lower than that in 10 years ago, accounting for around 1.4% of public transport patronage.

3.10 **Ferries** provide essential links to the outlying island and offer an alternative choice for passengers who travel to/from other areas and across the harbour. There is currently one franchised ferry operator and 13 licensed ferry operators in Hong Kong, operating a total of 21 regular passenger ferry services, 2 dangerous goods vehicular ferry services and 2 special services<sup>11</sup> to provide ferry services to/from other areas and outlying island<sup>12</sup>. As at 2016, ferries carry around 130 000 passenger trips per day<sup>13</sup>, which is similar to that in 10 years ago, accounting for around 1% of the public transport patronage.

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<sup>9</sup> Residents’ services serve passengers of specific housing developments with an aim to relieve heavy demand for regular public transport services primarily during peak hours and to fill the service gaps which cannot be met by regular public transport services. Operators of the residents’ service have to operate in accordance with the operation details as specified in the Schedule of Service approved by the TD, including routing, service periods, timetable, stops for boarding and alighting, number of buses and carrying capacity.

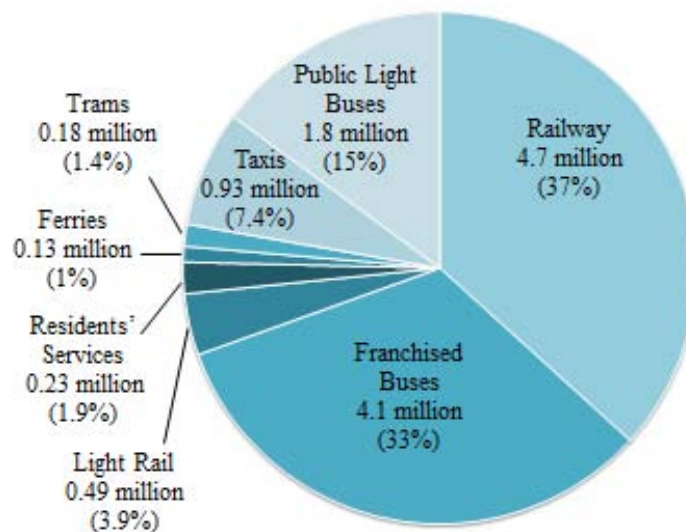
<sup>10</sup> The Government issued 25 new Lantau taxis licences through a tender exercise in December 2015. The new Lantau taxis had started providing services in the second quarter of 2016.

<sup>11</sup> Special services refer to a vehicular ferry services to/from North Point and Kwun Tong provided for various types of vehicles under emergency situation as notified by the Commissioner for Transport and a passenger ferry service to/from North Point and Joss House Bay during the Tin Hau Festival.

<sup>12</sup> In addition, there are 69 supplementary “Kaitos” ferry services serving remote area. Their fares are not regulated by the Government and they mainly provide services on holidays.

<sup>13</sup> Including passenger trips from franchised and licenced ferry services

**Distribution of Average Daily Public Transport Patronage in 2016**

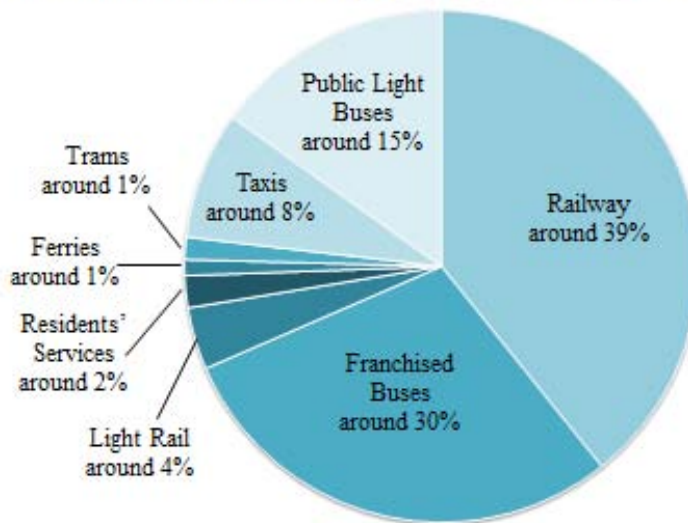


Note: Figures may not add up to 100% due to rounding.

3.11 To review the roles and positioning of various public transport services, including franchised buses, Light Rail, PLBs, NFBs, taxis, trams and ferries, under further expansion of the heavy rail network, the consultant has carried out a forecast and an analysis of the short-term (in 2021, i.e. the scheduled year for the commissioning of the Shatin to Central Link (“SCL”)) and medium- to long-term (in 2031, i.e. after the full implementation of the heavy rail network recommended under RDS-2014) service demand of various public transport services. The consultant has taken into account various factors, such as population growth, land use planning, infrastructure development, the Government’s public transport-oriented policy, etc., in the forecast. The methodology of the study is at [Annex 1](#).

3.12 In **2021**, the overall passenger demand for public transport is expected to rise. The number of passenger trips will increase from 12.59 million per day in 2016 to around 13.20 million per day. As the population and employment opportunities in New Territories West will grow most rapidly, the demand for public transport services in that area will have a more significant increase. With the commissioning of the SCL in a few years’ time, the demand for heavy rail is expected to rise. Heavy rail ridership will increase from around 37% of local public transport patronage in 2016 to around 39% in 2021. Despite the anticipated drop in the passenger demand for other public transport services, their ridership will still make up approximately 61% of local public transport patronage. Among the different public transport modes, franchised buses will continue to serve its role as a road-based mass carrier, with the ridership accounting for around 30% of local public transport patronage. As a result of the increase in the demand for public transport services in NWNT, the Light Rail will still account for about 4% of local public transport patronage and serve as an important track-based road transport in NWNT. Other public transport services will continue to play an important supplementary role in the public transport system, especially serving areas inaccessible by railway and providing feeder services to heavy rail. The shares of these services in local public transport will roughly equal to the existing levels, with PLBs close to 15%, NFBs nearly 2%, taxis close to 8%, trams nearly 1%, and ferries almost 1%.

**Distribution Forecast of Average Daily Public Transport Patronage in 2021**

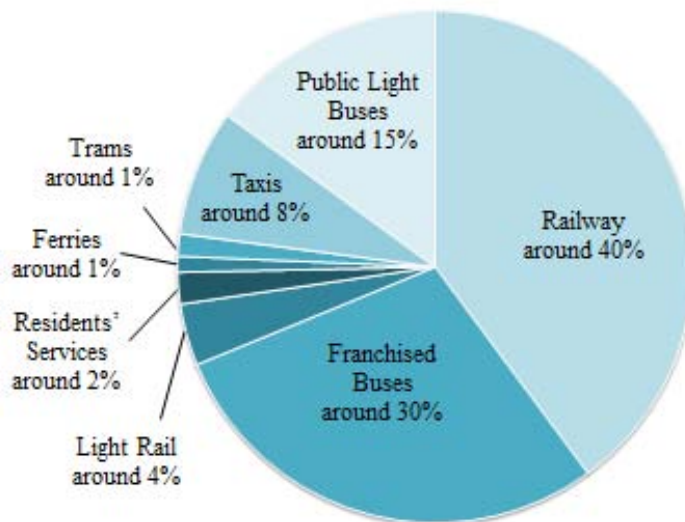


Note: Figures may not add up to 100% due to rounding.

3.13 In **2031**, the overall passenger demand for public transport is expected to rise further. The number of passenger trips will increase from around 13.20 million per day in 2021 to about 13.81 million per day. Driven by the further development of various new development areas in New Territories North, including Hung Shui Kiu, Yuen Long South, Kwu Tung North and Fanling North, as well as the Tung Chung New Town Extension, the public transport demand in New Territories North and the Lantau Island will increase more significantly. If the 7 railway projects recommended by the RDS-2014 could be fully implemented, the passenger demand for heavy rail is expected to rise. Heavy rail ridership will make up around 40% of local public transport patronage. Despite the anticipated adjustment of the demand for other public transport services, their ridership will still represent about 60% of local public transport patronage. This shows that the roles and positioning of other public transport services in the public transport system will remain unchanged. Among which, franchised buses will continue to serve the role of road-based mass carrier with the ridership accounting for about 30% of the local public transport patronage. As a result of increase in demand for public transport services in New Territories West, the Light Rail will still account for around 4% of local public transport patronage. Other public transport services will continue to play an important supplementary role in the public transport system, especially serving areas inaccessible by railway and providing feeder services to heavy rail. The shares of these services in local public transport will roughly equal to that in 2021.



**Distribution Forecast of Average Daily Public Transport Patronage in 2031**



Note: Figures may not add up to 100% due to rounding.

3.14 The consultant's forecast suggests that the overall passenger demand for public transport services will keep increasing in the medium- to long-term. Under the policy of using the railway as the backbone of the public transport system, heavy rail, which is basically an off-street carrier with the highest carrying capacity, will further expand to meet the passenger demand in various new development areas and the New Town extension. Nevertheless, other public transport services can still provide more flexible services, especially playing an important role in serving areas inaccessible by railway and providing feeder services to heavy rail. Various new development areas and New Town Extension will also bring certain development opportunities to public transport services other than heavy rail. **The improvement measures recommended under the PTSS can further enhance the existing strategic arrangements of public transport services so as to ensure the long-term, balanced, efficient, multi-modal and sustainable development of public transport services other than heavy rail.** The recommended measures for various public transport services are set out in Chapters 4 to 12.

3.15 In addition, we are rolling out a series of "Walk in HK" initiatives to enhance the overall walkability of our city for Hong Kong people to commute, connect and enjoy, making walking an integral part of Hong Kong as a sustainable city. **Encouraging people to use public transport services and to walk more will help reduce the use of private cars. This will in turn further ease road congestion and improve air quality so that Hong Kong can pursue sustainable development.**

## Chapter 4      Franchised Buses

4.1      As road-based mass carriers, franchised buses assume a pivotal role in the public transport system and should always strive for service excellence. Enhancements can be pursued along the following 5 avenues<sup>14</sup>:

- (a)    improving operational efficiency continuously;
- (b)    upgrading ancillary services for passengers;
- (c)    leveraging on distinctive edges to provide more diversified services;
- (d)    ensuring that the fare adjustment arrangement is up-to-date; and
- (e)    offering more fare concessions.

### (a)      Operational Efficiency

#### (i)      Bus Route Rationalization

4.2      Franchised bus services are flexible and can be adjusted in accordance with changes in patronage. Such flexibility is achievable through the continuous efforts in bus route rationalisation. This has all along been done through the annual bus route planning programmes by the TD and franchised bus companies. Bus route rationalisation proposals are formulated by franchised bus companies having regard to the growth or decline in patronage. Through cancellation or amalgamation of routes with persistently low patronage, franchised bus companies may redeploy the resources so saved to strengthen existing services with increased demand or introduce new services. Service level may therefore be adjusted in a timely manner having regard to patronage changes so as to utilise limited bus resources most efficiently. This will also alleviate traffic congestion and reduce roadside air pollution. In considering service adjustments, the TD will take into account changes in population, patronage and infrastructural developments, and draw reference to the Guidelines on Service Improvement and Reduction in Bus Route Programmes which was updated after consultation with the Legislative Council in 2010 (see **Annex 2** for details). Service adjustments will then be implemented after consultation with the District Councils concerned.

4.3      Since the Chief Executive's announcement in the 2013 Policy Address that the Government would pursue bus route rationalisation with greater vigour, **the TD and franchised bus companies have rationalised the bus routes in a number of districts (including North District, Tai Po, Tuen Mun, Yuen Long, Shatin, Kwai Tsing and Kowloon) by adopting the "Area Approach"**, under which bus services are reviewed holistically for a district as a whole rather than on a route-by-route basis, with a view to maximising the overall benefits to the district. In addition, with the successive opening of the West Island Line, Kwun Tong Line Extension and South Island Line (East), the TD has also rationalised the road-based public transport services in the Central and Western District, Southern District as well as those in the vicinity of Ho Man Tin and Whampoa in a similar manner so as to enhance the coordination among various public transport services and their complementarity. From 2013 to 2016, the TD and franchised bus companies have cancelled or amalgamated 31 routes of low patronage, truncated 14 routes and reduced the frequency of 279 routes. The daily volume of bus traffic in the Low Emissions Zones in Mong Kok, Central and Causeway was reduced by 3 885 trips (i.e. reduction by around 13% as compared

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<sup>14</sup> The Government completed a Topical Study in respect of franchised bus services in March 2015. The Topical Study covers 3 issues, namely bus route rationalisation, enhanced monitoring of lost trips and bus priority measures.

with 2012). During the period, franchised bus companies have introduced 40 new routes and increased the frequency of 278 routes.

4.4 From the above, the large-scale rationalisation exercises implemented by the TD and franchised bus companies under the “Area Approach” in recent years (including those for the opening of new railway lines) have basically covered most areas in Hong Kong to achieve improvement in operational efficiency of franchised bus services. **In the coming few years, apart from the rationalisation of public transport services in connection with the commissioning of the SCL, other rationalisation exercises will mainly focus on enhancing individual routes/groups of routes at the local community level, which will be taken forward through the annual route planning programmes.** To further enhance the reliability of patronage statistics gathered, some franchised bus companies will, as a new initiative, make use of information technology to gather statistics regarding the number of passengers alighting or boarding at individual bus stops. This is to facilitate early implementation of the rationalization proposals with the backing of reliable statistics. The TD will liaise with these franchised bus operators to ensure that the patronage statistics so gathered are reliable and accurate. We will continue to pursue rationalisation in an on-going manner with varying intensity and depth having regard to the actual circumstances each year. Such efforts should be sustained to keep up the vitality of the bus network and its healthy financial development in the long run. In taking forward the rationalisation exercises, we may also consider introducing alternative road-based transport services (such as GMBs and non-franchised buses) as appropriate so as to better meet the demand from residents and the community.

4.5 In fact, **in planning bus route rationalisation, the TD once explored the feasibility of replacing some franchised bus routes with low patronage by GMB routes.** In conducting the assessment, the factors which the TD took into account included:

- (a) the operational feasibility and financial viability of having these routes operated by GMBs;
- (b) the acceptability of the affected passengers to the service arrangements upon the replacement, such as frequency, journey time, location of stops and fare, as well as whether the vehicle model may accommodate wheelchair passengers, etc.;
- (c) the impact on road traffic;
- (d) the implications of the replacement to other existing public transport services; and
- (e) local views on the replacement.

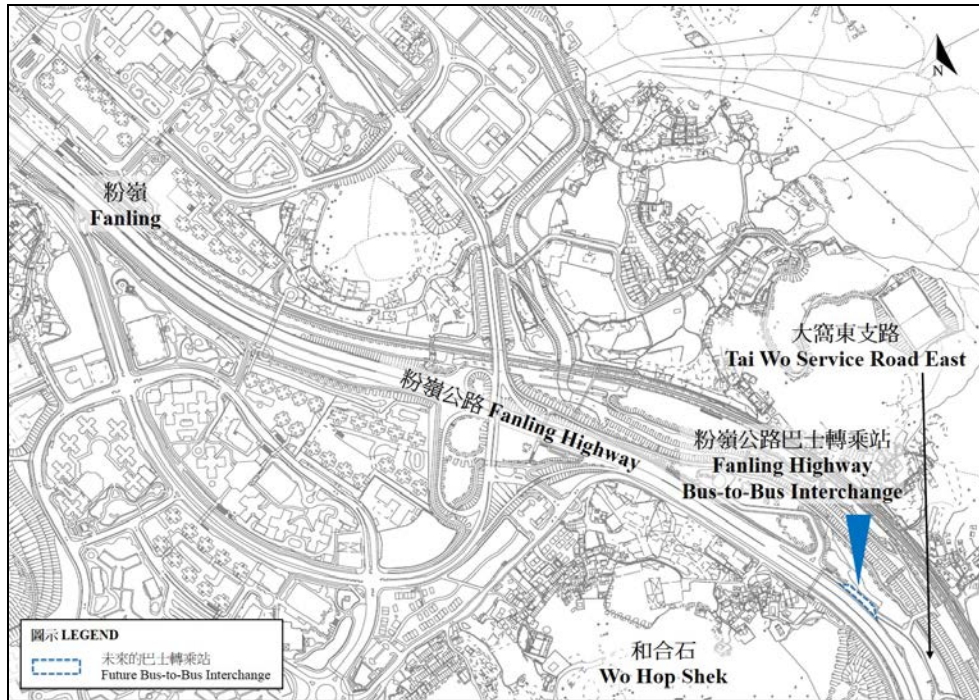
With reference to the implementation experience, while the TD proposed replacing the franchised bus routes with low patronage with GMB services to tie in with the opening of new railways, it might not be cost-effective in view of the patronage during peak periods. There are also certain differences in the fare level of franchised buses and GMBs (with the fare of the latter being higher in general). Such proposals therefore were eventually shelved as they failed to gain support from the community.

(ii) Bus-Bus Interchanges

4.6 Hong Kong is a small and densely-populated city with limited road space. The public is concerned about the impact of road traffic on air quality. Bus route rationalisation has been implemented to reduce duplication of resources, enhance the efficiency of bus network and alleviate traffic congestion and improve air quality. To support these bus rationalisation plans, the Government has been actively searching for suitable locations to set up new Bus-Bus Interchanges (“BBIs”) or upgrade the services and facilities of existing BBIs so that passengers can enjoy bus network with extended service coverage at the BBIs. This also facilitates better resource allocation of the bus companies, reducing the total number of buses on road and thereby alleviating the problems of traffic congestion and air pollution. There are normally fare concessions for interchanges. Over the past few years, the TD and franchised bus companies have set up new or enhanced existing BBIs at Tuen Mun Road, Tsing Sha Highway and the Tai Lam Tunnel Toll Plaza. There are also a wider range of interchange routes and more attractive fare concessions to facilitate passengers commuting between New Territories, Kowloon and Hong Kong Island. The bus companies have also upgraded the facilities at these BBIs, such as installing estimated bus arrival time display system, providing free Wi-Fi network, large-scale bus route information maps and chairs, etc.. There is a one-stop kiosk at the Tai Lam Tunnel BBI to provide octopus add-value, cash withdrawal and payment services. These large-scale BBIs have been well-received by passengers, with about 88 000 passenger trips made per day on average.

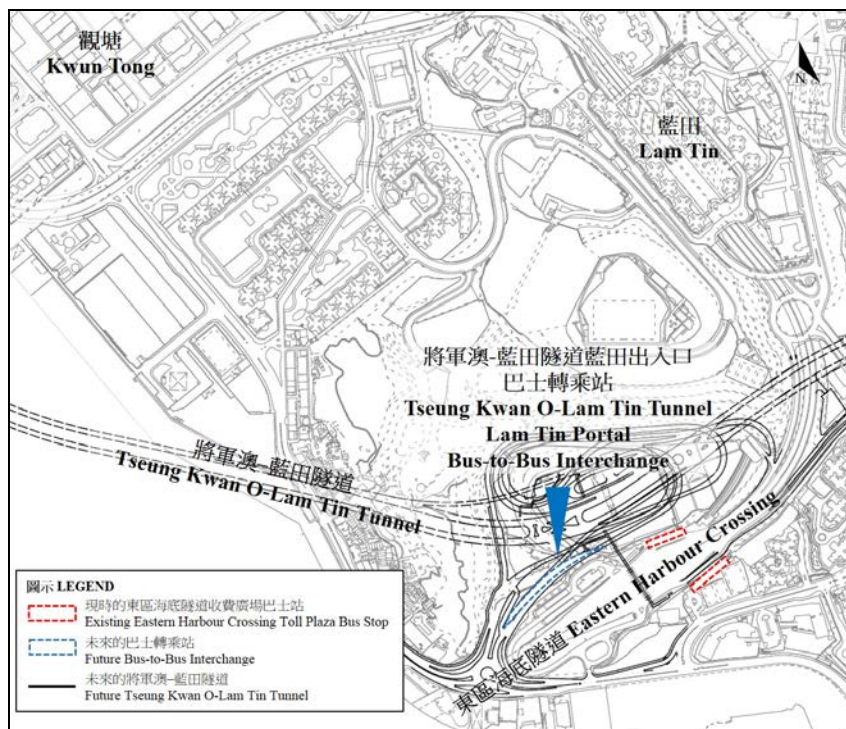
4.7 **With reference to the experiences of these BBIs, the Government has planned to construct BBIs in tandem with the development of certain new or extensions of major infrastructure projects such as tunnels, bridges and highways so as to facilitate passengers interchanging for more destinations.** At present, the Government is constructing BBIs at Fanling Highway, the portal of Tseung Kwan O – Lam Tin Tunnel (“TKO-LT Tunnel”, the toll plaza of Tseung Kwan O Tunnel (“TKO Tunnel”) and the toll plaza of northern connection of Tuen Mun – Chep Lap Kok Link (“TM-CLKL”):

- (a) Fanling Highway BBI: For the project of the Widening of Tolo Highway/Fanling Highway – Stage 2, the Government will construct a link road connecting the widened Kowloon-bound Fanling Highway with the realigned Tai Wo Service Road East as well as the new Fanling Highway Interchange. A new Kowloon-bound BBI is also planned at the side of the link road and expected to be completed in or before 2019. The TD and the franchised bus companies will discuss the appropriate bus routes for the BBI;



Fanling Highway BBI

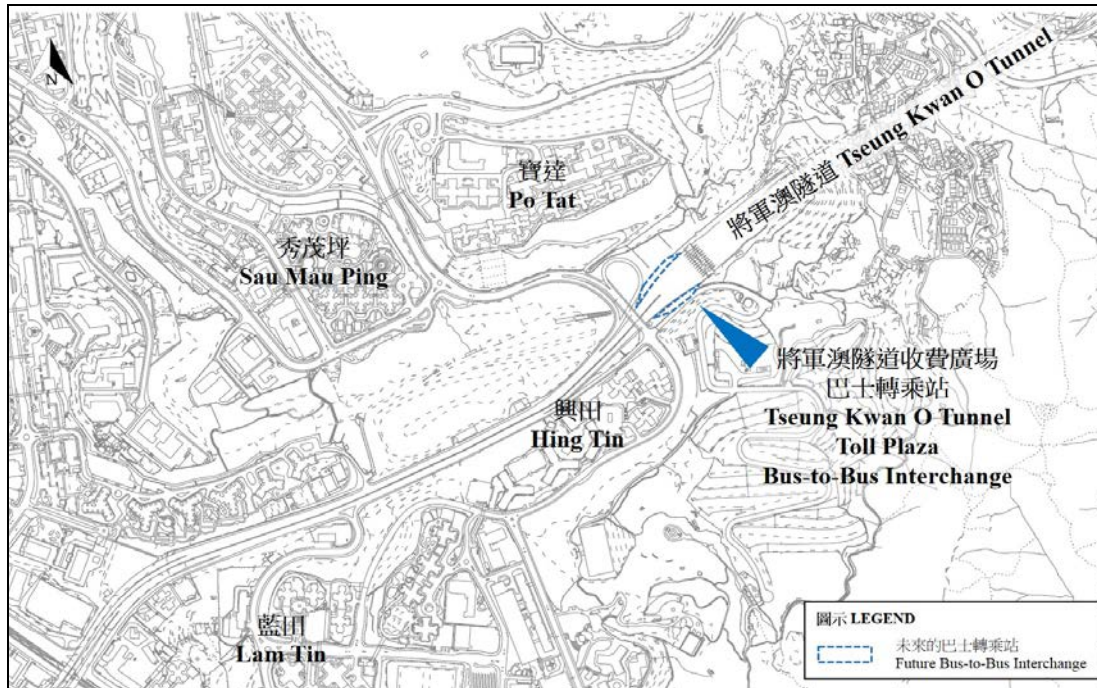
- (b) BBI at the portal of TKO-LT Tunnel: The TKO-LT Tunnel is under construction. The Government plans to add a BBI near the Administration Building of Eastern Harbour Crossing at the portal of Lam Tin Tunnel. The BBI will include a footbridge connecting to the bus stops at the toll plaza of Eastern Harbour Crossing to facilitate passengers travelling between TKO and Kowloon East and eastern Hong Kong Island. The construction work is expected to be completed in 2021. The TD and the franchised bus companies will discuss the appropriate bus routes for the BBI;



BBI at the portal of TKO-LT Tunnel

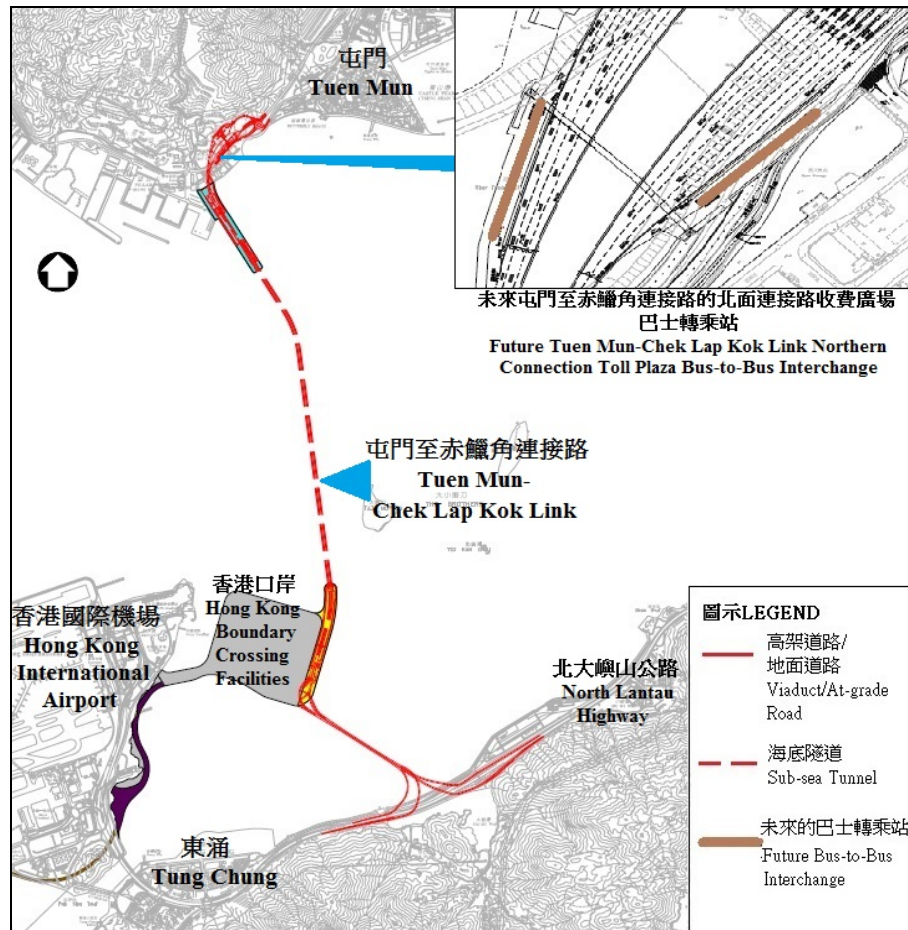


- (c) BBI at the toll plaza of TKO Tunnel: The Government has planned to add a BBI at the toll plaza of TKO Tunnel to facilitate passengers travelling between Kowloon East and TKO, as well as to meet the demand for bus services from the residents of Sau Mau Ping, Po Tat and Hing Tin areas. The construction work is expected to be completed in 2020. The TD and the franchised bus companies will discuss the appropriate bus routes for the BBI; and



BBI at the toll plaza of TKO Tunnel

- (d) BBI at the toll plaza of northern connection of TM-CLKL: The Government is constructing the TM-CLKL which connects the NWNT, North Lantau, the Hong Kong – Zhuhai – Macao Bridge Hong Kong Boundary Crossing Facilities and the Hong Kong International Airport at Chep Lap Kok. The Government plans to add a BBI at the toll plaza of northern connection of TM-CLKL to facilitate passengers travelling between Tuen Mun, Yuen Long and Lantau Island (including the Airport and Tung Chung). The construction work is expected to be completed in 2020. The TD and the franchised bus companies will discuss the appropriate bus routes for the BBI.

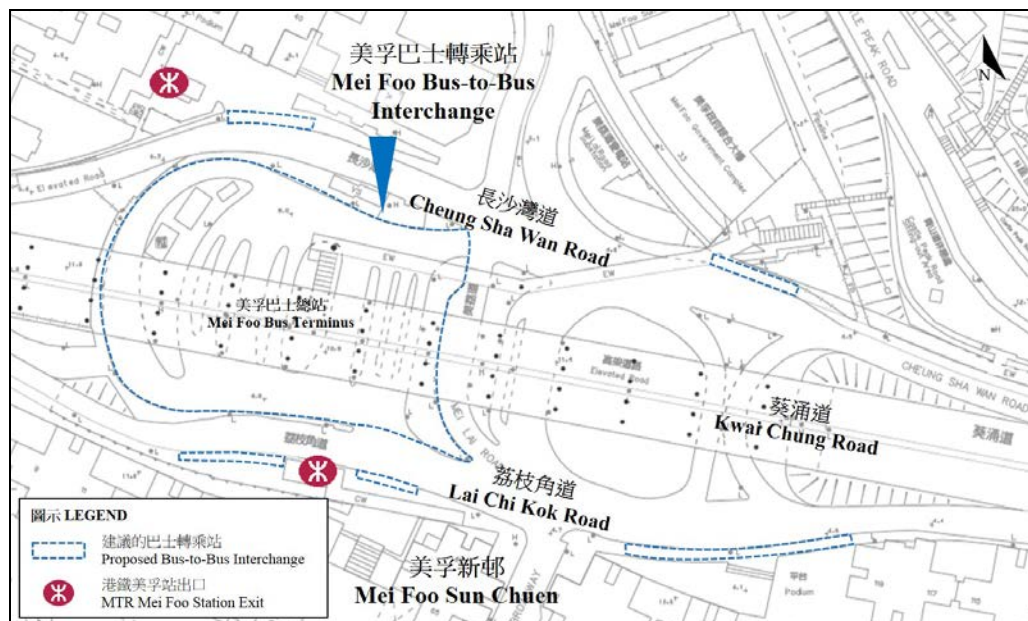


BBI at the toll plaza of northern connection of TM-CLKL

4.8 For developed urban areas with relatively high pedestrian and vehicular flows at narrower pavements and carriageways, it is not easy to set up large-scale BBIs similar to the one at Tuen Mun Road. **The consultant has explored the setting up of new BBIs or upgrading existing bus stops in the urban areas for interchanges of passengers:**

- (a) Mei Foo Bus Terminus and adjacent bus stops: It is proposed that the existing Mei Foo Bus Terminus and the adjacent bus stops should be upgraded to a BBI. At present, there are 11 bus routes operating at the Mei Foo Bus Terminus, while another 34 bus routes call at the adjacent bus stops. Around 58 000 passenger trips have used these facilities per day. These bus routes mainly run between Mei Foo and New Territories West, New Territories East, Kowloon West, TKO and eastern Hong Kong Island. Apart from the bus network, Mei Foo connects the Tsuen Wan Line with the West Rail Line of the MTR. The green minibuses near the Mei Foo Bus Terminus also provide feeder services within the district. Upgrading the Bus Terminus to a BBI can facilitate the introduction of more combinations of interchange routes and fare concessions. It would help further develop Mei Foo as a public transport hub and hence, strengthen the linkage between NWNT and Central Kowloon, Kowloon West and Kowloon East. This will enhance the connectivity and complementarity among various public transport services. In the meantime, the Government also encourages bus companies to improve the facilities at BBIs for facilitating passengers making interchanges and improving the waiting environment. The improvement measures being

contemplated include redesigning the bus parking bays at Mei Foo Bus Terminus to provide more bus parking spaces and expand passenger waiting area, installation of a bus arrival time display panel, as well as the provision of a large-scale bus route information map and chairs, etc.. Given the busy traffic at the Mei Foo Bus Terminus and adjacent bus stops, together with the geographical constraints, technical feasibility on these improvement works and the temporary traffic arrangement during the construction period would require further study. The study, which is expected to last one to two years, will be commenced soon. If these improvement works are to be implemented, the Government would explore the feasibility of providing more combinations of interchange routes and fare concessions with franchised bus companies. The views of the stakeholders would also be fully considered in the course of discussion; and



Mei Foo Bus Terminus and adjacent bus stops

- (b) Bus stops at Prince Edward Road East: It is proposed that the existing bus stops at Prince Edward Road East eastbound and westbound in San Po Kong outside the Latitude should be enhanced. At present, there are a total of 36 bus routes calling at the above bus stops which are made use of by about 17 000 passenger trips per day. These routes mainly provide linkage between Prince Edward Road East, San Po Kong and the Airport/Lantau Island, Tsing Yi, Sha Tin/Ma On Shan, Central Kowloon, Kowloon West, TKO and the Hong Kong Island. The Government will negotiate with the bus companies and encourage them to enhance bus stop facilities such as the possibility of providing more bus stop shelters, bus arrival time display panels, chairs, etc.. The Government will explore the feasibility of providing more combinations of interchange routes and fare concessions with franchised bus companies in order to strengthen linkage between Kowloon East, Kowloon West and the future Kai Tak Development Area. Upon the commissioning of the new SCL, this BBI can also enhance the connectivity and the complementarity among various public transport services in the future Kai Tak Development Area and the



passengers can enjoy more efficient services. The views of the stakeholders will be fully taken account of during the process.



Bus stops at Prince Edward Road East

4.9 The Government will continue to search for other suitable locations to set up BBIs.

(iii) Bus Priority Measures

4.10 The reliability of service frequency of road-based public transport services is easily affected by traffic congestion. **Under the public transport-oriented policy, buses are accorded priority use of roads as far as practicable.** At present, various bus priority measures are implemented in major trunk roads in Hong Kong if circumstances allow. These measures include:

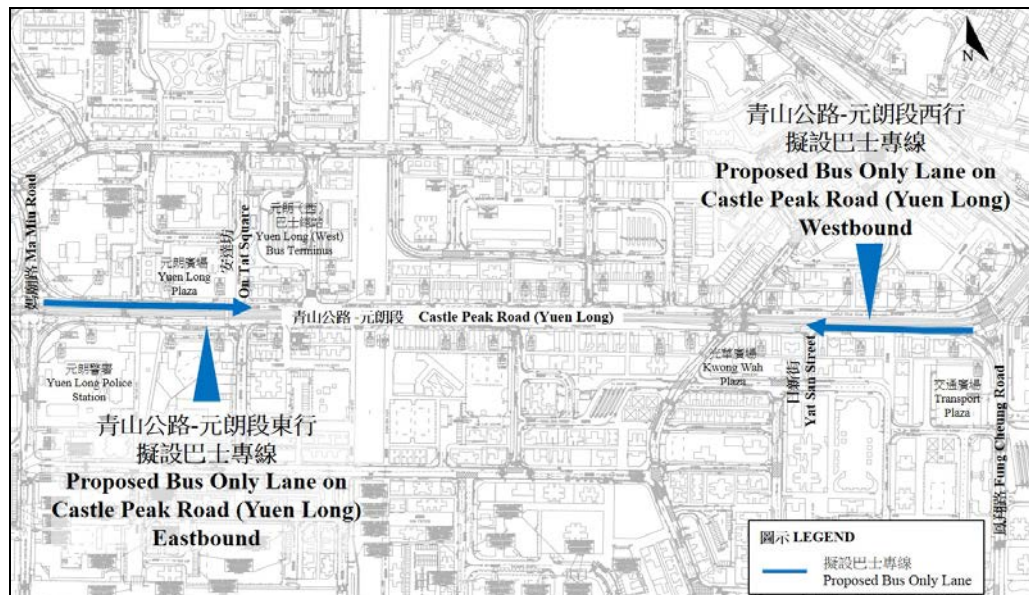
- (a) bus-only lanes;
- (b) bus-only lane changing position;
- (c) setting up bus stops at pick-up and drop-off restricted zones; and
- (d) changing road junction design and adjusting road traffic light signal control.

Among these bus priority measures, bus-only lane is the most commonly used one. At present, there are a total of over 25 kilometres of bus-only lanes and 14 designated bus gates in Hong Kong.

4.11 It is worth noting that the implementation of bus priority measures will reduce the number of lanes for use by other vehicles on the same road section. The travelling speed of other vehicles may reduce as a result. When planning for bus priority measures, the Government will carefully assess factors such as the impact of measures on overall efficiency of bus services and the traffic flow, as well as other road users.

4.12 Based on the above principles, the consultant has looked into the feasibility of designating new bus-only lanes at various locations. Initial proposals are as follow:

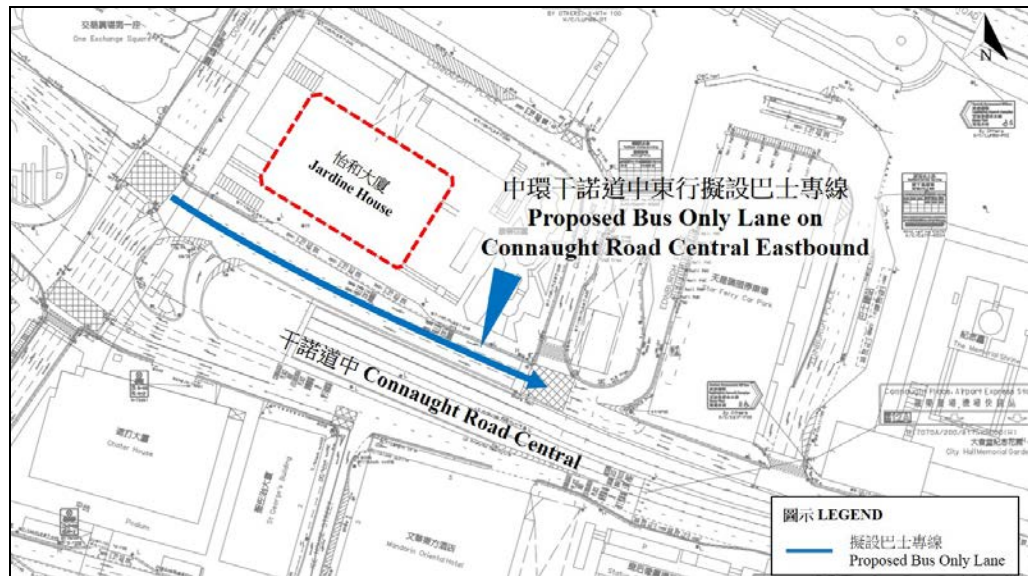
- (a) To designate a bus-only lane for use during morning and evening peak hours<sup>15</sup> by franchised buses along Yuen Long Main Road westbound (i.e. the section of Castle Peak Road (Yuen Long) westbound between Fung Cheung Road and Yat San Street) and eastbound (i.e. the section of Castle Peak Road (Yuen Long) eastbound between Ma Miu Road and On Tat Square, Yuen Long. At present, there are 23 and 21 bus routes pass through the Yuen Long Main Road westbound and eastbound during daytime respectively. Since this section is already designated a restricted zone effective from 7 a.m. to 12 midnight, passengers pick-up and drop-off or goods loading and unloading by vehicles is prohibited, except for franchised bus and authorised persons with permits. Preliminary assessment by the consultant shows that this proposal would have minimal impact on road traffic.



Proposed bus-only lane at Yuen Long Main Road  
eastbound and westbound

- (b) To designate a bus-only lane at the road section outside Jardine House on Connaught Road Central eastbound for use by franchised buses from 7 a.m. to 8 p.m. in Central. At present, there are a total of 76 bus routes passing through this road section. Preliminary assessment of the consultant shows that the proposal would have minimal impact on road traffic.

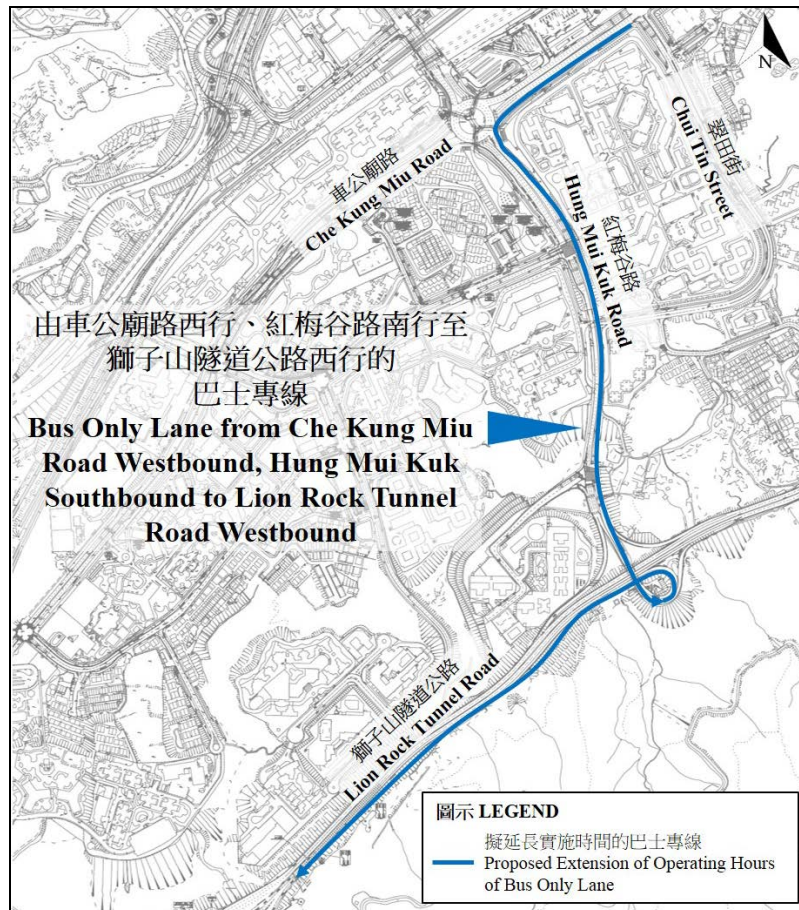
<sup>15</sup> The preliminary proposal is that the operating hours of bus-only lane in Yuen Long Main Road westbound should be effective from 8 a.m. to 10 a.m. and from 5 p.m. to 7:30 p.m., while the bus-only lane in Yuen Long Main Road eastbound should be effective from 7 a.m. to 9 a.m. and from 5 p.m. to 7 p.m..



Proposed bus-only lane outside Jardine House  
on Connaught Road Central eastbound

- (c) To extend the operating hours of the existing bus-only lanes at the road section on Che Kung Miu Road, Tai Wai westbound between Chui Tin Street and Hung Mui Kuk Road, the road section on Hung Mui Kuk Road southbound between Che Kung Miu Road and Lion Rock Tunnel Road, and the road section on Lion Rock Tunnel Road westbound between Hung Mui Kuk Road and the Lion Rock Tunnel Toll Plaza, originally from 7 a.m. to 10 a.m. and 4 p.m. to 7 p.m., to 7 a.m. to 7:00pm. At present, there are a total of 14 bus routes passing through the road section between Che Kung Miu Road and Hung Mui Kuk Road and 32 bus routes passing through the road section between Lion Rock Tunnel Road and Lion Rock Tunnel Toll Plaza. The consultant initially holds the view that extending the operating hours of the bus-only lanes to cover the hours between 10 a.m. to 4 p.m. would help shorten bus journey time and increase travelling speed. Preliminary assessment of the consultant shows that the proposal would have minimal impact on road traffic because bus-only lanes are already in operation during peak periods on the road sections concerned.





Proposed bus-only lanes in Che Kung Miu Road, Hung Mui Kuk Road and Lion Rock Tunnel Road for extending operating hours

In the light of the above proposals, the TD will make accurate assessments of the long-term traffic flow changes according to actual traffic conditions, with a view to ascertaining the overall efficiency of the proposals. Further study on the implementation details will also be undertaken, which is expected to last for one to two years. Prior to implementation, the stakeholders will be consulted in accordance with established procedures. The proposals will be implemented if they receive support from the local community.

#### **(b) Ancillary Facilities for Passengers**

4.13 **To further enhance franchised bus services, the Government is committed to providing more comprehensive ancillary facilities that can keep up with the times, with a view to providing passengers with a convenient and comfortable waiting environment.** In this regard, the Government announced a new initiative in 2016, under which around \$88 million was earmarked for subsidizing the franchised bus companies to expedite the installation of real-time arrival information display panels and seats at bus stops for the convenience of passengers. Please see Chapter 11 on Barrier-free Public Transport for further details. Meanwhile, **we will implement pilot projects which seek to improve the exterior design and facilities of existing covered public transport interchanges (“PTIs”).** The pilot projects will be implemented at covered PTIs, whereas the scope of enhancement will encompass Wi-Fi services, toilets, passenger information panels, seats, exterior refurbishment, brighter lighting, etc. TD and the Architectural Services Department are in the course of identifying two sites for conducting the pilot projects and formulating the details of the improvement works for implementation after consultation with the District Councils. Upon the completion of the pilot projects, we will, having regard to the trial outcome,

consider rolling out renovation works at other locations. We will also examine applying such new standards when the Government builds the same type of facilities in future.

4.14 In addition, the KMB will set up Wi-Fi service for around 500 buses per year, and a total of around 2 000 buses (about half of KMB's fleet) will be equipped with Wi-Fi service in phases by end-2020 under the new franchise. The Wi-Fi service will be available for use by passengers free of charge. In order to optimise the use of the buses equipped with free Wi-Fi service, KMB will flexibly deploy these buses to operate on long-haul routes or routes with higher patronage. KMB will also conduct a trial by making use of suitable technology, through which passengers in the lower deck of the bus compartment will be given information on seat vacancy of the upper deck. This will reduce unnecessary passenger movements between the two decks. Subject to the trial outcome, KMB will provide the same on more buses progressively.

4.15 With the improvement of ancillary facilities, passengers of franchised buses can enjoy a better environment during their waiting time and throughout their journey. The Government will continue to work with franchised bus operators on the early implementation of works and initiatives for enhancing the ancillary facilities.

#### **(c) Diversified Services**

4.16 Without compromising the efficiency of the existing franchised services, franchised bus companies may proactively leverage on their distinctive edges to provide more diversified services for meeting various needs of the community.

4.17 Franchised bus services possess a number of distinctive edges over other road-based public transport services. Firstly, operators may exercise control over cost-efficiency by deploying bus models of various vehicle lengths and carrying capacity to operate on different routes having regard to their practical circumstances. Secondly, the compartments of franchises buses are more spacious such that they may be fitted with different kinds of special facilities (such as area for accommodating wheelchairs) or provide passengers with more space. Thirdly, barrier-free facilities on franchised buses are relatively more mature. Leveraging on these distinctive edges could help opening up possibilities for more diversified services.

4.18 **Franchised bus companies may attempt to open up new services along the following 3 avenues, namely (i) introducing new long-haul services; (ii) deploying mid-sized single-deck buses to provide shuttle services for lower-density residential community with growth potential; and (iii) providing more low-floor buses with barrier-free facilities for hospital routes, or operating more new community hospital routes (i.e. "H" routes).** Further details on low-floor buses and hospital routes will be discussed in Chapter 11 on Barrier-free Public Transport Services. This Chapter will elaborate on the new long-haul services and mid-sized single-deck bus services.

##### **(i) New Long-haul Services**

4.19 With reference to passengers' opinions on the new long-haul services canvassed by the consultant, it is observed that passengers generally consider that the new long-haul services should possess the following 3 key features. Firstly, their services should come with greater comfort (such as more spacious seating and no standees). Secondly, their journeys should be speedier (such as observing fewer stops or operating via expressways).

Thirdly, their bus compartments should be equipped with more passenger amenities (such as Wi-Fi services and charging docks). Practically, the new services would be more suited for long-haul routes (especially during peak periods).

4.20 In fact, buses running on long-haul routes in general will be able to provide better services following KMB's commitment to provide free Wi-Fi services on 2 000 buses (about half of its fleet) by end-2020 under its new franchise. Individual operators have also introduced express direct services with very few stops that operate via expressways during the morning peak periods, such as KMB's Routes No. T270 and T277 (from the North District to Kowloon) and NWFB's Route No. 88X (from Siu Sai Wan/Chai Wan to Central and Western District). Such initiatives for service improvement can already satisfy passenger's demand for new services to a certain extent. Nevertheless, we will still encourage franchised bus companies to consider introducing new long-haul services during peak periods on a trial basis. The new services, which will be characterised by more spacious seating, no provision for standees, fewer stops and more comprehensive passenger amenities in the bus compartment, will cater for the aspirations of some passengers. Details (including routings and fares) are to be confirmed. Operators may put forward specific proposals having regard to the commercial principles and market needs.

4.21 The positioning of the new long-haul services seeks to provide passengers with more diversified choices. Operators will not reduce their existing services on account of introduction of new long-haul services. Meanwhile, the new long-haul services will be a kind of services offered under bus franchises. Same as ordinary services, the daily operation of the new long-haul services will likewise be subject to the regulation of the TD in accordance with the Public Bus Services Ordinance and the franchise conditions.

4.22 If the new services to be introduced by operators can carry less passengers due to more spacious seating or no provision for standees, it will become more costly to carry each passenger when compared with the existing services. Taking an existing double-deck bus as example, about 70% of its capacity is from seats and 30% from provision for standees. If there is no provision for standees in the bus compartment and if the seats are to made more spacious, the carrying capacity of each bus may decrease by 30% to 40%, whereas the cost of carrying each passenger may be 50% to 70% higher than that of ordinary services. According to the opinion survey conducted by the consultant earlier, close to 65% of the respondents considered it reasonable for the new services to charge a higher fare than that of existing ordinary services. Among these respondents, close to half indicated that they may consider using the new services so long as their fares are higher than those of existing ordinary services by not more than 30%. Meanwhile, over 40% of these respondents indicated that they would still consider using the new services if their fares are 60% to 100% higher those of existing ordinary services. Operators should exercise prudence in planning the new services, while the Government will consider providing suitable room for setting the fares to ensure that such services are financially viable on one hand while acceptable to the market on the other.

#### (ii) Mid-sized Single Deck Bus Services

4.23 Among the existing fleets of franchised bus companies, 90% are double-deck buses and 10% are single-deck buses. In terms of the operating cost, no matter whether it is single-deck or double deck buses, salary expenses make up about half of such cost. Other operating cost and maintenance expenses of these types of buses are also comparable. Bus operators have thus generally preferred large buses for their operation to achieve the best cost-

efficiency. However, we need to search for a new service model to serve the demand from those areas with growth potential while the population is yet to render the provision of bus services by large buses sustainable. In this regard, the Government will examine with the franchised bus companies the feasibility of introducing mid-sized single-deck buses (i.e. bus models equipped with barrier-free facilities but with shorter vehicle length and smaller carrying capacity), and conduct a trial of these buses in areas with patronage that is yet to support services to be provided using large buses. The initial idea for the trial is to provide short-haul shuttle services to/from transport nodes (such as major BBI locations) for individual districts in the New Territories with growth potential which currently have relatively lower population density. The Government will work with the franchised bus companies to examine the feasibility of the trial and the implementation details (including the timeframe for the trial).

4.24 Notwithstanding the above, the cost-efficiency of using mid-sized single-deck buses should be carefully assessed before introducing such new services to ensure their financial sustainability. If there is patronage growth on routes operated by the mid-sized single-deck buses afterwards, bus operators may consider switching back to using large buses to achieve better cost-efficiency.

**(d) Fare Adjustment Arrangement**

**(i) Current Arrangement**

4.25 The Fare Adjustment Arrangement for franchised buses (“FAA”) is the mechanism adopted by the Government over years to process applications for fare increase from franchised bus operators. Upon receipt of an application, the Government will make reference to a basket of factors under the FAA in considering the need of any fare adjustment and the rate of adjustment. Such factors are:

- (a) changes in operating costs and revenue since the last fare adjustment;
- (b) forecasts of future costs, revenue and return;
- (c) the need to provide the bus operator with a reasonable rate of return;
- (d) public acceptability and affordability;
- (e) quality and quantity of service provided; and
- (f) outcome of a fare adjustment formula. The formula is  $(0.5 \times \text{Change in Nominal Wage Index for the Transportation Section}) + (0.5 \times \text{Change in Composite Consumer Price Index (“CCPI”)}) - (0.5 \times \text{Productivity Gain})$ . The productivity gain is set at zero in the last review.

4.26 **The outcome of the fare adjustment formula (item (f) of paragraph 4.25 above) does not operate as an automatic determinant of the fare adjustment outcome.** Due consideration will be given to all the 6 factors mentioned above in a comprehensive manner. Moreover, the Government keeps applying the formula of the FAA on a quarterly basis. If the formula outcome reaches -2%, the Government will proactively initiate a fare review with reference to these 6 factors of the FAA.

4.27 **There is a passenger reward arrangement under the FAA.** When the rate of return on average net fixed assets (“ANFA”) for an operator reaches or exceeds the threshold of 9.7%, the operators will have to share the profit above this threshold with passengers through fare concessions. The sharing arrangement has worked well and benefitted passengers. Profits gained by the operators due to various causes, including the drop in oil

price, may also be shared with passengers and benefit them through this arrangement. In other words, passengers can already benefit when there is a considerable drop in oil price such that the above threshold for sharing of profits with passengers is reached<sup>16</sup>. Recent examples include the 20% same day return discount concessions for a period of 88 days rolled out by KMB in 2016 as well as the 5% discount on every trip for a period of two months introduced in the second quarter of 2017.

4.28 The aforesaid existing arrangement was put in place in 2006 after consultation with the LegCo. The arrangement was subsequently fine-tuned having regard to the outcome of the review in 2009<sup>17</sup>. As the existing arrangement can basically strike a balance between the sound operation of bus service as well as public affordability and acceptability, there is no need for an overhaul of the FAA.

4.29 In this regard, **the Government has conducted a review of the FAA. The initial findings indicate that the arrangement should be kept intact, while the data could be updated on two fronts:**

- (a) Productivity gain value<sup>18</sup>: The existing fare adjustment formula takes into account the productivity gain of franchised bus companies. Currently, the productivity gain value is set at zero, which is the outcome of the 2009 review on the changes in productivity of franchised bus companies at the time. The consultant has recommended updating the value of productivity gain with reference to the information on the operation of franchised bus companies and statistics. The initial data hinted that the value of productivity gain may revert from a negative value computed in the last review to a positive value. This will help moderating the formula outcome on the supportable rate of adjustment as and when franchised bus companies apply for fare increase in future<sup>19</sup>.
- (b) Passenger reward arrangement: As mentioned above, the profit achieved by a franchised bus operator in excess of the 9.7% rate of return on ANFA shall be shared equally between the operator and passengers. The current

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<sup>16</sup> The existing mechanism enables passengers to enjoy the savings in expenses due to the drop in oil price in the form of fare concessions. In fact, even though the international oil price has remained at a relatively stable and low level in recent years, the influence of fuel cost is limited as it only accounts for about 11% of the total operating expenses of franchised bus companies in 2016. In comparison, expenses for salary for staff accounts for about half of the total operating expenses, while the franchised bus companies have been improving the remuneration and benefits of their staff over the past few years. The operating expenses of franchised bus companies on other fronts (such as maintenance and depreciation) have also been on a rising trend due to inflation.

<sup>17</sup> As the productivity gain in the formula was calculated to be a negative value, the value was set at zero until the next review.

<sup>18</sup> Under the FAA, productivity is computed from the ratio of the total of fare and non-fare box receipts to the total operating cost over a period of ten years.

<sup>19</sup> The formula outcome is for reference only and does not operate as an automatic determinant of the fare adjustment outcome. The rate of fare adjustment is to be determined by the Chief Executive-in-Council with reference to the six factors under the FAA (see paragraph 4.25 above for details).



target rate of return was set in 2009<sup>20</sup> based on analysis of past performance and forward-looking projections made with reference to the economic and investment environment at that time. The consultant recommended that the triggering threshold of 9.7% should be adjusted downwards slightly having regard to the latest changes in the overall economic situation and investment environment.

4.30 The Government has initiated discussion with the franchised bus companies on the initial review outcome and the details of the above two data updates. We will announce the discussion outcome and expect to implement them in the first half of 2018 upon approval by the Chief Executive-in-Council.

**(e) Offering More Fare Concessions**

4.31 Franchised bus services in Hong Kong are provided by private operators in accordance with commercial principles basically without government subsidies. The Government has all along been encouraging operators to offer more fare concessions, but this should avoid imposing fare pressure that might eventually affect the basic fare level. By end-2016, **all franchised bus companies offered a total of more than 700 fare concession items**, including section fares for over 400 bus routes (around 70% of all routes), as well as over 400 BBI concession schemes. These BBI concession schemes benefit some 170 000 passenger daily on average, with the concession amount reaches \$390 million each year.

4.32 In the past 5 years, the Government has granted a total of 6 new franchises for a period of 10 years each. The operators have introduced a number of new forms of fare concessions in response to the public aspirations and to benefit more passengers. Specifically, Citybus (Franchise 2) and Long Win, which are operated by two different groups, have joined hands in launching the first ever inter-group bus-bus interchange discounts in 2013. This has set an important milestone and enhanced the bus network interchange arrangements for the bus network serving the Airport and North Lantau. In its new franchise which commenced in March 2017, the New Lantau Bus introduced for the first time a “ride 30 get 1 free/ride 40 get 2 free” fare concessions to benefit frequent riders of its South Lantau routes. Upon the commencement of its new franchise in July 2017, KMB will also roll out a long-haul route fare concession scheme for full-time students, and partner with the Hong Kong Tramways Limited to offer interchange concessions such that passengers riding on cross-harbour routes solely operated by KMB may interchange for trams for free on Hong Kong Island.

4.33 We will closely monitor the usage of various concession schemes and review them in a timely manner. **Meanwhile, we will also continue to encourage franchised bus companies to introduce monthly pass schemes which have wide coverage and practical concessions without having to be subsidised by other passengers through increase in the general fare level.**

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<sup>20</sup> The 9.7% threshold for the rate of return was first adopted in 2006 for implementation of the passenger reward arrangement.

## Chapter 5      The Long-term Development of the Light Rail

5.1      The Light Rail was commissioned in 1988. The then network comprised 6 routes and 70 Light Rail Vehicles (“LRVs”) serving Tuen Mun and Yuen Long districts, with 43 LRVs providing service during peak hours. During the initial years of operation, the average daily patronage was about 150 000. In 1993, the Light Rail network was extended to Tin Shui Wai in tandem with the development of this new town. The number of Light Rail routes increased to 9 and the LRV fleet size was expanded to 100 LRVs, with 88 LRVs providing service during peak hours. Upon the Rail Merger in December 2007, the operation of the Light Rail was taken over by the MTRCL. In 2008, the average daily patronage was about 376 000. In 2016, the figure increased to about 490 000. With a total of 12 routes, **the Light Rail serves as an important rail-based and at-grade transport mode in Yuen Long and Tuen Mun, as well as a feeder to the West Rail Line.** In view of the justifications as set out in paragraph 5.28 below, the role of Light Rail will be continued and strengthened with the measures covered in this chapter.

5.2      The carrying capacity of the Light Rail system is determined by various factors, including the coverage of the network, number of LRVs, layout and design of the LRV compartments, service frequency, deployment of single-set and coupled-set LRVs, and design of Light Rail platforms. Also, operating at grade, the Light Rail adopts an open design and has to share certain space of the roads with other road users. The traffic at the junctions of the shared road sections will affect the number of LRVs which can be deployed, thereby affecting the carrying capacity of Light Rail. According to the on-site observation by MTRCL in 2016, the average loading of Light Rail was around 80%<sup>21</sup>. During peak hours, most of the passengers can board the first arriving LRV. Details of the current utilisation are at **Annex 3**.

5.3      Similar to other MTR railway lines, the respective highest loading of the Light Rail routes is mostly found within an hour in the morning (the busiest hour slightly varies among different Light Rail routes and it is generally within 7:15 a.m. and 8:15 a.m.). The MTRCL has been closely monitoring the overall service demand for the Light Rail, the travelling pattern of passengers and the loading of the Light Rail routes. It endeavours to work out corresponding measures to increase the carrying capacity of the Light Rail. Currently, on average 133 LRVs<sup>22</sup> are deployed to provide Light Rail service during the morning peak hours on weekdays.

5.4      The measures adopted by MTRCL in enhancing the carrying capacity of Light Rail include increasing frequency of service, improving the layout and design of LRV compartments, strengthening platform management, introducing short-haul special service,

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<sup>21</sup> As there may be a number of routes passing through a single Light Rail stop, the MTRCL cannot ascertain which routes the passengers take after they purchase tickets or pay by Octopus. Therefore, the MTRCL is unable to assess the loading of individual Light Rail routes by making reference to the entry/exit records of passengers. The approach of on-site observation has been adopted by the MTRCL in assessing the loading of Light Rail. MTRCL staff observe and assess the vacant space of LRV compartments at platforms during the busiest hour during morning peak hours. Data obtained within the hour will be consolidated for assessing the loading of individual Light Rail routes. In 2016, the loading of the 12 Light Rail routes ranged from 69% to 96%, with 80% as an average.

<sup>22</sup> The LRV fleet now consists of 140 LRVs. On average 133 LRVs are deployed to provide service during the peak hours every day, while 7 LRVs are sent to the Light Rail Depot on a rotational basis for routine maintenance. Besides, two LRVs were severely damaged in accidents and have been disposed of.

and increasing the number of coupled-set LRVs. Details are set out at **Annex 4**.

5.5 The Government conducted a systematic review in collaboration with the MTRCL on the long-term development of Light Rail. Topics covered include:

- (a) the feasibility of increasing the carrying capacity of Light Rail under the original design of the system;
- (b) the feasibility of upgrading the existing system to increase the carrying capacity;
- (c) the long-term demand of NWNT for public transport services; and
- (d) the roles of various public transport services including Light Rail in meeting such demand.

5.6 The Government and the MTRCL concluded from the study that the following measures for the short, medium and long term could be adopted to enhance the carrying capacity of the Light Rail, with a view to meeting the transport demand of Northwest New Territories:

Short-term measures

- (a) purchasing ten additional LRVs;
- (b) rationalising some Light Rail routes; and
- (c) adjusting traffic lights at busy junctions.

Medium-term measures

- (d) undertaking a study on design improvements for busy junctions.

Long-term measures

- (e) improving the long-term operation model of the Yuen Long Main Road of the Light Rail; and
- (f) undertaking a long-term study of the feasibility of constructing a heavy rail to connect Northwest New Territories and the urban areas.

**The feasibility of Increasing the Carrying Capacity of Light Rail under the Original Design of the System**

- (a) 10 Additional LRVs

5.7 To expand the Light Rail fleet, the MTRCL awarded a contract in July 2016 to purchase 40 new LRVs, of which 30 will be used to replace Phase 2 LRVs which have been in service since 1992, while the remaining ten would be deployed to expand the fleet. It is expected that these 10 additional LRVs will be delivered to Hong Kong by batches between 2019 and 2023.

5.8 The additional LRVs will be deployed to increase the number of coupled-set LRVs as far as practicable. Nevertheless, considering the current traffic condition and the capacity of the roads, the utilisation rates of certain road junctions covered by the Light Rail system are already very high and the room for increasing the Light Rail service frequency during morning peak hours is rather small. Therefore, before considering the addition of coupled-set LRVs to certain Light Rail routes, measures must be adopted to enhance the operational

efficiency of the current services, creating room for the deployment of these 10 additional LRVs<sup>23</sup>.

(b) Rationalising Light Rail Routes

5.9 Currently, there are three cross-district Light Rail routes connecting Yuen Long and Tuen Mun, including Route Nos. 610, 614 and 615. These three Light Rail routes completely overlap in Yuen Long district and all of them pass through the busy Yuen Long Main Road (i.e. Castle Peak Road – Yuen Long Section) as well as three busy junctions along the way<sup>24</sup>. The service frequencies of these three Light Rail routes are every 5 to 9, 10 to 17 and 10 to 18 minutes respectively. A total of 27 LRVs (including 25 single set LRVs and 2 coupled-set LRVs) are in operation during the morning peak hours.

5.10 The Yuen Long Main Road has busy traffic and is used by many road users apart from LRVs. Traffic congestion occurred from time to time, in particular at the busy road junctions mentioned above. Often LRVs have to move slowly and wait at traffic lights at junctions. As Route Nos. 610, 614 and 615 all pass through the Yuen Long Main Road, coupled with Route No. 761P that plies between Yuen Long and Tin Shui Wai, a large number of LRVs are travelling through the Yuen Long Main Road during peak hours. As these LRVs are running according to different schedules, often there may be more than one LRV arriving at the stop simultaneously or in close succession. Headways are not evenly arranged and the Light Rail system cannot achieve maximum operational efficiency. The operating speed and carrying capacity of the Light Rail system will be affected. According to MTRCL, the operating speed of LRVs travelling from Shui Pin Wai Stop to Yuen Long Terminus along the Yuen Long Main Road is around 15 km per hour, which is significantly lower than the operating speed of 25 km per hour for LRVs travelling from Siu Hong to Shui Pin Wai stops. Under the circumstances, even if the MTRCL deploys more LRVs for these routes, the Light Rail system will only become more congested and LRVs will then be unable to arrive at stops on time. In this case, the overall carrying capacity cannot be effectively increased.

5.11 On the other hand, Route Nos. 614 and 614P, 615 and 615P have completely overlapping alignments in Tuen Mun. Passengers can actually take Route Nos. 614P and 615P to get to any stop covered by Route Nos. 614 and 615 within Tuen Mun district.

5.12 **The Government requested the MTRCL to put forward feasible proposals to address the above route-overlapping problem, so as to improve the deployment of LRVs during peak hours and operational efficiency of the Light Rail, as well as to enhance the capability of increasing the number of LRVs, in a bid to increase the carrying capacity of Light Rail under the original design.** After scrutinising the operational conditions of the Light Rail and its role as major public transport feeder to the West Rail Line, the MTRCL proposes the following route rationalization proposal for deliberation with the community :

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<sup>23</sup> The Light Rail system is not unlimited in terms of the number of LRVs it can accommodate. Too many LRVs will result in congestion, which will lower the operating speed of LRVs, and further increase in the number of LRVs will not be able to enhance the carrying capacity of the network, or may even see a decrease. Actually, due to busy traffic and increase in LRVs, the average operating speed of LRVs has dropped by 6% in the past 8 years.

<sup>24</sup> Including (1) Kuk Ting Street/Tai Tong Road and (2) Castle Peak Road-Yuen Long Section, Fung Cheung Road/Castle Peak Road – Yuen Long Section and (3) On Lok Road/Castle Peak Road – Yuen Long Section.

- (i) cancel Route Nos. 614 and 615 and retain Route No. 610 as a cross-district route connecting Yuen Long and Tuen Mun;
- (ii) introduce new Light Rail Route No. 610P that connects Siu Hong Stop and Yuen Long Terminus of the Light Rail, and runs along the current alignment of Route Nos. 614 and 615 within Yuen Long district; and
- (iii) deploy more LRVs to run Route No. 614P and 615P in order to increase their service frequencies and enhance the feeder service to West Rail Line stations (including Tuen Mun Station and Siu Hong stops).

The 3 above-mentioned measures combine to form a consolidated rationalisation proposal and cannot be implemented alone. Details are set out at **Annex 5**.

5.13 The Government and the MTRCL will consult the Traffic and Transport Committees of Yuen Long District Council and Tuen Mun District Council shortly in respect of the above route rationalisation proposal. Taking into account the discussion on the Light Rail route rationalisation proposal, the Government will also consider whether other road-based public transport services in NWNT, including MTR feeder buses<sup>25</sup>, franchised buses and Green Minibuses, should be reviewed.

(c) Traffic Lights at Busy Junctions

5.14 The Light Rail enjoys priority in passing junctions. When an LRV is about to reach a junction, it will automatically send signals to the traffic light system of the junction, which will change to a white light within a short time (i.e. indicating that the LRV can pass through). In the meantime, the traffic light for other road users will turn into red so as to allow the LRV to pass through quickly. After a certain period of time, the white light for the LRV will turn into red to allow other road users to pass through the junction. If an LRV arrives at the junction at this time, it has to wait for the next white light for passing through.

5.15 Currently, the Light Rail network has 11 busy junctions (see **Annex 6**). The TD and MTRCL have reviewed the traffic light arrangements at these busy junctions to identify room for improvement, such that the priority enjoyed by Light Rail can be maximised to increase the operating efficiency of Light Rail. It was concluded that improvement works can be carried out at 3 junctions: (1) improvement works have been carried out at the Tin Ho Road/Tin Yiu Road; (2) improvement works can be carried out at Tin Shui Road/Tin Wing Road (near the Tin Shui Wai Hospital); and (3) improvement works can be carried out at Tin Fuk Road/Tin Yiu Road/Ping Ha Road.

5.16 Currently, there are 5 Light Rail routes passing the 3 junctions mentioned above, including Route No. 705, 706, 751P, 761P and 751. After the implementation of the above adjustments, the journey time of these routes will be slightly shortened and the on-time performance of LRVs will be enhanced. Also, as the journey time is shortened, it creates room for the MTRCL to introduce short haul special service on the basis of operational needs, which will enhance carrying capacity. The adjustment work involves modifying the hardware (the traffic signalling system components) and the software (system control). It is

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<sup>25</sup> MTRCL provides feeder bus service to travel to and from a number of West Rail Line stations and Light Rail stops to provide convenience to railway passengers. The MTR feeder buses carry a total patronage of more than 130 000 passenger trips. Light Rail passengers using Octopus can enjoy free feeder bus service to and from a number of residential estates and Light Rail stops.

estimated that the work would be completed by 2018 the earliest.

5.17 Regarding other busy junctions, upon study, the TD reckons that the prevailing arrangement has already maximises the priority enjoyed by Light Rail, while giving adequate time for other road users to cross the junctions. In fact, other than the Light Rail, there are a large number of other road users, including other public transport modes and pedestrians etc, using the busy junctions. If the time allowed for the Light Rail to pass the junctions is substantially increased, other road users must be affected. Therefore, **the adjustment of traffic light signal is only applicable to certain junctions.**

### **Feasibility of Upgrading the Existing Light Rail System to Increase Carrying Capacity**

#### **(d) Enhancing the Design of Individual Busy Junction**

5.18 Unlike heavy rails that run on designated tracks, the Light Rail needs to share the road with other road users. This limits the number of LRVs which can be accommodated by the Light Rail system and thus the carrying capacity of the system. There are comments suggesting that only by segregating the Light Rail tracks with other road users can this issue be resolved. Theoretically, there can be two directions:

- (i) to build overhead or underground Light Rail tracks at certain sections; and
- (ii) to build overhead or underground roads or footpaths at certain sections.

5.19 **Upon assessment, it is considered technically and practically not feasible to reconstruct the existing Light Rail tracks or roads/footpaths overhead or underground.** Major reasons include –

- (i) the areas now covered by the Light Rail networks are already well developed. Along the routes of Light Rail (such as the Yuen Long Main Road), there are a large number of buildings and other structures (such as stations and tracks of the West Rail Line). Certain Light Rail tracks and stations are even integrated with other buildings such that it would not be possible to avoid affecting the structure of these buildings if the Light Rail tracks or road/footpath structures are to be hugely altered;
- (ii) huge alteration of Light Rail tracks or road/footpath structures would entail the closure of certain road sections for a long time. This is not feasible given the high traffic volume of busy junctions at present; and
- (iii) a large number of columns or facilities are required for supporting overhead structures, no matter if they are Light Rail tracks or roads or footpaths. These columns or facilities will likewise take up road surface, which is of permanent nature. If an underground option for Light Rail/roads/footpath (i.e. tunnel) is adopted, the problem encountered would be even more complex, including whether the construction of tunnels is geological permissible, whether there is enough space to build the access from road surface to underground, and whether public utilities (such as major drainage) would be affected.

5.20 **The Government and MTRCL have also reviewed whether it is feasible to partially segregate the Light Rail system with roads/footpaths.** For this, the Government and the MTRCL have conducted an assessment on the 11 busy junctions mentioned in paragraph 5.15 above. The initial review outcome is that it is technically not feasible to separate Light Rail tracks from roads/footpaths for 5 junctions, while further studies are required to ascertain the feasibility for the remaining 6 junctions. For details, please refer to **Annex 7**. In any event, the Government will carry out in-depth technical studies to examine whether the technical constraints can be overcome, so as to confirm how many of these busy junctions can undergo grade segregation works.

5.21 It must be pointed out that, whether or not grade segregation works are feasible is not on its own a technical issue, but it also involves the demolition of existing structures and building of new structures. Therefore, the works will need to be undertaken in phases and confined to limited area each time. As such, the projects may take a long time, possibly 5 to 10 years or even longer from planning to completion, and the cost would be high. At the same time, as alteration is required to the structures of existing roads and tracks, there may be temporary diversion or even partial suspension of Light Rail service during the construction. Roads may also need to be diverted.

5.22 If grade segregation is feasible at all or some of these 11 busy junctions eventually, the travelling time of the concerned Light Rail routes can be shortened, enabling the headway to be increased.

5.23 The Transport and Housing Bureau will strive for resources to conduct this detailed technical feasibility study in 2018. It is expected that the study will take two years' time.

(e) **Mode of Operation of Light Rail along Yuen Long Main Road**

5.24 The Yuen Long Main Road is a busy road with heavy traffic of Light Rail, vehicles and pedestrians. Congestion often occurs, affecting not only the operation of Light Rail but also transport efficiency on the whole. **The Government plans to conduct studies with the MTRCL on improving the mode of operation along Yuen Long Main Road in the long run. Under consideration is the proposal to divert one of the two Light Rail tracks, such that the Yuen Long-bound Light Rail service will pass through Shui Pin Wai Road, Wan Tat Road and Long Yip Street and connect to the Yuen Long Terminus**, while the Light Rail service departing from the Yuen Long Terminus for the Yuen Long Main Road will remain unchanged.

5.25 The above option should be able to increase the operational efficiency and expand the service coverage of the Light Rail. Besides, having a single Light Rail track along the Yuen Long Main Road will release more road space for vehicle use, widen the pedestrian walkway and ease the conflict among vehicles, pedestrians and railways. The Transport and Housing Bureau will strive for resources to conduct further research in determining the feasibility and desirability of this proposal.

5.26 Besides, the Government is considering the adoption of an environmentally friendly transport system in the Hung Shui Kiu New Development Area ("HSKNDA") and Yuen Long South Potential Development Area ("YLSFDA") as the major intra-district public transport mode in the areas. Connectivity with the Light Rail system will be considered. The preliminary idea on such connection, together with the possible diversion of the Light Rail at the Yuen Long Main Road is at **Annex 8**. It must be pointed out that such connection

and diversion of Light Rail are only conceptual ideas, and further studies are required to ascertain whether they are feasible and desirable. Even if they are considered to be pursuable, actual alignment may also be different from the current conceptual alignment.

### **Long Term Public Transport Demand for NWNT and the Role of Light Rail**

5.27 Recent years have seen the continuous increase of population in Yuen Long and Tuen Mun in NWNT. The figure grew from 1.07 million persons in 2011 to 1.1 million persons in 2016. Following the completion of new residential developments in the regions progressively, coupled with the growth in two new development areas under planning (i.e. HSKNDA and YLSPDA), the population of NWNT is expected to reach 1.24 million in 2024. The increasing population will naturally spur the rise in demand for public transport services in the region. The Government will make early planning, with a view to meeting residents' transport needs.

5.28 At present, the West Rail Line is the major transport mode linking up NWNT and the urban areas. Under the policy of railway as the backbone of public transport, the West Rail Line will continue to play a key role. Nevertheless, as heavy rail, the West Rail Line only covers several key locations in Yuen Long and Tuen Mun. For residents who live some distance away from stations of West Rail Line, they will rely on other public transport modes to travel to and from these stations. **Among the various public transport modes in NWNT, the Light Rail plays the most prominent and effective role as a feeder to the West Rail Line.** At present, the 12 Light Rail routes and 68 Light Rail stops have covered a number of relatively remote places in Yuen Long and Tuen Mun. As a road-based railway, the Light Rail has a higher carrying capacity than other public transport modes (including franchised buses). A single-set LRV has a maximum carrying capacity of 200 passengers. Moreover, Light Rail is electricity powered and emission-free. Since its commissioning in 1988, the Light Rail has been a popular mode for local residents and its patronage has been on the rise. At present, no other public transport mode can replace the function of the Light Rail in NWNT. Even if a better alternative mode is identified in future, it takes a long time to demolish the Light Rail and build a new system. During the course of construction, it is difficult to arrange substitute public transport modes to provide services for the some 500 000 passengers. Under the circumstances, the conclusion of the PTSS is 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.** The Government will work with the MTRCL to study in detail the measures mentioned above, to raise the carrying capacity and operational efficiency of the Light Rail and strive to ease the congestion of the Light Rail system during peak periods to meet the transport needs of the community.

5.29 **Nevertheless, with the continuous rise of population in NWNT, both the West Rail Line and the Light Rail Line will inevitably become more crowded. Passengers may also need to wait for a longer time to board a train/LRV. Therefore, in the longer run, the Government will study whether it is necessary to construct a new heavy rail to directly connect NWNT to urban areas, in parallel with West Rail Line and Light Rail.** The Transport and Housing Bureau will take forward as early as possible the Strategic Studies on Railways and Major Roads beyond 2030 ("the Study") in the light of the "Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030" Study, with a view to formulating the preliminary arrangement of the relevant infrastructure. The Study will cover the transport infrastructure required in areas including Lantau, NWNT and New Territories North.



## **Environmentally Friendly Public Transport System<sup>26</sup> for Hung Shui Kiu New Development Area and Yuen Long South Potential Development Area**

5.30 As mentioned in paragraph 5.27 above, the Government is undertaking planning studies for HSKNDA and YLSPDA. Being strategically located in the NWNT and well connected to Tuen Mun, Tin Shui Wai and Yuen Long Town, HSKNDA will serve as a “Regional Economic and Civic Hub” for the NWNT. This NDA, spanning some 714 hectares in total, will have residential developments to accommodate about 218 000 people (including a new population of 176 000) and provide spaces for various economic land uses, such as office, retail, hotel and special industrial uses, creating about 150 000 job opportunities. As to YLSPDA, it is located south to Yuen Long Town with a total area of around 223 hectares and will be developed as a southern extension of the Town through integrated planning and improved connectivity. It will be mainly used for residential development to accommodate some 85 000 people (including a new population of 82 700) and will offer about 10 800 job opportunities. According to the Development Bureau, the first population intake of HSKNDA is expected to take place in 2024 and that of YLSNDA is expected to take place in around 10 years. Actual population growth will depend on the planning and implementation of individual development projects in the areas, which are subject to confirmation by the Development Bureau.

5.31 The planning and engineering studies of the HSKNDA and YLSPDA have already reserved land for the provision of environmentally friendly transport services. **The Transport and Housing Bureau has also confirmed that the latest green transport mode would be deployed to provide public transport services within HSKNDA and YLSPDA. Efforts are being made to identify the most suitable transport mode and a final decision has yet to be made.** It could be road-based rail mode (such as Light Rail or Modern Tramway) or road-based non-rail mode (such as electric bus), with the following basic characteristics:

- (a) to possess medium carrying capacity (lower than heavy rail but higher than general road-based transport mode); and
- (b) to provide convenient connection for residents to Light Rail to commute to and from nearby Tin Shui Wai and Yuen Long Town; and also connection to heavy rail to commute to and from the urban areas.

5.32 The Transport and Housing Bureau and TD, in collaboration with the Development Bureau and Civil Engineering and Development Department, which are responsible for the HSKNDA and YLSPDA projects, as well as expert consultants, are conducting an in-depth study to work out the most feasible and desirable environmentally friendly public transport system that meets the above-mentioned requirements. The study is expected to be completed in two years. Depending on the outcome of the study, different requirements of various transport modes and population growth rate, we may consider meeting transport needs through the provision of public bus service at the initial stage of population intake, and to plan

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<sup>26</sup> The environmentally friendly public transport system for HSKNDA and YLSPDA is different from the proposed environmentally friendly linkage system of the Kai Tak Development proposed by the Government. The latter will incorporate elevated monorail which would, in addition to providing transport services, become a unique landmark in Hong Kong with high tourism appeal and offer tourists an amazing travelling and sightseeing experience.

and introduce higher capacity public transport mode (e.g. rail-based transport system) in time before the population grows rapidly.

5.33 When studying in depth on the connection of the environmentally friendly public transport system with West Rail Line and Light Rail, the Government will decide, inter alia, the detailed alignments/routes, the design of the stations, and the operators and the operating modes to be adopted, with a view to enhancing the interchange arrangement to provide convenience to residents. Regarding the connectivity with adjoining areas, the Government will consider the feasibility and desirability of taking a more holistic approach whereby this environmentally friendly public transport system would be considered and planned together with the conceptual proposal of diverting the Light Rail system in Yuen Long Town mentioned in paragraphs 5.24 and 5.26 above, as well as other pedestrian accessibility proposals (e.g. connecting the YLSPDA's environmentally friendly transport services with Yuen Long Main Road by pedestrian walkway). Subject to the outcome of the study, the Government will timely consult the public on the planning concept.

## Chapter 6 Public Light Bus

6.1 There are two types of PLBs, namely green minibuses (“GMBs”) and red minibuses (“RMBs”). GMBs operate scheduled services with their routes, fares, vehicle allocation and timetable subject to approval by the TD. At present, there are around 530 GMB routes<sup>27</sup> under about 160 route packages granted by the TD in operation across Hong Kong. When selecting operators for GMB routes, it is the established practice to group appropriate routes into a route package having regard to such factors as the service area and patronage of the individual routes for operation by the same operator. This is to ensure that no route with unsatisfactory return will be left without an operator, such that GMB services can fully meet the needs of the community. RMBs are not required to operate on fixed routes or timetable, and can set their own fares. They are subject to certain restrictions on their service area under the existing policy<sup>28</sup>. There is an established statutory cap on the total number of PLBs, which has been stood at 4 350. As at 2016, there are 3 254 (approximately 75%) GMBs and the rest are RMBs.

6.2 The TD will develop new routes suitable for GMB operation having regard to the demand for public transport and group these new routes into packages based on factors such as geographical locations and operational viability. Operators, including RMB operators, may then bid for operating the new GMB route packages. In order to encourage the conversion of RMBs into GMBs, applicants who are new entrants to the GMB trade (including incumbent RMB operators) will be given additional marks in the selection exercise since 2002. To further encourage RMB operators to bid for new GMB routes, the additional marks given to new entrants have increased from 10% to 15% of the total marks since 2004<sup>29</sup>. The number of RMBs in 2002 was 1 809 and it reduced to 1 096 in 2016. Meanwhile, the number of GMBs has increased from 2 541 in 2002 to 3 254 at present.

6.3 **With enhancement of the railway development, it is necessary to maintain and enhance the measures for helping operating environment of the PLB trade, so as to ensure the sustainable and healthy development of PLBs. Such measures include:**

- (a) maintaining the statutory cap on the number of PLBs;
- (b) increasing the seating capacity of PLBs;
- (c) providing interchange concessions for MTR and GMBs;
- (d) introducing other measures to enhance the operating environment; and
- (e) amending the Guidelines on Working Hours of GMB Drivers.

### **(a) Statutory Cap on the Number of PLBs**

6.4 The total number of vehicles which may be registered as PLBs has all along been capped at 4 350 since 1976. This cap is statutory and its effective period can be extended by the LegCo by resolution from time to time. Over the past 4 decades, the LegCo has time and

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<sup>27</sup> These include about 355 main routes and around 175 supplementary service routes.

<sup>28</sup> Taking into account the road congestion problem in Hong Kong and the objective of encouraging the conversion of RMBs into GMBs, the Government has imposed certain restrictions on RMB operation. RMBs can operate in their existing service area but are not allowed access to new towns or new housing developments. Besides, there are also restrictions on RMBs in using expressways.

<sup>29</sup> The full mark is 100 under all the assessment criteria.

again extended the effective period of the cap on the number of PLBs.

6.5 The Government completed a Topical Study on the statutory cap on the number of PLBs in November 2015. The study shows that overall speaking, the operating costs of PLBs have generally been increasing in tandem with inflation. In addition, the labour market has remained tight in recent years and it is not easy to recruit drivers. There is also keen competition from other public transport services. Therefore, the overall operating environment is becoming more challenging. As a result, close to 60% of route packages are not able to balance their books. Nevertheless, the demand and supply of PLB services remain generally stable, with PLB patronage accounting for some 15% of the public transport market share over the past 5 years. Moreover, under the study, the trade has been consulted on whether the existing cap on the number of PLBs should be maintained. The majority view is in support of the retention of the existing PLB cap at 4 350. The main reasons are that increasing the number of PLBs under the current operating environment would intensify competition and adversely affect the operation of the trade. In fact, in view of the rising operating costs, recruitment difficulties and traffic congestion, the way to relieve the trade's pressure should first be considering increasing the seating capacity of PLBs, rather than relaxing the cap on the number of PLBs. Operators of other public transport services (including franchised buses, non-franchised buses and taxis) also hope that the Government would maintain the cap on the number of PLBs, in view of the supplementary role played by PLBs in the public transport system.

6.6 **As such, the current cap on the number of PLBs (i.e. 4 350) should be maintained.** In May 2017, the Government moved a motion at the LegCo in accordance with the Road Traffic Ordinance to extend the effective period of the existing cap on the number of PLBs until June 2022, and the motion was passed by the LegCo.

**(b) Increasing the Seating Capacity of Light Buses<sup>30</sup>**

6.7 **Meanwhile, the Government proposes to increase the maximum seating capacity of PLBs (i.e. GMBs and RMBs) from the current 16 seats to 19 seats in order to enhance the overall capacity of PLBs for meeting the passenger demand, especially during peak periods.** When studying and deciding on the suitable maximum seating capacity of PLBs, we have considered the supply and demand for PLB services and the need to maintain the delicate balance amongst various public transport services. If the number of seats is increased to 19, the number of GMB routes with left-behind passengers at termini during the peakiest one hour is expected to drop significantly from about 70% at present to less than 40%. Also, the ratio of GMB routes with waiting time of over 10 minutes will also reduce by nearly 80%. The loss-making GMB route packages are also expected to drop by half from close to 60% at present to about 30%. We introduced the Road Traffic (Amendment) Bill 2017 into the LegCo in April 2017 to amend the definitions of "light bus" and "bus" under the Road Traffic Ordinance and proposed other consequential amendments so as to implement the proposal of increasing the statutory maximum seating capacity of light buses to 19 seats.

6.8 Upon the enactment of the legislative amendments, PLB operators may take into account the operational conditions and passenger demand in deciding on their own whether to increase the seating capacity and, if so, the exact number of seats to be added and the time of

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<sup>30</sup> The Government carried out a Topical Study on increasing the seating capacity of PLBs in May 2015 to preliminarily explore the suggestion raised earlier by the PLB trade.

implementation. **Likewise, this increase in statutory maximum seating capacity is applicable to private light buses.**

**(c) Interchange Concessions for MTR and GMBs**

6.9 **The Government and MTRCL completed the review of Fare Adjustment Mechanism (“FAM”) in March 2017. In response to Government’s request, MTRCL agreed to offer interchange concessions with all GMB routes.** Specifically, MTRCL will expand the current interchange discount scheme from the existing 62 GMB routes to some 530 routes. The discount will be \$0.3 per trip. For those GMB routes currently enjoying interchange discounts ranging from \$0.3 to \$3 per trip, the existing higher discounts will be retained and will not be adjusted downward to \$0.3. Passengers can benefit from the scheme when they interchange from MTR to GMBs, or vice versa.

6.10 MTRCL will need to take time to liaise with GMB operators (totaling over 160) on details and alternation of the fare collection systems. It is expected that the new interchange concession can be fully implemented within second quarter of 2018. This arrangement will be good for 5 years, until June 2023. The Government and MTRCL will review this interchange discount arrangement in end-2022, in the context of the next scheduled FAM review.

**(d) Other Measures to Enhance the Operating Environment**

6.11 In view of the rising operation costs (such as parts, insurance and staff costs), shortage of drivers, traffic congestion and railway expansion, the PLB trade is facing a tough operating environment.

6.12 In particular, we have noted the challenges posed to the operation of PLBs arising from the commissioning of new railway lines (including the Kwun Tong Line Extension and the South Island Line (East) that have commissioned in 2016, and the SCL to be commissioned in phases starting from 2019). **When formulating the public transport re-organisation plan, the TD will maintain close communication with GMB operators to enhance the routing and services of GMBs.** This is to ensure that they can serve the public in a more efficient and competitive manner, thereby continuing to discharge effective feeder functions. For example, on the first day of the opening of the Kwun Tong Line Extension in October 2016, the TD arranged 4 GMB feeder routes to connect to the new MTR stations. Also, on the first day of the opening of the South Island Line (East), the TD arranged 9 GMB feeder routes to connect to the new MTR stations.

6.13 From a macro perspective, in tandem with the route rationalisation for franchised buses in districts, the TD will consider the operating conditions of PLBs so as to improve the overall efficiency of public road transport network. Upon bus route rationalisation, some passengers originally taking buses may switch to PLBs and, resulting in a rise in the passenger demand for PLBs. In response to the request of the GMB trade, the TD has actively studied the possibility of converting certain bus routes of lower patronage into GMB services. **The TD has also studied the possibility of converting some GMB routes with high passenger demand to franchised bus routes having regard to the requests of members of the local community. However, both proposals face quite a number of implementation problems,** such as the service frequency during peak and non-peak periods, journey time, locations of the stops, whether the vehicles are wheelchair-accessible and the fare level, etc. (in general, the fares of GMBs are higher than those of franchised buses). It

is relatively difficult to obtain the support and consensus from the stakeholders and members of the local community (may refer to paragraph 4.5 above).

6.14 To address the needs of passengers and enhance operation efficiency, individual GMB operators may apply to the TD and discuss the proposals to re-organise existing routes when necessary (such as amending alignments, increasing/decreasing frequencies and number of vehicles). The TD will consider the specific re-organisation arrangements having regard to the actual circumstances.

**6.15 To further improve the operating environment of the PLB trade, the TD has implemented and will implement a number of relief measures.** Details are as follows:

- (i) The TD is committed to opening up business opportunities for the PLB trade in new development areas and areas with passenger demand. For instance, the TD introduced two new GMB routes to serve the developed areas with passenger demand (Yau Tong and Tsuen Wan) and 4 new GMB routes to serve the new development areas (Kai Tak, Shui Chuen O and Tsueng Kwan O, etc.). In 2015, the TD introduced 3 new GMB routes serving Hung Shui Kiu and Anderson Road. In April 2017, a new GMB route was also approved for serving Kau To Shan;
- (ii) As regards RMBs, the TD has relaxed or rescinded prohibited zones and no stopping for passenger pick up/drop-off restricted zones at the request of the RMB trade and in accordance with the actual situation of the locations concerned. For instance, the prohibited zone on West Kowloon Corridor was rescinded. The restriction for entering Island Eastern Corridor as well as the PLB prohibited zone at the slip road leading from Cherry Street to Lin Cheung Road Southbound were relaxed. Furthermore, the PLB prohibited zone at the section of East Kowloon Corridor between Chatham Road North and Kowloon City Road was temporarily rescinded while the RMB prohibited zone at Luen Wan Street leading to Bute Street in Mongkok was rescinded in 2016. The TD also plans to launch a pilot scheme in June 2017 for relaxing the PLB prohibited zone (from 7 p.m. to 12 midnight) at Sugar Street in Causeway Bay. Should the trial be satisfactory and receive local support, the TD will consider making the arrangement permanent;
- (iii) The trade is encouraged to open up sources of non-fare revenue, such as making use of the exterior of the vehicle and the interior of the passenger compartment for multi-media advertisements;
- (iv) PLBs are allowed to park at all PLB stands during non-peak periods to reduce parking expenses. The TD is currently conducting local consultation in relation to the additional installation of parking signs at various PLB stands across the territory. Subject to local support, the proposal will be implemented as soon as possible. The TD will strive to assist GMB operators in the flexible deployment of vehicles where feasible, so as to increase the carrying capacity of specific routes during peak periods;

- (v) Route rationalisation, rolling out of short-haul or supplementary routes, adjusting vehicle deployment, and revising of service schedule will be explored with GMB operators on a need basis, in order to enhance the competitiveness and efficiency of PLB services;
- (vi) GMB operators may apply to the TD for fare revision having regard to the operational and financial condition. As for RMB, operators can determine their own fares;
- (vii) It is planned to extend the validity period the PLB driver identity plates through legislative amendments, so as to reduce the frequency of renewal of the plates<sup>31</sup>; and
- (viii) In view of the difficulties in recruiting drivers, the TD has contacted the Labour Department and assisted the PLB operators in participating in the job fairs organised by the Labour Department, in order to ease the problems faced by the trade arising from the shortage of drivers. Furthermore, the Government proposes to amend the requirement for applicants for driving licence for PLB etc. to hold a valid driving licence for private car or light goods vehicle for at least 3 years<sup>32</sup> to at least one year<sup>33</sup> (please see **Annex 9** for details).

For those proposals mentioned above involving legislative amendments, it is expected that they could be introduced within 2 to 3 years, the earliest.

#### **(e) Guidelines on Working Hours**

6.16 Routing arrangements aside, the remuneration of drivers is an equally important factor for the effective delivery of GMB services. The Government has all along been very concerned about the working and rest time arrangements for PLB drivers. In 2000, the TD, in consultation with the trade, introduced the Guidelines on Working Hours of GMB Drivers (“Guidelines”). The Guidelines covers the maximum number of duty hours and driving hours for drivers<sup>34</sup>. The TD holds regular trade meetings with the GMB operators to discuss

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<sup>31</sup> According to section 51 of the Road Traffic (Public Service Vehicles) Regulations, a PLB or taxi driver has to display a driver identity plates inside the vehicle compartment. The driver identity plate must bear the driver’s photograph taken not earlier than 12 months before the day of display. As a result, drivers are required to renew their driver identity plates every year. The PLB and taxi trade generally considers that the renewal of the driver identity plates currently required is too frequent. Having regard to the trade’s views, the Government will amend the law to reduce the frequency for the drivers to renew their driver identity plates. At present, the validity period for a driving licence can be as long as 10 years. The Government will make reference to this arrangement in formulating the legislative proposals.

<sup>32</sup> If the full driving licence for private car or light goods vehicle was issued upon completion of a probationary driving period (of at least one year), the relevant driving licence holding period is at least two years.

<sup>33</sup> If the applicant has already completed a probationary driving period of at least one year, he or she will only need to hold a full driving licence for private car or light good vehicle at the time of application.

<sup>34</sup> Under the Guidelines on Working Hours of GMB drivers, the maximum duty hours for a GMB driver, including all breaks, should not exceed 14 hours per day; and the driving hours of all GMB drivers (i.e. the maximum duty hours less all rest breaks which lasts for 15 minutes or more) should not exceed 11 hours per day.

matters such as manpower and working hours of drivers. The TD also maintains close contact with individual operators regarding their service management and operational matters on a need basis.

6.17 To enable the Guidelines to keep pace with the times, and to ensure the arrangements for the rest time and meal break arrangements for drivers are appropriate, **the TD and the trade started to explore revising the Guidelines in mid-2016.** As the majority of GMB operators are small-to-medium-sized operators, they do not employ a large number of staff. More flexibility is needed in manpower deployment and work arrangements to meet passenger demand. The TD will strive to balance the needs of all parties in order to enhance the Guidelines on the drivers' working hours. At present, the TD is discussing with the trade the proposals to amend the Guidelines. Having regard to the problems faced by the trade in terms of shortage of drivers and insufficient parking spaces at termini, the TD has initially worked out an amendment proposal (see **Annex 10**), which covers the rest time during the duty hours and the break between two consecutive working days for a GMB driver, as well as the meal break arrangements, etc.. The TD will further consult the operators. Should the proposal receive support from the trade, the new Guidelines are expected to be implemented within 2017. The above-mentioned Guidelines will be provided to the RMB trade for reference as well.



## Chapter 7 Non-franchised Bus

### (a) Role and Positioning

7.1 The major services provided by non-franchised bus (“NFB”) include **resident’s service, student service, employee’s service and tour service**. At present, NFB services on the whole operate well. In the past 5 years, the number of NFBs remained at around 7 000 and the demand and supply was generally stable. According to TD’s survey conducted in 2016, the fleet utilisation rate is about 90%. The number of NFBs having endorsements for residents’ service remains at 1 100, student service at 3 200 to 3 400, employees’ service at 1 700 and tour service at 3 200.

7.2 NFB services in general are directly arranged between the users/groups/organisations and the Passenger Service Licence (“PSL”) holders. One vehicle may obtain more than one service endorsement<sup>35</sup>, so as to provide more than one type of service. Fares need not be approved by the TD. The services can flexibly satisfy the market needs. As at end April 2017, the number of NFBs obtaining 3 or above service endorsements is 2 785, accounting for 36% of the total fleet.

7.3 As early as confirmed by the CTS-3 completed in 1999, NFBs, ferries, trams and taxis each perform their supplementary functions while serving their own niche markets.

7.4 We consider that **NFBs should continue to perform its role and positioning as a supplementary public transport facility**, achieving the following functions:

- (a) relieving demand on the franchised bus and GMB services primarily during the peak hours; and
- (b) providing services to specific passenger groups (e.g. tour groups, hotels and students) when the regular public transport services cannot provide appropriate services.

### (b) Regulation of Supply

7.5 The Transport Advisory Committee in 2004 reviewed the regulation of NFBs. The review at that time mainly responded to the situation that there was rapid growth for NFBs but the growth for passengers for public transport was relatively slow, which resulted in oversupply of NFBs in the market. The Transport Advisory Committee also noted that at that time, some operators provided services without obtaining the endorsements. According to the review outcome, in order to contain the growth of NFBs, applicants for expanding their bus fleets or applicants for entering the market to provide NFB services must procure buses from the existing NFB fleets in the market. **At present, since the supply of NFBs can meet the market demand in general, in order to avoid increasing the number of vehicles on road, this sourcing requirement should be maintained. If the supply falls short of the market demand in future, the TD may consider issuing new PSLs to new buses in**

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<sup>35</sup> Endorsements which are issued at present include tour service (A01), hotel service (A02), student service (A03), employees’ service (A04), international passenger service (A05), residents’ service (A06) and contract hire service (A08). There is also the endorsement for multiple transport service (A07). The TD has not issued such endorsement for years owing to changes in market.

**accordance with the law.**

7.6 In fact, PSL holders for NFBs can apply for various types of service endorsements having regard to the market needs, and the approval work has all along been smoothly run. Meanwhile, the TD monitors the number and supply of each type of NFB service. In order to further enhance the NFB services, we have made adjustments as appropriate to the endorsement approval and supply regulation of the following types of services.

(i) Student Service Vehicle Arrangement

7.7 As regards the student service vehicles, we completed the Topical Study in April 2015. In recent years, the public has raised concerns about the supply and some schools also reflected the difficulties in tendering their school bus service or that the bid price was too high. To increase the supply of school buses, the TD has since 2012 implemented a new measure to allow an operator in possession of student service endorsement to use all vehicles meeting the requirements in his/her fleet for carriage of students upon application. Despite having this measure in place, the number of NFBs with student service endorsement still decreased between 2012 and 2014. Some schools still faced difficulties in tendering their school bus service. In view of the above (i.e. the supply and demand situation since the implementation of the new measure in 2012), and the expected number of kindergarten and primary students remaining on the high side in the coming few years, **the TD has considered increasing the flexibility of student service vehicles supply suitably, with a view to better catering for the market demand.** The two new proposed measures are as follows:

- (a) Private school buses will be exempted from the sourcing requirement, meaning that schools or school sponsoring bodies (only kindergartens, primary schools and secondary schools) will not be required to source existing vehicles in the market when using school private bus service and may procure new vehicles as needed. This measure has been implemented since May 2015; and
- (b) If NFBs are solely used for student service (only kindergartens, primary schools and secondary schools), the operators will be exempted from the sourcing requirement, meaning that operators will not be required to source existing vehicles in the market and may procure new vehicles as needed. However, these NFBs will be issued with endorsement for “solely for student service”. The NFB trade had reservations on this new measure to exempt NFBs which provided student service from the sourcing requirement. Subsequently, after discussion between the TD and the stakeholders of the trade and the education sector, it was agreed that a working group would be set up starting from the 2015-16 school year to study the demand and supply arrangement for school buses and to provide assistance to individual schools which were not able to provide school bus service. The TD will continue to closely monitor the supply and demand situation of student service and will maintain liaison with the trade on this issue.

The current supply and demand of the student service is in general stable since the implementation of the above measures. The Government will continue to keep a close eye on the situation.

(ii) Cross-boundary NFB Services

7.8 Cross-boundary NFB services are regulated under a quota system of the boundary crossings. In anticipation of the commissioning of the Hong Kong-Zhuhai-Macao Bridge, we originally proposed to exempt cross-boundary buses and cross-boundary shuttle buses from complying with the sourcing requirement with a view to reducing the operation costs of the trade and to reducing the fare burden on passengers, as well as ensuring that sufficient services are provided. This measure can also help avoid the need of deploying existing buses to run on the Bridge which will affect other local NFB services.

7.9 However, the number of tourists in recent years has dropped<sup>36</sup>, and a recent survey conducted by TD also indicated that the overall utilisation rate of NFBs dropped when compared with the previous years. Having consulted the views of the trade, we will refine the proposal as appropriate such that **only the operators of the cross-boundary shuttle buses and the operators of the Hong Kong/Macao cross-boundary coaches holding Macao quota will be exempted from the sourcing requirement.**

(iii) Tour Service

7.10 As mentioned above, since the number of tourists visiting Hong Kong has reduced in recent years (in particular tour groups), the number of NFBs providing tour service can generally meet the demand. Hence, **we consider that it is not necessary to change the sourcing requirement for NFBs for tour service.** As regards the view reflected by the trade that there is insufficient number of parking spaces for coaches, the TD is actively adding parking spaces for coaches at appropriate locations. Furthermore, the TD has all along been concerned about the supply and demand of parking spaces in Hong Kong, and has commenced the review on the parking policy, with priority accorded to considering and meeting the parking need of commercial vehicles. The TD will explore improvement measures having regard to the review outcome.

(iv) Residents' Service

7.11 Residents' service mainly provides point-to-point passenger service for residential developments. Following the development of the North-West and North-East New Territories, there is an increasing demand for public transport services from the residents in the region. Upon completion of new residential developments (particularly those not located near railway lines), residents may wish to be provided with feeder service connecting nearby railway stations and inter-district service with direct access to the urban areas. The Government understands their needs, and the TD has been furnishing the franchised bus companies with planning data of various districts for their reference, so as to enable them to submit service proposals to the TD via the annual bus route planning programmes. The proposals include introducing new routes; adjusting frequency, operating hours and routing; as well as cancelling or amalgamating routes. The TD will continue their efforts in this aspect and will further collaborate with the franchised bus companies by inviting them to

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<sup>36</sup> The number of tourists visiting Hong Kong in the past 3 years is as follows –  
2014: 60.84 million  
2015: 59.31 million  
2016: 56.65 million

provide services upon the initial population intake of the new residential developments. In addition, the TD will introduce as appropriate new GMB routes to cope with the passenger demand arising from such new residential areas.

**7.12 In case franchised buses and GMBs are unable to provide services to these new residential areas, the TD will, having due regard to the actual situation** (e.g. remote locations, relatively low patronage and lack of other public transport modes to and from the urban districts), **follow the established procedures in handling applications for NFB residents' service to ensure that there will be suitable public transport services for the residents in the vicinity.** When vetting the applications for NFB services (including residents' service endorsement), the TD has all along taken into account, in accordance with the Road Traffic Ordinance, an array of factors including the need for the proposed services to be provided by the applicant, the level of service already provided or planned by other public transport operators, as well as the traffic conditions in the areas and on the roads where the services are to be provided. When handling new application for residents' service endorsement, the TD will also take into account the following general principles:

- (a) the proposed residents' service should facilitate commuters to connect to the nearby railway station or public transport interchange to avoid adding congestion to busy urban districts;
- (b) the proposed residents' service should not pose a significant adverse impact on regular public transport services in the area concerned;
- (c) the operation of the proposed residents' service should only be approved when the existing or planned public transport services in the area concerned are inadequate or limited;
- (d) the operation of the proposed residents' service should only be approved when the residential developments served by the proposed residents' service are distant from the railway stations, public transport interchanges or major franchised bus stops or GMB stops and use of alternative services will result in an excessive number of interchanges; and
- (e) the proposed residents' service will not operate in congested areas or via local busy roads and will not cause traffic congestion.

**7.13** We understand that some residents may wish to have residents' service in their estates because such services are provided in a nearby estate. We must emphasise that in considering approving new applications for residents' service or applications for renewal of existing residents' service, the TD will process having regard to the situations of each application, including whether the regular public transport services in the area concerned will need to be adjusted because of the residents' service, whether the residents can accept the arrangement if adjustment is required, and whether such residents' service will result in traffic congestion, etc. In any case, the backbone of the public transport services is still railway. Franchised bus will be the major transport facility if the areas do not have direct railway access. This is to be followed by GMBs which service routes with lower passenger demand. Residents' service mainly plays a supplementary role during peak hours, in particular as feeder services to and from railway stations and major public transport interchanges to relieve the public's demand on franchised buses and GMBs during the peak hours. **If we give up**

**the public transport services which are of a high carrying capacity and a wider service coverage while allowing each estate to use its own residents' service (which occupies considerable road space) without any control, this will impose negative implications on the road traffic and will not be conducive to improving the road-side air quality.** Besides, regarding those routes suitable for GMB operation, if the routes with stable patronage are mainly operated by the estates through residents' service, there will only be those routes with less stable or insufficient patronage for GMBs to operate, rendering it difficult for the GMB operators to balance their books. Other areas that could only rely on GMB services will also be greatly affected<sup>37</sup>. Moreover, if franchised bus companies are not able to operate new routes or enhance their existing service level because most passengers are using NFB services, or even have to cut services, the overall arrangement of the public transport services of the area concerned must be affected.

**(c) Measures for Facilitating Operation**

7.14 To facilitate the operation of NFBs, the trade has put forward proposals on the vetting arrangements, licensing procedures, enforcement arrangements and enhancement of information transparency. **The TD will continue to follow up the following proposals with the trade:**

- (a) reviewing the reserve vehicle arrangements for residents' service;
- (b) studying ways to refine the restriction that prior approval being required for contract hire service that exceeds two days; and
- (c) disseminating to the trade survey information on NFB services.

7.15 Regarding the reserve vehicle arrangement for residents' service, the current arrangement is that the operator is allowed to keep one reserve bus for every 10 buses in service. The TD will consider raising the ratio of these reserve vehicles to enhance the flexibility in the operation of residents' service.

7.16 As regards the contract hire service, the operation of any contract hire service with the same origin and destination areas, for more than two days either intermittently or consecutively in a period of 30 days, shall be subject to the prior approval of the TD under the existing arrangement. This is to avoid the contract hire service which is of temporary nature from being abused as regular service, and it will then overlap with other service endorsements. Having considered the trade's proposal to provide more flexible contract hire services, the TD will consider relaxing the two-day restriction so that services may be more flexibly provided to meet market needs.

7.17 Concerning the dissemination to the trade of the survey information on NFB services, the TD currently conducts surveys on NFB services on a regular basis to understand the usage of NFBs. To assist the trade in knowing the demand of various services, the TD will consider uploading the survey summary (including the utilisation rates of service endorsements) onto its website for the trade's reference.

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<sup>37</sup> It is the established practice for the TD to group appropriate routes into a route package, having regard to such factors as the service area and patronage of the individual routes, for operation by the same operator. This practice ensures that no routes with unsatisfactory investment returns but of social needs will be left without an operator.

7.18 If the proposals mentioned in paragraph 7.14 above receive support from the trade, they can be implemented within 2017.

## Chapter 8                      Personalised and Point-to-point Public Transport Services

8.1            At present, there are two types of personalised and point-to-point transport services, namely taxi services and hire car services (i.e. using private cars for carriage of passengers for hire or reward).

8.2            **Taxis** constitute the majority of personalised and point-to-point public transport services with the largest number in supply. At present, there are a total of 18 163 taxis in Hong Kong, of which 15 250 are urban taxis, 2 838 are New Territories taxis and 75 are Lantau taxis. Ordinary taxi licences are permanent in nature, and held by some 9 000 licence holders. Apart from that the fares and operating areas are regulated by the Government, taxi licences have been issued without any conditions directly related to service quality. Regarding the operating areas, taxis may pick up passengers on the street or at taxi stands or provide pre-booked services. In respect of fares, taxis shall either charge according to taximeter or be hired as a whole. The fares charged by taximeter are regulated by the Government, whereas the fare for hire-as-a-whole service will be agreed between the parties providing and receiving the service to allow for more flexibility in meeting different passenger needs.

8.3            **Hire car** provides another kind of personalised and point-to-point service. According to established policies, hire car does not come under the category of public transport services. A private car owner must obtain a hire car permit (“HCP”) for operating the service under the law. The fare of hire cars is not subject to regulation. Generally speaking, the fare of hire cars is higher. The maximum number of HCPs for private service (including both cross-boundary and local) is capped at 1 500 under the law. As at April 2017, around 650 HCPs have been issued.

8.4            Under the PTSS, we have reviewed the following areas to ensure that personalised and point-to-point public transport services can meet the community’s demand:-

- (a)    enhancing personalised and point-to-point transport services;
- (b)    issuing more taxi licences; and
- (c)    exploring taxi fuel surcharge.

### (a)            **Enhancing Personalised and Point-to-point Transport Services**

8.5            Under the existing Taxi service and the conduct of some taxi drivers (such as refusal of hire, poor service attitude towards passengers and overcharging) have been subject to increasing criticisms in the community in recent years. Meanwhile, a personalised and point-to-point passenger service of a higher fare in general but non-compliant with the legal requirement on holding a HCP for provision of passenger services, was provided through the use of car-hailing mobile applications. **On the premise that provision of any passenger services must be lawful, there is a certain demand in the community for personalised and point-to-point public transport services of higher quality and fare.** The Government commissioned a consultancy to conduct a telephone survey earlier on, of which



the outcome confirms that this new demand is both solid and pressing<sup>38</sup>.

**8.6 The existing taxi operation mode has posed a certain limitation on ensuring the overall quality of taxi service in a sustained fashion.** At present, over 18 000 taxi licences have been issued. They are all permanent in nature. Renewal of the licences is not required. These licences have been issued without any conditions directly related to service quality. As such, we cannot impose any penalty against unsatisfactory service of taxi drivers or owners through the licence conditions. Since the existing taxi licences are permanent in nature, it is legally infeasible to impose new licence conditions for regulating the taxi services on the issued licences through legislative amendments<sup>39</sup>. Moreover, under the present licensing regime, regulation of taxi services can only be carried out by enforcement action under the Road Traffic Ordinance and its subsidiary legislations. Yet, malpractices of drivers usually occur with the presence of the drivers and passengers only. The absence of other independent corroborating evidence renders it difficult to gather evidence for prosecution. At present, enforcement actions are usually conducted by carrying out decoy operations. Even if the existing legislation is amended to impose heavier penalties on malpractices of taxi drivers, the effectiveness of enforcement is still subject to constraints arising from the aforesaid high threshold for gathering of evidence for prosecution. Given the limitations of the existing regulatory regime and enforcement actions, the quality of the existing taxi services can only depend on the willingness or performance of individual owners or drivers. However, the ownership of ordinary taxi licences is scattered. There are over 9 000 licence holders<sup>40</sup>. It is difficult for the taxi owners to centrally manage the service quality. Incomes of taxi drivers are not directly related to their service quality. Thus, there is a lack of an incentive mechanism to ensure drivers' service quality, resulting in variation of service quality. Taxi owners and drivers do not usually have an employer-employee relationship. It is thus difficult to maintain the service quality of the drivers in the long run. **Without reforming the existing regime of taxi services, it will be difficult to meet the community's demand for quality personalised and point-to-point public transport services.**

**8.7 Meanwhile, we should not give up the principle that the provision of any passenger services must be lawful. If passenger services are not regulated, this will in effect mean that illegal passenger services are allowed.** This will not only increase the number of vehicles on the road which worsen the traffic congestion, but also disrupt the planning of public transport system which is being used by over 90% of the commuters,

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<sup>38</sup> The Government commissioned a consultancy to conduct a telephone survey in May 2016. The outcome of the survey indicates that, even without knowing how much the fare of franchised taxis would be higher than that of ordinary taxis, over 60% of the respondents already indicate that they will consider using franchised taxis of higher quality than ordinary taxis and expect to use franchised taxis at least once a month. This suggests that there is demand for better quality personalised and point-to-point public transport services of higher fares.

<sup>39</sup> Different from taxi licences, existing passenger service trades are regulated by the PSLs. The PSLs are time-limited (for 1 to 3 years in general). The Government may add new licence conditions when issuing new PSLs (i.e. renewing the PSLs). If the PSL holders do not comply with the licence conditions, the PSLs may be suspended or revoked in serious cases. At present, the taxi licences issued are permanent in nature. No renewal is required. Hence, it is legally infeasible to add new licence conditions on these licences.

<sup>40</sup> As at March 2017, there are 18 163 taxi licences, of which around 60% are held by individuals, while the rest are held by companies. There are about a total of 9 000 individual and company licence holders. Among these licence holders, around 75% hold one taxi licence; around 5% hold 5 or more taxi licences; less than 2% hold 10 or more taxi licences.

thereby affecting the effectiveness, reliability and long-term healthy development of the public transport services. **It is also highly likely that the passengers cannot be protected from the illegal passenger services.**

8.8 Since taxis are the major providers of personalised and point-to-point services in the existing roles and positioning of public transport services, the community has certain demand for these services and hence, there is a need to study how to meet the demand. Therefore, the Government has conducted a comprehensive review on the demand for personalised and point-to-point transport services, including taxis and hire car services<sup>41</sup>, under the PTSS. In November 2015, the Government proposed to explore the feasibility and desirability<sup>42</sup> of introducing **franchised taxis (formerly referred to as “premium taxis”)**.

8.9 In June 2016, the Government presented the preliminary idea of franchised taxis<sup>43</sup> to the Transport Panel. Franchised taxi is positioned as a new choice of personalised and point-to-point public transport services other than ordinary taxis to address the needs of passenger groups with higher disposable income. Its main features include: operating through a franchise model; setting of service standards in respect of vehicle types, compartment facilities, drivers’ training, customer services and handling of complaints, etc. through franchise terms; and also proposing the requirement for the operators to maintain an employer-employee relationship with their drivers in order to monitor the service quality of drivers. **The fares of the new services will be higher than that of ordinary taxis. The new services include the “online hailing” feature and can be arranged by mobile hailing applications.**

8.10 Having regard to the views of various stakeholders and the latest analysis of the consultancy study, the Government submitted the latest proposals at the Panel meeting in April 2017<sup>44</sup>, which included suitable adjustments to the preliminary proposals in June 2016. The latest proposals address the concerns and worries of the taxi trade and meet the public demand for more convenient and higher-quality “online hailing” services. A gist of the regulatory regime and services is set out below:

- (a) It is proposed to introduce 600 franchised taxis in total (i.e. about 3% of the 18 000-odd taxis in Hong Kong). The cap on the total number of franchised taxis should be stipulated in law, which could only be revised with the consent of the LegCo;

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<sup>41</sup> In response to the community views on hire car services, the Government has completed the study on how to enhance the processing of applications for HCPs. On the premise of maintaining the cap of the HCPs, new measures have been implemented starting from 1 February 2017 to facilitate new market entrants and ensure quality of vehicles. These measures include: interested parties may make a request for “pre-application assessment” without the need to submit private car registration documents; special consideration on individual merits may be given to applicants for Private Service (Limousine) Hire Car Permits who are unable to produce the required hiring records or future service contracts; and introducing the vehicle age requirement of Private Service (Limousine) Hire Car.

<sup>42</sup> Please refer to LC Paper No. CB(4)119/15-16(08) for details:  
<http://www.legco.gov.hk/yr15-16/english/panels/tp/papers/tp20151106cb4-119-8-e.pdf>

<sup>43</sup> Please refer to LC Paper No. CB(4)1124/15-16(01) for details:  
<http://www.legco.gov.hk/yr15-16/english/panels/tp/papers/tp20160621cb4-1124-1-e.pdf>

<sup>44</sup> Please refer to LC Paper No. CB(4)666/16-17(05) for details:  
<http://www.legco.gov.hk/yr16-17/english/panels/tp/papers/tp20170317cb4-666-5-e.pdf>

- (b) Each franchisee should comprise 200 vehicles. This has been made reference to the present fleet operation experience of the taxi trade and taken into account the fact that a fleet must be of certain scale for serving passengers and maintaining operation efficiency. Operating in fleets can help address the current difficulty in managing centrally the service quality of ordinary taxis;
- (c) 3 franchises should be granted by fair and open tender. The Government will monitor the operators' services through the franchise terms, and the operators will be responsible for ensuring that their services (including the performance of the drivers) will be proper and efficient as prescribed in the franchise. If an operator fails to meet the service level or standards prescribed under the franchise, the Government will be able to impose penalties through franchise terms or even revoke the franchise in serious cases;
- (d) The overall fare level of franchised taxis will be about 35% to 50% higher than that of ordinary taxi fare so as to maintain a certain division of labour between franchised taxis, ordinary taxis and hire cars corresponding to their respective passenger groups;
- (e) The franchise will set clear requirements for the operation and service quality of franchised taxis, including an "online hailing" feature and requiring the operators' fleets to be comprised at least 50% of wheelchair-accessible vehicles. If a bidder for franchised taxi service proposes a percentage of wheelchair-accessible vehicles higher than that required, he/she will be given a higher score in the assessment;
- (f) The operators are required to propose a franchise fee when bidding for the franchise. They have to pay that specified amount of franchise fee once the franchises are granted;
- (g) Bidders are required to submit technical (company structure, proposed vehicles to be used and compartment facilities, driver monitoring as well as reward and penalty mechanism, drivers' training, customer services and complaint handling system, etc.) and financial (franchise fee) proposals. The technical proposal will be the primary consideration, while the financial proposal will only be the secondary consideration;
- (h) A company will not be issued with more than one franchise so as to maintain a healthy competition in the franchised taxi market. Participation of both existing taxi operators and new entrants are allowed. Companies with experiences in operating local taxis and other public transport services would be given higher scores in the bidding;
- (i) An employer-employee relationship helps enhance the occupation protection for drivers and attract new blood to the trade. Therefore, the applicants' proposed measures for monitoring driver service quality as well as reward and penalty mechanism will one of the considerations in the assessment; and

- (j) The duration of franchise should be 5 years under the trial scheme. The franchise is non-permanent and non-renewable. The operator must compete in bidding for a new franchise upon its expiry, so that the Government will be able to review and amend the terms of the franchise where necessary when new franchises are to be issued.

8.11 The Government has all along been communicating with taxi associations, unions as well as other stakeholders through various channels to canvass views from different parties. The Government has also taken note of the views and opinions of the community. Overall speaking, the public welcome the introduction of franchised taxis as a new alternative and expect the new services to be launched as soon as possible. Some members of the taxi trade are worried about the impact of the franchised taxi on existing taxi trade and have proposed that even if the franchised taxis are to be introduced, the Government should make use of some ordinary taxi licences to operate franchised taxis. The Government does not agree with this request since it would be equivalent to a closed market, which is contrary to the principle of open competition.

8.12 At the meeting of the Panel on 21 April 2017, members put forward a number of views on enhancing personalised and point-to-point services and passed 5 non-binding motions (see **Annex 11**). One of the motions requested the shelving of the proposal (7 affirmative, 5 negative and one abstention vote(s)). The remaining 4 motions, while basically supported the introduction of franchised taxi, put forward different views on the implementation details. For instance, some members opined that while introducing franchised taxis, efforts should be made to combat unlawful acts, strengthen drivers' training and introduce suitable service quality monitoring mechanism within the trade so as to enhance ordinary taxi services quality on all fronts; the new services should be offered in a manner different from the existing licensing regime and should be subject to a prescribed duration; the Government should review the policy on hire car services and introduce suitable regulatory mechanism for "online hailing" to meet the demand of the public; the Government should reconsider stipulating that franchised taxi operators should maintain an employer-employee relationship with their drivers; and to consider giving priority to existing ordinary taxis for converting their licences into operating right of franchised taxis.

8.13 **In the light of the results of consultation with the Panel mentioned above and the generally supportive views from the community, the current-term Government concludes that the introduction of franchised taxis could meet the new demand in the community for personalised and point-to-point services of higher quality and fare. We propose that the next-term Government may formulate the legislations for implementation on the basis of the proposal on franchised taxis put forward by the current-term Government. Depending on the outcome of the scrutiny of the legislation on franchised taxis by the LegCo, consideration may have to be given on whether to explore other new services (such as regulated online hailing services).**

8.14 **A two-pronged approach has to be adopted to enhance taxi services.** Ordinary taxis are cheaper and will continue to be the main taxi services used by the general public. After the introduction of franchised taxis, the current 18 000-odd taxis will continue to be the majority of the personalised and point-to-point public transport services. Therefore, **the Government will on one hand continue to strive to enhance the existing taxi service quality and operating environment** by, inter alia, (i) reviewing the current penalty for various taxi malpractices; (ii) relaxing permanently the no-stopping restrictions for taxi from peak hours and "7 a.m. to 7 or 8 p.m." on roads with speed limit less than 70 kilometres per

hour; (iii) extending the validity period of driver identity plates<sup>45</sup>; (iv) amending the requirement for applicants for driving licence for taxis etc. to hold a valid driving licence for private car or light goods vehicle for at least 3 years<sup>46</sup> to at least one year<sup>47</sup>; and requiring applicants for full driving licence for taxi and non-franchised public bus to complete and pass a pre-service course designated and approved by the Commissioner for Transport. Details are at **Annex 9**; and (v) proactively considering subsidising taxi drivers to enrol in training courses. It is expected that the above measures could be introduced within 2 to 3 years.

8.15 On the other hand, the Government will continue to maintain close liaison with the taxi trade. We propose that under the existing taxi licensing system, we will **strengthen the interaction and cooperation with the trade and other important stakeholders (including stakeholders such as the Chartered Institute of Transport, passenger concern groups, Consumer Council, Competition Commission and labour organizations), drive changes and discuss feasible supportive measures through comprehensive restructuring the current Quality Taxi Services Steering Committee under the TD.** The restructuring will be commenced soon.

#### **(b) Increasing the Number of Lantau Taxi Licences**

8.16 According to the established policy, the Government will still issue new ordinary taxi licences as and when necessary, having regard to factors including the demand for taxi services, the operating status of the taxi trade and the likely impact of the increase in the number of taxis on traffic conditions. We completed the Topical Study on the taxi service level in June 2015. It was found that the supply of ordinary taxis could largely meet the demand, while there was a need to increase the supply of Lantau taxis. The Government issued 25 new Lantau taxi licences through open tender in December 2015 and these newly added Lantau taxis commenced operation in the second quarter of 2016. According to a recent survey conducted by the TD, the waiting time for passengers at the taxi stands in Lantau during the peak hours has been improved. **The Government will review the demand and supply of taxi services on a regular basis (in particular after the introduction of franchised taxis).**

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<sup>45</sup> According to section 51 of the Road Traffic (Public Service Vehicles) Regulations, a PLB or taxi driver has to display a driver identity plates inside the vehicle compartment. The driver identity plate must bear the driver's photograph taken not earlier than 12 months before the day of display. As a result, drivers are required to renew their driver identity plates every year. The PLB and taxi trade generally considers that the renewal of the driver identity plates currently required is too frequent. Having regard to the trade's views, the Government will amend the law to reduce the frequency for the drivers to renew their driver identity plates. At present, the validity period for a driving licence can be as long as 10 years. The Government will make reference to this arrangement in formulating the legislative proposals.

<sup>46</sup> If the full driving licence for private car or light goods vehicle was issued upon completion of a probationary driving period (of at least one year), the relevant driving licence holding period is at least two years.

<sup>47</sup> If the applicant has already completed a probationary driving period of at least one year, he or she will only need to hold a full driving licence for private car or light goods vehicle at the time of application.

**(c) Study on Fuel Surcharge**

8.17 At present, the vast majority of taxis (over 99%) are run on liquefied petroleum gas (“LPG”)<sup>48</sup>. When the LPG prices follow the changes of the international fuel prices, in particular when there are rather steep rises in a short period, pressure will be exerted on the operation of the taxi trade. The taxi trade has proposed earlier that, apart from the regular taxi fare adjustment mechanism, a fuel surcharge mechanism should also be put in place. The basic concept is that passengers will have to pay a certain amount of fuel surcharge when the fuel price reaches or exceeds a pre-set triggering point, and the surcharge level will increase along with the fuel price. When the fuel price has not reached or has fallen below the pre-set triggering point, passengers will not have to pay any fuel surcharge. However, the trade has not suggested that metered fare can be reduced when the fuel price falls substantially.

8.18 We completed the Topical Study on taxi fuel surcharge in July 2015. **Having studied the experiences of 17 cities in both implementing and not implementing a taxi fuel surcharge<sup>49</sup> and the views of various stakeholders (including taxi passengers, taxi trade and academics), as well as considering the specific conditions in Hong Kong, we are of the view that a taxi fuel surcharge mechanism should not be introduced.**

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<sup>48</sup> To reduce roadside emissions, the Air Pollution Control (Vehicle Design Standards) (Emission) Regulations (Cap. 311J) stipulates that any taxi registered on or after 1 August 2001 shall be operated on LPG or unleaded petrol unless the vehicle concerned is not powered by a positive-ignition engine (such as an electric taxi).

<sup>49</sup> Cities that have introduced a taxi fuel surcharge include Beijing, Shanghai, Guangzhou, Shenzhen and Hangzhou; cities that have not introduced a surcharge include Macao, Taipei, Singapore, Tokyo, London, Frankfurt, Amsterdam, Melbourne, Sydney, Auckland, Washington D.C. and New York City.

## Chapter 9 Tram

9.1 Trams have been running along the north shore of Hong Kong Island since 1904. There are at present a total of 7 routes in operation. Since the tramway provides public transport services at high frequency and low prices with zero roadside emission, trams **perform an important supplementary function on the north shore of Hong Kong Island. This role and positioning will remain unchanged.**

9.2 **The Government encourages the Hong Kong Tramways Limited (“Tramways”) to retain the over 100-year exterior design while modernising its facilities and enhancing service quality.** In 2011, the Tramways launched the seventh-generation tram, which is a combination of modern interior design and traditional tram body exterior. Its features include an aluminium tram body structure in place of teak structure, which increases the durability of the tramcars; electronic display and voice next stop announcement systems installed inside the tramcar; and improved lighting and ventilation systems. As at May 2017, there are about 59 tramcars of the new generation. Furthermore, the Tramways has adopted a real-time positioning system using the radio frequency identification technology, which enhances the service frequency and fleet deployment, as well as providing real-time tram arrival information on its website. In June 2016, the Tramways launched its first air-conditioned tramcar for a trial run to increase the comfort of passengers. The Tramways is now studying the feasibility of further promoting air-conditioned tramcars. The study will focus on technical issues including electricity loading and tram body design.

9.3 Meanwhile, to reduce the traffic impact arising from the track replacement works and provide more comfortable service for passengers, the Government has earmarked around \$20 million to subsidise the Tramways on a matching basis to expedite the track replacement of the key bends and junctions with the use of new technology<sup>50</sup> from 2017-18 to 2019-20 financial years. The TD expects that the Tramways may start to apply for the subsidy in mid-2017 and commence the track replacement works in the fourth quarter of 2017. It is expected that the works will be completed in 3 years, during which about 2.4 kilometres of the tram tracks will be replaced.

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<sup>50</sup> The new technology is the “rail jacket technology”. Unlike the existing traditional method where tram tracks are directly embedded in concrete, the new technology makes use of a layer of eco-friendly elastic rubber material to wrap the tracks before installing them onto the concrete road surface. Subsequent replacement of the same section of tracks will only require removal of the worn out section wrapped in the rubber jacket through boring holes without the need to excavate and repave the road surface. This will help reduce the work duration and impact on the surrounding traffic. The new technology can extend the track life and is effective in enhancing the track’s capability of absorbing vibration and reducing the noise of tram operation, as well as providing more comfortable service for passengers. The Tramways has already replaced about 80 metres of tracks with the new technology at Shau Kei Wan Terminus.



## Chapter 10 Ferry

### (a) Role and Positioning

10.1 Local passenger ferry services consist of in-harbour routes and outlying island routes. Over the years, in tandem with the commissioning of the 3 cross-harbour tunnels<sup>51</sup> and the continuous expansion of the railway network, the cross-harbour public transport network has become more comprehensive nowadays. **The in-harbour ferry services perform a supplementary role as an alternative public transport service to rail and road-based harbour-crossing services.** Services are adjusted in accordance with supply and demand in the market. According to established policy, the Government does not provide any direct subsidy to the seven in-harbour ferry routes<sup>52</sup>.

10.2 **Outlying island ferries will retain the role of providing public transport services that are basically essential for the outlying islands.** Of the 14 outlying island ferry routes, the 6 major outlying island ferry routes<sup>53</sup> receive direct subsidies from the Government. In April 2016, we completed the Topical Study on the mid-term review of the Government's provision of Special Helping Measures ("SHM") to those ferry routes for the current 3-year licence period since 2014. As to whether the remaining 8 routes should be subsidised, the Government is now looking into the matter.

### (b) Subsidy Model and Operation Model

#### (i) Current Subsidy Model – Special Helping Measures

10.3 It is the Government's established policy that public transport services should be run by the private sector in accordance with commercial principles to enhance efficiency and cost-effectiveness. There is no direct subsidy from the Government for public transport

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<sup>51</sup> The Cross Harbour Tunnel, Eastern Harbour Crossing and Western Harbour Crossing was opened in 1972, 1989 and 1997 respectively.

<sup>52</sup> However, to help reduce the operating costs of ferry services, the Government has implemented various measures for all ferry routes where applicable. They include taking over the responsibility of pier maintenance, waiving fuel duty as well as reimbursing pier rental and exempting vessel licence fees under the Elderly Concessionary Fares Scheme. In addition, ferry operators are allowed to sub-let premises at piers for commercial and retail activities to generate non-fare box revenues for cross-subsidising the ferry operation so as to alleviate pressure for fare increase.

<sup>53</sup> The 6 major outlying island ferry routes are: "Central – Cheung Chau"; "Inter-islands" between Peng Chau, Mui Wo, Chi Ma Wan and Cheung Chau; "Central – Mui Wo"; "Central – Peng Chau"; "Central – Yung Shue Wan"; and "Central – Sok Kwu Wan" routes.

services save for the 6 major outlying island ferry routes. The Government provides SHM<sup>54</sup> to these routes because, in the areas served by these routes, there is basically no alternative to the ferry services as a means of public transport<sup>55</sup>, and short of the SHM, the ferry services cannot be maintained without periodic hefty fare increases. Therefore, the SHM help maintain the financial viability of the ferry services and alleviate the burden of fare increases on passengers.

10.4 **The SHM were first launched for the 6 major outlying island ferry routes in 2011** and achieved the intended purpose during the past two licence periods (i.e. 2011-14 and 2014-17). The Government will continue to provide SHM for the 6 major outlying island ferry routes<sup>56</sup> so that residents need not bear hefty fares.

10.5 The subsidy amount increased from about \$110 million for the first round of SHM for the 3-year licence period commencing in mid-2011 to around \$190 million for the second round of SHM for the 3-year licence period commencing in mid-2014. For the next 3-year licence period from mid-2017 to mid-2020, the Government will provide SHM of around \$410 million. The substantial increase in the SHM amount is mainly attributable to the escalating cost and the Government's introduction of new item under the SHM. **Apart from reimbursing the vessel maintenance cost to ferry operators, with a view to encouraging operators to introduce new vessels or improve services, facilities or equipment, the Government will reimburse half of the depreciation expenses of the abovementioned capital investment.** With the latest SHM, the operators have already planned to introduce two new vessels and implement a series of measures to upgrade the facilities of the ferry fleet (such as replacement of air-conditioning and ventilation systems and refurbishment of passenger cabins/washrooms).

10.6 Apart from increasing the number of items and amount of subsidy, we established a profit-sharing mechanism in the mid-term review conducted in early 2016. **Under the mechanism, ferry operators have to share the windfall profit (i.e. the profit exceeding the projected profit margin at the time of licence extension), with passengers on a 50:50 basis.** The windfall profit earned in the first half of the licence period will be shared with passengers on a 50:50 basis in the second half of the licence period, while that earned in the second half of the licence period will be shared with passengers in the next licence period on a 50:50 basis. The same profit-sharing mechanism is applicable to the next licence period (i.e.

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<sup>54</sup> The SHM include:

- (1) reimbursing the operators of the ferry services concerned for the annual vessel survey fee and private mooring charge;
- (2) reimbursing the pier electricity, water and cleansing charges;
- (3) reimbursing the balance of revenue foregone due to provision of elderly fare concessions after netting off the amount of pier rental reimbursement and vessel licence fee exemption under the established arrangement;
- (4) reimbursing the vessel maintenance cost;
- (5) reimbursing the depreciation cost relating to vessels;
- (6) reimbursing the revenue foregone due to provision of child fare concessions;
- (7) reimbursing the vessel insurance cost; and
- (8) launching the "Visiting Scheme to Outlying Islands".

<sup>55</sup> Only Mui Wo is also linked by an external road network, but its cross-district land-based public transport services are very limited.

<sup>56</sup> In this regard, the Finance Committee of the Legislative Council approved funding of \$410 million for the next 3-year licence period (i.e. from mid-2017 to mid-2020) in March 2017.

from mid-2017 to mid-2020) and has been formally incorporated into the terms of licence extension of the ferry services.

(ii) Maintaining the Long-term Financial Viability

10.7 In respect of the effectiveness of the above new arrangements in enhancing ferry service and maintaining their long-term financial viability, **we will look into and make a decision on the most desirable long-term operation model for maintaining the financial viability of ferry services, in the mid-term review (in the first half of 2019) of the next 3-year licence period. The review will cover a study of the pros and cons of various options, including maintaining the existing SHM, extending the licence duration and enhancing the SHM at the same time, or letting the Government own the ferry fleet and outsource the service operation.** The objective is to ensure enhanced service quality, financial viability and reasonable fare level of ferry services.

10.8 The Ferry Services Ordinance stipulates that a licence period for ferry service should be 3 years at the maximum. We are of the view that this requirement hampers the operators' capability for longer-term planning and investment for ferry operation. Therefore, we will explore extending the effective period of a licence through legislative amendments.

10.9 Currently, there are 8 other outlying island ferry routes<sup>57</sup> in addition to the 6 major outlying island ferry routes. There are views that the SHM should be extended to these 8 routes. We will study this issue and consider a host of factors, including the principle of prudent use of public money; the availability of alternative public transport services for these 8 routes; their respective operating environment (for example, some routes were launched in support of the new residential development projects at that time); their different financial situations (some are operating at a loss while there are individual routes that are relatively financially manageable for the time being); and their patronage, etc. The profit-sharing mechanism has become the terms of licence renewal for 2017-20 for the 6 major outlying island ferry routes. Whether it should be applicable to the other 8 routes needs to be studied. Besides, the duration of the licence periods of those 8 routes is not the same (the existing licence periods range from one to 3 years). Whether the future licence periods should be rationalised or unified also needs to be studied. **When the Government makes a decision on the long-term operation model of the existing 6 major outlying island ferry routes in the first half of 2019, it will decide in one go whether and how the long-term operation model to be determined at that time should be applicable to the other 8 routes.** We will then consult the Legislative Council.

(c) Enhancing Pier Facilities

10.10 **We plan to carry out renovation projects for existing ferry piers to keep up the**

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<sup>57</sup> The other 8 outlying island ferry routes include: "Aberdeen – Cheung Chau"; "Aberdeen – Yung Shue Wan (via Pak Kok Tsuen)"; "Aberdeen – Sok Kwu Wan (via Mo Tat)"; "Tuen Mun – Tung Chung – Sha Lo Wan – Tai O"; "Discovery Bay – Central"; "Discovery Bay – Mui Wo"; "Ma Wan – Central"; and "Ma Wan – Tsuen Wan". In addition, there are "kaitos", which mainly provide waterborne transport services to the remote areas which are generally inaccessible by land in the territories. There are 69 kaito routes in 2016. These kaitos do not provide daily public transport services for the general public. Instead, they operate on a relatively small scale and mostly provide non-regular services. The study of SHM and long-term operation model does not cover kaito routes. In fact, they could generally adjust their service frequencies and charges on their own initiative in the light of passenger demand.

**exterior design and facilities of the piers with the times** so as to provide the public with a better waiting environment. Our preliminary plan is to renovate one ferry pier on a pilot basis, through which we may explore enhancements such as installation of facilities for passengers' convenience, exterior refurbishment and brighter lighting. We are actively taking forward the preparatory work such as identifying the pilot site, scope of specific enhancement works, renovation budget and timetable. Upon completion of the pilot project, we will consider renovating more ferry piers in the light of the project outcome and passengers' feedback. We will also examine applying such new standards to newly-built ferry piers in future. Separately, the Development Bureau is launching a "Pier Improvement Programme" to **enhance the structural and facility standard of some existing public piers at remote rural areas in phases.**

## Chapter 11      **Barrier-free Public Transport Services**

11.1      The Government has all along been encouraging the elderly and people with disabilities (“PwDs”) to integrate into the community. **Since 2002, it has actively promoted the concept of “Transport for All”** and engaged public transport operators in enhancing their facilities wherever possible to facilitate access by the elderly and PwDs.

11.2      Since June 2012, the Government has launched the Public Transport Fare Concession Scheme in phases, so that eligible PwDs and elderly people aged 65 or above can travel on general MTR lines<sup>58</sup>, franchised buses<sup>59</sup>, ferries and most of the GMBs<sup>60</sup> at a concessionary fare of \$2 per trip. In addition, the Government has all along been providing special care for the general transport needs of PwDs. Rehabus service, which is subsidised by the Government, has been provided to PwDs.

11.3      Having regard to public concerns about the transport needs of PwDs, the Government completed a Topical Study on the barrier-free facilities of public transport services in April 2016. As for the Rehabus service, it is a service under the welfare policy of the Labour and Welfare Bureau. The service is planned and funded by that Bureau to provide point-to-point special transport services to those PwDs who are not able to use ordinary public transport facilities. The positioning of Rehabus does not fall within the purview of public transport services.

### **(a)      Progress of Promoting “Transport for All”**

11.4      Under the concept of “Transport for All”, the Government and various public transport service operators have been striving to promote “Better accessible transport services for all”, “Better public transport infrastructure and facilities for all” and “Better partnership”, so that barrier-free facilities will be provided in the compartments and at stations/platforms/piers of various public transport having regard to the actual circumstances. The major progress in recent years includes:

- (a)      All **franchised bus** companies have completed the installation of bus stop announcement system inside the compartments of their fleets. As at March 2017, over 90% of the buses are already wheelchair-accessible low-floor buses;
- (b)      All **MTR stations** are equipped with at least one barrier-free access, such as passenger lifts, ramps, stair lifts and wheelchair aids;
- (c)      The Government has been encouraging the **taxi** trade to use wheelchair-accessible models. As compared to early 2015 during which there were only 20 wheelchair-accessible taxis, there are now over 80 such taxis; and

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<sup>58</sup> Excluding the Airport Express, East Rail Line services to and from Lo Wu, Lok Ma Chau and Racecourse Stations, and first-class service of East Rail Line.

<sup>59</sup> Excluding “A” and “NA” routes to the airport and racecourse routes.

<sup>60</sup> As at end April 2017, there is still one GMB operator involving 6 routes not joining the concession scheme. This operator has indicated that it will join the concession scheme, and preparation work is underway to meet the accounting and auditing requirements for joining the scheme.

- (d) The Government encourages the light bus trade to designate priority seats for persons in need as well as providing braille registration number plates, non-slip floor and additional handrails, etc. inside the compartment.

11.5 In addition, the TD and Highways Department have retrofitted, where possible, PTI, bus termini, PLB termini, public piers and landings with barrier-free facilities such as tactile guide paths, tactile warning strips, dropped kerbs and road signs. All new public transport facilities will come with facilities for ease of use by PwDs in accordance with TD's Transport Planning and Design Manual. Furthermore, to build up better partnership, the TD has actively engaged the public transport operators, relevant departments and PwD groups through regular meetings of the Working Group on Access to Public Transport by People with Disabilities. Through these meetings, the TD has sought to understand the needs of PwDs and deliberated proposals for improving barrier-free facilities.

#### **(b) Further Enhancing Barrier-free Facilities**

11.6 To further enhance barrier-free facilities to facilitate easy access of public transport services for the elderly and PwDs, the Government has maintained close communication with various public transport operators. The following are key measures that have been or will be introduced by the operators:

##### **(i) Railways**

11.7 MTRCL is exploring the provision of audio information to the visually impaired through the tactile guide paths at concourses and platforms at Shek Kip Mei Station, to facilitate them to obtain necessary information and proceed to their destinations. Besides, subject to actual circumstances, **the MTRCL will install passenger lifts or vertical platform lift near the staircase at the remaining stations<sup>61</sup>, which are currently not provided with lift access between station concourse and the street level, in phases by end-2021. When constructing new railways, passenger lifts connecting station platform, concourse and street level will be regular items, subject to actual circumstances.**

##### **(ii) Franchised Buses**

11.8 As mentioned in paragraph 4.13 above, the Government announced a new measure in 2016 that around \$88 million had been earmarked to **subsidise franchised bus companies in expediting the installation of real-time arrival information display panels and seats at bus stops** for the convenience of passengers (especially the elderly and those in need). Regarding the seats, in order to expedite the installation, the Government will subsidise franchised bus companies for installing seats at covered bus stops without seats. As regards real-time arrival information display panels, all franchised bus companies are gradually rolling out their real-time arrival information systems, and individual operators have already provided such information through display panels installed at some of their covered bus stops

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<sup>61</sup> The stations are Diamond Hill, Fortress Hill and Tin Hau stations. For Diamond Hill Station, installation of lift is now underway alongside the construction works of the Shatin-to-Central Link. For Fortress Hill, the MTRCL plans to extend the two existing lifts adjacent to entrance/exit A connecting street level with mid-level downwards to the underground concourse of the Station. As to Tin Hau Station, the MTRCL plans to install a vertical platform lift at Entrance/Exit B near the staircase, connecting the station concourse and the King's Road.

with electrical installation. This has generally been well received by passengers. As the installation of display panels involves considerable capital and recurrent expenditure and may exert pressure on bus fare, the Government provides subsidy to franchised bus companies for the installation of display panels at covered bus stops with electrical installation on a matching basis.

11.9 The implementation of the subsidy scheme is currently in good progress. The TD and franchised bus companies are actively taking forward the necessary preparatory work and tendering exercise. Installation work is expected to commence progressively in the second half of 2017. It is expected that the franchised bus companies will have installed seats and display panels at around 870 and 380 bus stops respectively within a year. Our target is that the franchised bus companies will have installed display panels and seats at all suitable existing covered bus stops by 2019-20.

11.10 Meanwhile, all bus companies are upgrading their smartphone applications. Audio bus route information system was launched progressively since 2016 and **real-time bus arrival information for the visually impaired is expected to be fully rolled out before end-2018**. In order to assist the visually impaired to get hold of information on relocation or cancellation of bus stops, franchised bus companies have introduced a pilot scheme since the second quarter of 2016. Under the pilot scheme, braille question marks and braille telephone numbers will be displayed at the bus stops to be temporarily relocated or cancelled due to incidents such as road constructions or major public events.

11.11 Moreover, with bigger compartment space and adequate barrier-free facilities, franchised buses can provide more convenient services to the elderly and wheelchair users. It is expected that by end-2017, all fleets of franchised bus operators will be of low-floor models, except Lantau buses on account of topographical constraints, and there will be adequate handrails and priority seats for use by the needy passengers in bus compartments. In view of an aging population in Hong Kong, it is expected that there will be a growing demand for franchised bus services to hospitals. Frequencies and route planning aside, franchised buses running to and from hospitals should be equipped with extra facilities for the convenience of the needy passengers. In this regard, **the Government started in 2016 to discuss with the franchised bus companies the feasibility of operating routes to and from hospitals (“H” routes) and the deployment of more low-floor buses which are equipped with more suitable facilities for PwDs to facilitate their boarding and alighting from vehicles**. At present, there are already some concrete proposals, including planning to operate new bus routes serving Tung Wah Eastern Hospital, United Christian Hospital and Yan Chai Hospital. The TD has already submitted the proposals to the District Councils concerned for consultation.

11.12 **The Government is exploring with the franchised bus companies the feasibility of increasing the number of wheelchair parking spaces to two in the bus compartments.** KMB will, on a trial basis, reconfigure the bus compartments of its existing low floor buses so that the lower deck can accommodate two wheelchair passengers at the same time. The trial will be conducted on a few selected routes serving hospitals, thereby enhancing the transport for PwDs. The first bus with dual wheelchair parking spaces has been arranged to serve route 273A (Choi Yuen-Wah Ming (Circular)) (operating via the North District Hospital) for the trial. KMB will also refigure another 4 buses by increasing the number of wheelchair parking spaces to two. It is expected that the works will be completed in mid-2017. KMB will select another 4 routes serving hospitals for the trials. Depending on passengers’ views, KMB will consider increasing the number of buses installed with dual wheelchair parking



spaces.

11.13 Some patients having certain illnesses (such as Chronic Obstructive Pulmonary Diseases) at present have to receive oxygen therapy and have to carry oxygen cylinders for self-medical use when going out. **The provisions under the existing Public Bus Services Regulations stipulate that any substance or article to which the Dangerous Goods Ordinance applies cannot be brought onto the bus and compressed oxygen is one of the dangerous goods regulated under the Dangerous Goods Ordinance. Hence, carrying oxygen cylinders for self-medical use onto franchised buses by passengers is restricted. In order to further enhance “Transport for All”, we propose to amend the Public Bus Services Regulations to relax the restrictions** on the premise that passengers’ safety should continue to be fully protected<sup>62</sup> during implementation. Subject to the progress of the discussion with the stakeholders on the specific arrangements, it is expected that the legislative proposal could be submitted to the Legislative Council in the 2017-18 legislative year.

(iii) GMBs

11.14 To tie in with the vehicle replacement of GMB operators for increasing the seating capacity of vehicles, the TD is working with the trade to follow up on the mandatory installations required for **all newly registered GMBs, including half-step at the middle door, handrails and/or call bells with indication lights**. These requirements are expected to be implemented together with the revised maximum seating capacity of PLBs.

11.15 Meanwhile, with TD’s encouragement and support, the trade has identified new low-floor wheelchair-accessible PLB models suitable for use in Hong Kong. These vehicles will be introduced for trial at 3 hospital routes (operating via Queen Mary Hospital, Prince of Wales Hospital and St. Teresa’s Hospital respectively). The trial scheme is expected to commence in the second half of 2017. When the operators formally apply to the TD for vehicle examination and type approval for the new low-floor PLB models, the Commissioner for Transport will consider exercising her statutory discretionary power to allow vehicle length to exceed the current statutory length limit of 7 metres and weight limit of 5.5 tonnes, so as to facilitate the trial run in Hong Kong. Upon commencement of the trial scheme, we will review with the operators the operational effectiveness of these vehicles, including the feasibility of technical operation, maintenance, actual operation on roads and passengers’ feedback, etc.. **If the trial scheme is proven effective, we will discuss with the trade on further promoting low-floor PLBs.**

(iv) Taxis

11.16 As mentioned above, there are at present over 80 wheelchair-accessible taxis. To our understanding, a major supplier has planned to introduce a new model of wheelchair-accessible taxi, which complies with the laws and regulations of Hong Kong, in early 2018. **We will continue to assist the taxi trade and vehicle suppliers in introducing of more such models of wheelchair-accessible taxis** so as to provide wheelchair users with more choices. We will keep an eye on the use of these models among the public and the trade, and

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<sup>62</sup> There should be a proper mechanism for implementation, which will enable the bus captains to easily identify whether the passenger carries an oxygen cylinder is for medical reason and how the requirement concerning the limit on the number of oxygen cylinders as specified in the Dangerous Goods Ordinance will be enforced.

consider ways to encourage their wider use in the trade. Meanwhile, to provide convenience to wheelchair users, **we also propose that the franchised taxi operators' fleet will be required to comprise at least 50% of wheelchair-accessible taxis.** If a bidder of franchised taxis proposes a percentage of wheelchair-accessible vehicles higher than the requirement, such application will be accorded with a higher score under the assessment.

## **Benefits**

11.17 The implementation of the above measures will help cater for the various travel needs of the elderly and PwDs. Regarding the **visually impaired**, MTRCL is exploring the provision of audio information through the guide paths at Shek Kip Mei Station; all franchised bus companies will also disseminate audio information system and real-time bus arrival information through smartphone applications, as well as providing braille question marks and braille telephone numbers at the bus stops which will be relocated or cancelled. These measures will facilitate the PwDs' use of the public transport facilities. As for those **persons with impaired mobility**, there will be a series of new measures to facilitate their use of the public transport services, which include: (1) MTRCL will install barrier-free facilities at the three stations which currently do not have barrier-free corridor connecting the station concourse with the street level; (2) the Government is subsidising franchised bus companies to expedite the installation of seats; (3) the franchised bus companies will introduce buses with dual wheelchair parking spaces and exploring the provision of bus routes serving hospitals; (4) the GMB operators will introduce the trial scheme for low-floor light buses and requiring all newly registered GMBs to be equipped with half-step at middle door and handrails; (5) the taxi trade will introduce ordinary taxi models which are wheelchair-accessible; and (6) requiring the franchised taxi operators' fleet to comprise at least 50% of wheelchair-accessible taxis. For **persons with chronic diseases**, they may carry oxygen cylinders when travelling on franchised buses. The Government will continue to take heed of the technological development and make use of the latest technologies where appropriate, so as to further facilitate the travelling of the elderly and the PwDs.

## Chapter 12      Environmentally-friendly Public Transport Services and Use of Technology

### (a)      Environmentally-friendly Public Transport Services

12.1      **The Government has been pushing forward “Green Transport”.** The Environmental Protection Department has made legislative amendments to tighten the statutory emissions standards of newly registered vehicles (including public transport vehicles). Specifically, any taxis newly registered on or after 1 July 2017 and any buses with design weight of over 9 tonnes newly registered on or after 1 October 2018 shall comply with Euro VI emissions standards. On another front, there are suggestions in the community that more public transport vehicles should be electric vehicles, but whether electric vehicles may gain wider adoption in public transport will hinge on their technical feasibility (e.g. the endurance, reliability and durability of the battery, as well as the adequacy of charging facilities), operational feasibility (e.g. the impact of the charging time on the use and functioning of the vehicle) and financial viability (e.g. the cost of acquiring and operating an electric vehicle).

#### (i)      Hybrid Buses

12.2      The Environment Bureau allocated \$33 million in 2011 for franchised bus companies to procure 6 double-deck hybrid buses for a trial scheme of two years in order to ascertain their suitability for operation in Hong Kong. The trial was completed in November 2016 and the Environment Bureau submitted a paper to brief the LegCo Panel on Environmental Affairs on the outcome in May 2017. In terms of driving performance, the hybrid buses are comparable with conventional diesel buses. However, their fuel economy performance varies with their routes and shows a distinct seasonal pattern. Over the two-year trial period, the hybrid buses consumed on average 0.4% more fuel than the conventional diesel buses on the same routes<sup>63</sup>, which fell far short of the 30% fuel saving as reported in overseas economies. The poor fuel economy performance of the hybrid buses should mainly be due to the high air-conditioning loading in the hot and humid summer in Hong Kong, which could account for up to 40% of the fuel consumption.

12.3      As mentioned in the paper by the Environment Bureau, the price of each hybrid bus is \$5.5 million, being about 60% to 80% more costly than its conventional counterpart, which may translate into pressure for significant fare increase if bus operators are to bear the cost. The lower bus availability of hybrid buses owing to more frequent breakdowns also means that passengers may experience more service disruptions. **The emission performance of hybrid buses over Euro VI conventional buses is not substantial and their fuel economy performance in the local operating environment fell far short of expectation. As such, there is no strong justification for promoting the use of hybrid buses in franchised bus operation until their fuel economy performance has been significantly improved and their price has become more competitive.** The Environment Bureau will continue to work with the hybrid bus manufacturer to improve the fuel economy of the 6 hybrid buses, and closely monitor the development of hybrid buses and other green bus technologies.

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<sup>63</sup> In general, the hybrid buses on highway routes with less start-stop operations tend to use more fuel; and fuel consumption in summer is higher than in cooler months. The best performing hybrid bus delivered a fuel saving of 10.7% whereas the worst one used 9.0% more fuel.

(ii) Electric Buses

12.4 Apart from hybrid buses, the Environment Bureau has also allocated \$180 million to fully subsidise franchised bus companies to procure 36 single-deck electric buses, comprising 8 supercapacitor buses and 28 battery-electric buses as well as ancillary charging facilities, in order to make a comprehensive assessment on their performance under local conditions. This trial of electric buses lasts for two years. The scope of trial covers the reliability of buses, batteries, supercapacitors and charging facilities; maintenance requirements and economic feasibility, etc. for ascertaining whether they are suitable to be used as franchised buses in Hong Kong. Compared with public buses in other cities, local franchised buses are more intensively used. They generally operate with a high operation frequency, long service hours, high peak passenger loadings and on hilly terrains. Given the hot and humid summer weather in Hong Kong, the buses require heavy air-conditioning duties. These stringent operational conditions have put electric buses to a very severe test.

12.5 The trial of the first batch of 5 battery-electric buses procured by Citybus and NWFB commenced in end-2015 for operating on 5 routes on Hong Kong Island. Since the launch of the trial, there were incidents such as malfunction of bus doors, broken wheel bolts, and excessive regenerative braking torque affecting the braking performance of electric buses in rainy weather that led to concerns over skidding on wet road surfaces. As such, the trial for these 5 battery-electric buses will be extended for 5 months. The trial of the second batch of batter-electric buses by Citybus and NWFB has just commenced in early June 2017. As for the supercapacitor buses, the trial of two buses commenced in late March 2017 and the operation has been satisfactory so far. Trial of the remaining electric buses will start progressively. **If the trial results are satisfactory, the Government will encourage franchised bus companies to use electric buses on a larger scale, taking into account the affordability of the franchised bus companies and passengers.**

(b) Use of Technology

12.6 The Government is committed to developing Hong Kong into a smart city by using innovation and technology to enhance city management and improve people's livelihood. Smart city development encompasses multiple themes, which includes Smart Mobility, i.e. raising the efficiency and service quality of urban transport. With regard to public transport services, the Government will continue to encourage public transport operators to make use of new technology for enhancing services. **All franchised bus companies are progressively introducing real-time arrival information system, whereas the Government is also offering subsidies for them to expedite the installation of display panels for such real-time information.** Both KMB and Long Wing have already applied the real-time arrival information system to all of their regular routes. Citybus, NWFB and NLB are in the process of conducting trial of providing real-time arrival information on individual routes, which will be extended to all of their regular routes progressively. **It is anticipated that real-time arrival information will become available on all regular franchised bus routes by 2018.** In addition, KMB is testing the use of suitable technology for providing real-time information on seat vacancy on the upper deck for passengers on the lower deck.

12.7 **The Hong Kong Tramways Ltd. has also introduced a real-time arrival information system,** enhanced operational efficiency and improved vehicle deployment. It also provides information on the next three tram departures through its website, QR code and smartphone application to the general public.

12.8 **The MTRCL's smart phone application "Next Train"** provides passengers with train arrival information of West Rail Line, East Rail Line, Tseung Kwan O Line and Airport Express. **Another smart phone application "Traffic News"** provides information on train service delay during incidents, as well as MTR free shuttle bus services.

12.9 Since 2013, all MTR heavy rail stations have set up free Wi-Fi hotspots to allow free internet access for passengers within the MTR network. KMB will set up Wi-Fi service in around 500 buses per year, and a total of 2 000 buses (about half of KMB's fleet) will be equipped with Wi-Fi service in phases by end-2020.

12.10 Since 2009, **the Government has provided one-stop service of point-to-point public transport route enquiry through "Hong Kong eTransport" website and smartphone application** for the public to search the most appropriate public transport mode and route to reach their destination. The Government has added new features to "Hong Kong eTransport" in early 2017 to provide information on the next three tram departures. **"Hong Kong eTransport" will also be connected with the smartphone applications of individual franchised bus companies for access to real-time bus arrival information beginning from mid-2017 in a progressive manner.** The TD will continue to encourage all public transport operators to support the Government's open data policy by making the data in their possession available at the "data.gov.hk" portal co-ordinated by the Office of the Government Chief Information Officer. In addition, the Government has **launched the "eTraffic news" smartphone application** in 2016 to provide the latest traffic news and alerts on public transport service disruption, as well as notifications on planned public transport service arrangements.

## Chapter 13      Looking Ahead

13.1 Hong Kong is a small and densely-populated city. A well-developed public transport system will satisfy the need of the community and support Hong Kong's development. The Government has been adopting a public transport-oriented policy with railway as backbone for years. This has resulted in an efficient and well-connected railway network to the benefit of the community. Meanwhile, the Government strives to develop other public transport services to complement the railway services and to provide more choices for the public to commute conveniently. The public transport services are now well-developed, allowing competition while maintaining a delicate balance. In 2014, the Government announced the RDS-2014 to set out the development blueprint for the further development of the railway in the coming decade. We will also soon take forward the Strategic Studies on Railways and Major Roads beyond 2030 with a view to preliminarily formulating the arrangement of the required transport infrastructure in areas including Lantau, NWNT and New Territories North.

13.2 The objective of the Government to conduct PTSS is to continue promoting the diversified and sustained development of the public transport services while developing the railway services. In the course of the study, **we have noted two key factors for the success of Hong Kong's well-developed public transport system:**

- (a) The highly cost-effective, efficient and reliable public transport services of Hong Kong are attributable to the fact that they have been operating on a commercial basis, essentially without any direct subsidy from the Government<sup>64</sup>; and
- (b) The diversity of public transport to cater for the different needs of the public relies on the delicate balance all along maintained among various public transport services. Different operators can effectively perform their functions and complement with each other to provide the most suitable services for the public.

The two key factors are fully retained in the PTSS, and reinforced through the series of measures set out in this report.

13.3 These measures will be implemented through the Government's existing mechanism for monitoring public transport services. Upon implementation, these measures will help reinforce the important roles played by public transport services other than the heavy rail, which will in turn help promote the long-term, healthy development and the complementarity among different public transport services so that the public can enjoy well-developed public transport services with the following features:

- (a) **Highly-efficient public transport network with comprehensive coverage:** By continuing the effort to actively carry out bus route rationalisation, provide new BBIs or enhance existing ones to make available more combinations of route interchanges, put in place more bus priority measures, increase seating capacity of PLBs to meet passenger

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<sup>64</sup> The Government has not provided direct subsidy to public transport services except for the six major outlying island ferry routes. For details, please refer to paragraph 10.3 of the main text.

demand during peak periods, enhance road-based public transport services (including Light Rail and new environmentally-friendly public transport system) to tie in with the commissioning of the new railways and the development of NWNT, etc., a more efficient public transport network with comprehensive coverage will be provided for the public. Meanwhile, we will encourage operators to provide various fare concessions as far as possible and the public to take public transport for commuting;

- (b) **Diversified public transport services:** Various types of new public transport services (for example, franchised taxis, new long haul bus services and mid-sized single-deck bus services) will be rolled out to provide more different choices of services for the public, catering for the needs of different passenger groups; and
- (c) **More convenient and environmentally-friendly public transport services that values “Transport for All”:** By providing better ancillary facilities for passengers (for example, rendering financial support to franchised bus companies for speeding up the installation of real-time bus arrival information display panels and seats at bus stops and enhancing facilities at BBIs), and barrier-free facilities (for example, operating bus routes to and from hospital and conducting trial runs of low-floor PLB models), together with the convenience brought by technological advancement, passengers will be able to enjoy more efficient and convenient services. We will continue to encourage public transport operators to provide environmentally-friendly public transport services, thereby reducing the impacts of vehicle emissions on the environment.

13.4 We are also rolling out a series of **Walk in HK** initiatives to enhance the overall walkability of our city for Hong Kong people to commute, to connect and to enjoy, making walking an integral part of Hong Kong as a sustainable city. **Encouraging the public to use public transport services and to walk more will help reduce the use of private cars. This will in turn further ease road congestion and improve air quality so that Hong Kong can pursue sustainable development.**

**Transport and Housing Bureau  
June 2017**



**Methodology of the  
Forecast on the Demand for Public Transport Services**

The consultant has forecast and analysed the demand for public transport services in the short-term (2021, i.e. the scheduled year for the commissioning of the Shatin to Central Link) and in the medium to long-term (in 2031, i.e. after the full implementation of the heavy rail network recommended under RDS-2014). The consultant has taken into account the following factors in carrying out the forecast:

1. The Government's public transport-oriented policy;
2. The anticipated population growth and forecast on employment in future;
3. The anticipated economic growth;
4. The planned transport infrastructure and development, including major highways and tunnels (e.g. Tuen Mun – Chek Lap Kok Link, Central – Wan Chai Bypass, Tseung Kwan O – Lam Tin Tunnel, Widening of Fanling Highway, etc.) and the development of the heavy rail network (e.g. heavy rail lines to be opened in near future, such as Shatin and Central Link and 7 recommended projects under the Railway Development 2014<sup>1</sup>);
5. Relevant territorial development studies such as Hung Shui Kiu New Development Area Planning and Engineering Study, Planning and Engineering Study for Housing Sites in Yuen Long South, Development of Kwu Tung North and Fanling North New Development Areas, Planning and Engineering Study for Kwu Tung South, North East New Territories New Development Areas Planning and Engineering Study, Planning and Engineering Study on Development of Lok Ma Chau Loop, Preliminary Feasibility Study on Developing the New Territories North, and Planning and Engineering Study on the Remaining Development in Tung Chung.

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<sup>1</sup> The recommended projects include the Northern Link and Kwu Tung Station, Hung Shui Kiu Station, the Tung Chung West Extension, the Tuen Mun South Extension, the East Kowloon Line, the South Island Line (West) and the North Island Line.

**Guidelines on Service Improvement and Reduction  
in Bus Route Development Programmes**

**Service Improvement**

**(I) Frequency Improvement**

If the occupancy rate of any bus route reaches 100% during any half-hour of the peak period and 85% during that one hour, or reaches 60% during the busiest one hour of the off-peak period, the Transport Department (TD) will consider the deployment of more vehicles to enhance the service level. In increasing the vehicle allocation, priority will be given to redeploying vehicles saved from other rationalisation items.

**(II) New Bus Service**

If the frequency improvement alone is not sufficient to meet demand and no practical alternatives are available, we will give consideration to the provision of new bus service, with priority to serve areas that are beyond the catchment area of existing railways or railway feeders. In approving any new bus service, we will also consider the impact of such new service on the traffic condition on major roads, and will as far as possible refrain from providing long haul bus routes or routes that operate via busy districts such as Mong Kok, Tsim Sha Tsui, Central, Wan Chai, Causeway Bay etc.

**Service Reduction**

In pursuance of our policy objective of providing a safe, efficient and reliable transport system in a sustainable environment, franchised bus routes with low utilisation would be rationalised from time to time to enhance bus operation efficiency while meeting passenger demand and matching local operating environment, reducing traffic congestion and roadside emission. These guidelines set out the situations whereby rationalisation measures such as adjustment to service frequency and timetable, route cancellation / amalgamation, route truncation, etc. would be pursued.

**(III) Reduction of Bus Trips along Busy Corridors**

In view of concentration of activities in the urban areas leading to serious environmental and traffic concerns, TD is committed to reducing the number of bus trips along busy corridors and bus stoppings through various measures of service cancellation / reduction and route rationalisation. If it is inevitable for new routes or enhanced bus services to operate via these busy corridors, the bus operators will have to reduce the same number of trips plying through the same corridor from other routes in order not to aggravate the traffic and environmental conditions in these busy corridors.

**(IV) Frequency Reduction**

If the average occupancy rate of an individual route is below 85% during the peakiest half-hour of the peak period, or below 30% during the off-peak period, TD will consider reducing bus deployment for the route. Railway feeder routes, socially essential routes (such as bus routes serving remote areas or where the majority of the passengers are elderlies) with no alternatives available, and routes with peak headways at 15 minutes or more will be considered on individual merits.

**(V) Route Cancellation / Amalgamation**

If the utilisation of a low-frequency route does not improve (i.e. a bus route with average occupancy rate lower than 50% during peak hour, despite its headways having already been reduced to 15 minutes and 30 minutes during peak hours and off-peak hours respectively), TD will consider proposing cancellation of the route or amalgamation of the route with other route(s) in consultation with the bus operators.

**(VI) Route Truncation**

To optimise the use of resources, TD will review with relevant bus operators the feasibility of truncating routes, in particular those where majority of the passengers will have alighted en route. In formulating truncation proposals, TD will consider whether the number of affected passengers is excessive (i.e. the occupancy rate of not more than 20% to 30% at the proposed truncated section during the peakiest hour); whether enough roadside space is available to accommodate the affected passengers for interchange; and whether terminal space for the changed route is available.

**Factors to be Considered in Bus Service Rationalisation**

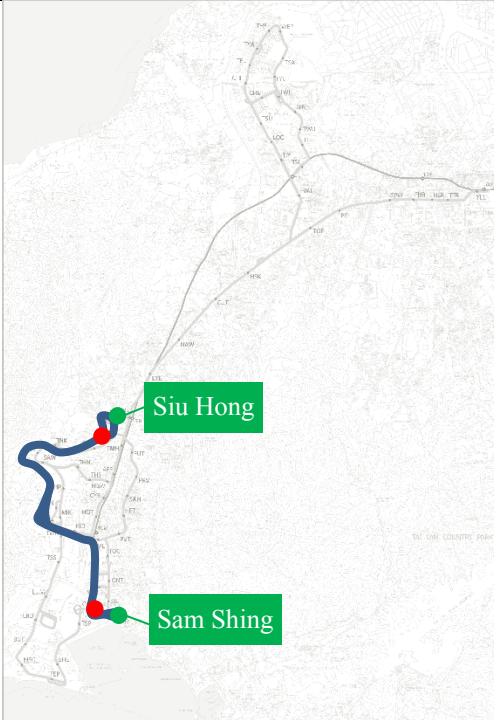
In formulating rationalisation proposals, in particular those where drastic measures are to be adopted, TD would give due consideration to ensure that the interests of passengers would be taken care of and to minimise impact on them as far as possible. Factors that will be taken into account include:

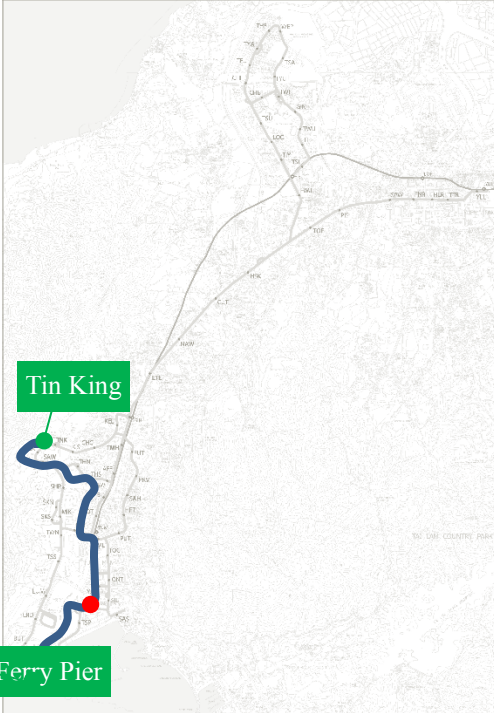
- (a) nature of the services proposed to be cancelled: For services the utilisation rates of which have been consistently low but are socially essential (i.e. those serving remote areas or where majority of the passengers are elderlies) and without reasonable alternatives, TD would consider other means to improve the service performance, such as through the use of vehicles with smaller carrying capacities, provision of alternatives such as introduction of replacement green minibus services, etc;
- (b) availability of reasonable alternatives: In proposing service cancellation, measures have to be taken to ensure that reasonable alternatives for the affected passengers are provided as far as possible. Factors such as the availability of spare capacity of alternative services in taking up the diverted

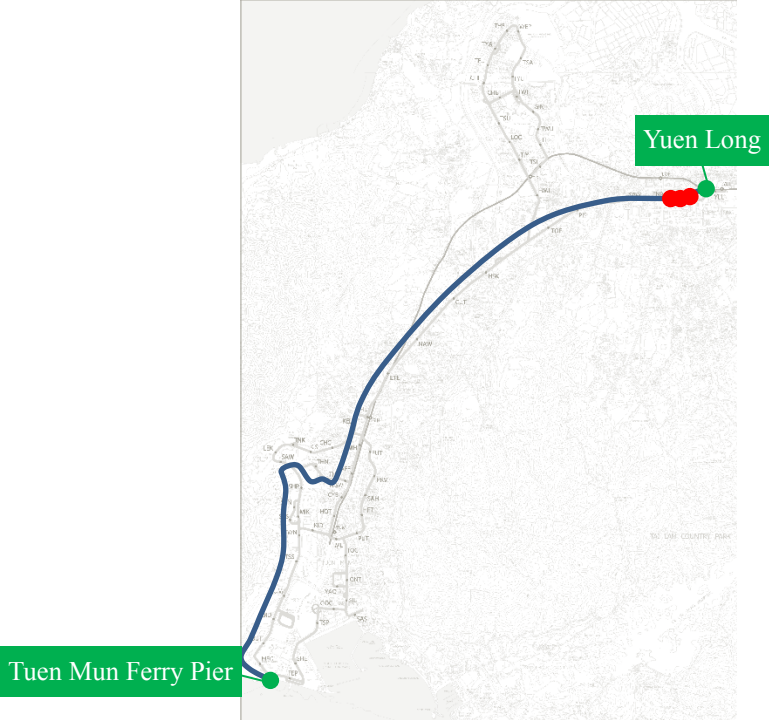
passengers, the number and convenience of interchanges involved, the total journey time (including interchange and on-vehicle time) as compared with the existing services, etc, would be assessed carefully to ensure the reasonableness of the alternative services;

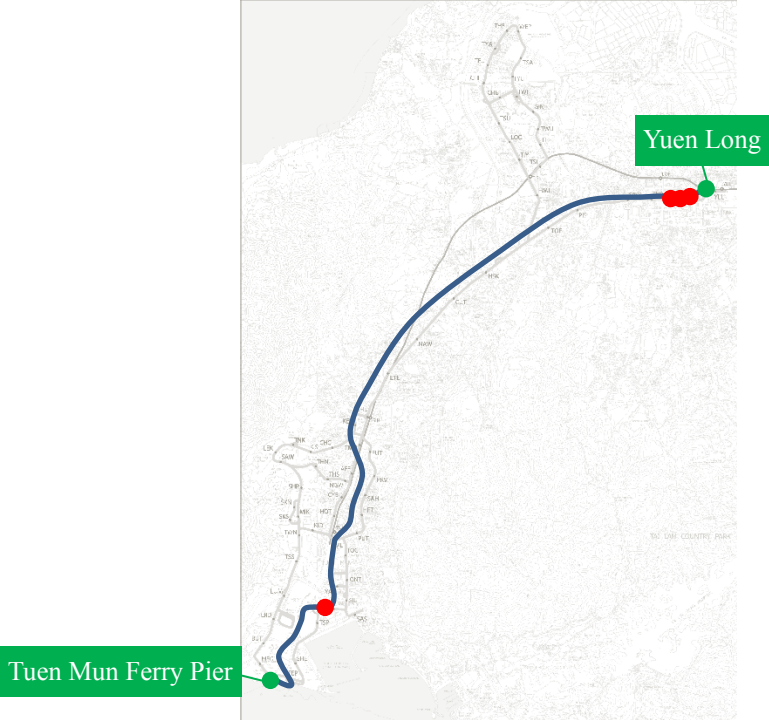
- (c) fare of the best available alternative service: The total journey fare as compared with the fare of the existing service would be assessed. Positive consideration to route cancellation will be given if the total journey fare is not higher than that of the service being considered for cancellation. The relevant bus operators would also be requested to consider the provision of fare concessions, such as interchange discounts, section fares, special discounts to elderly, and other incentives wherever appropriate and feasible, to provide attraction to the affected passengers to facilitate the implementation of the rationalisation proposals;
- (d) transport operational considerations: The proposed service rationalisation should not cause undue hardship to passengers or operational problems. Factors such as the number of passengers requiring interchanges, the availability of space for interchange activities, etc. would be carefully assessed. The deployment of the saved vehicles to improve services within the same district would also be spelt out where appropriate;
- (e) impact of the proposed service rationalisation on bus captains: Factors to be considered include the number of bus captains that would be affected by the proposed service rationalisation, and whether the excess bus captains could be absorbed through natural wastage or other means without causing any major staff issues; and
- (f) environmental benefits arising from the service rationalisation: Environmental benefits such as the reduction in emission, reduction of bus trips in busy corridors, etc. would be spelt out in the consultation documents for the public to take note of.

**Utilisation of the 12 Light Rail routes during peak hours**

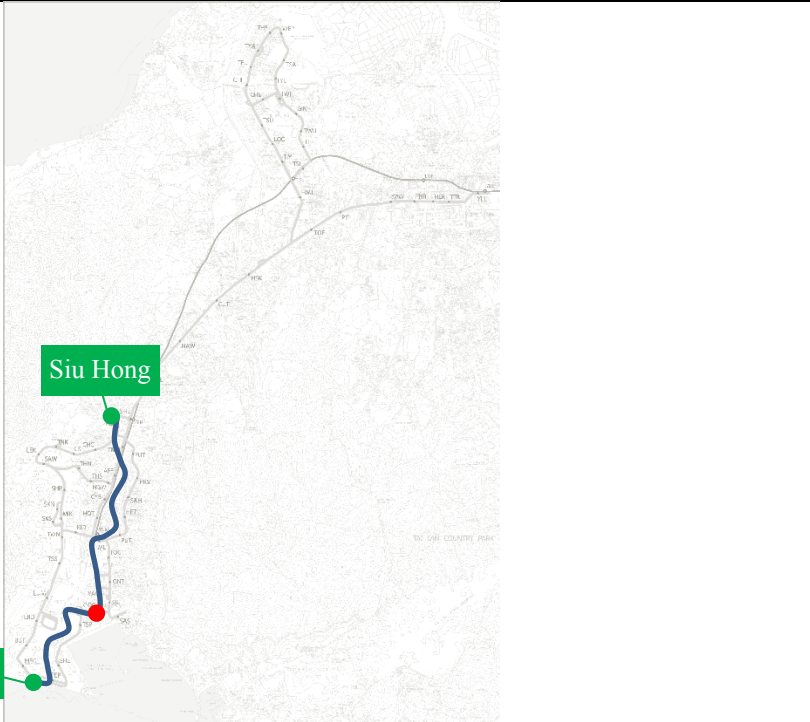
<b>Route 505 – Sam Shing to Siu Hong (commissioned in 1988)</b>	
	
Journey time	About 25 minutes for a single journey (Total route length: about 5.9 km)
Number of stops	16 (Siu Hong-bound journeys); 14 (Sam Shing-bound journeys)
Frequency of service	6 – 9 minutes
Number of LRVs deployed	6 single-set and 2 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	2 356
Loading at the busiest section in 2016	74%
Number of junctions en-route	17 for Siu Hong-bound journeys and 16 for Sam Shing-bound journeys, of which 2 are busy junctions: <ol style="list-style-type: none"> <li>1. Tsing Lun Road (near Tuen Mun Government Primary School)</li> <li>2. Junction between Hoi Chu Road/Tuen Mun Heung Sze Wui Road</li> </ol>

Route 507 – Tuen Mun Ferry Pier to Tin King (commissioned in 1989)	
	
Journey time	About 27 minutes for a single journey (Total route length: about 6.6 km)
Number of stops	16
Frequency of service	5 – 9 minutes
Number of LRVs deployed	10 single-set and 1 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	2 430
Loading at the busiest section in 2016	83%
Number of junctions en-route	18, of which 1 is a busy junction: 1. Junction between Hoi Chu Road/Tuen Mun Heung Sze Wui Road

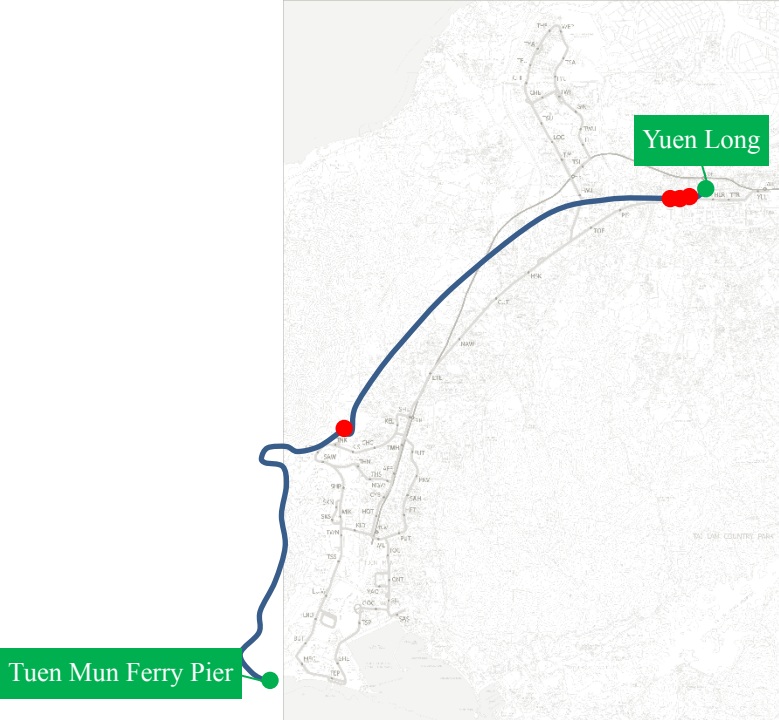
Route 610 – Tuen Mun Ferry Pier to Yuen Long (commissioned in 1988)	
	
Journey time	About 45 minutes for a single journey (Total route length: about 13.7 km (Yuen long-bound journeys) / about 14.3 km (Tuen Mun-bound journeys))
Number of stops	26
Frequency of service	5 – 9 minutes
Number of LRVs deployed	11 single-set and 2 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	2 019
Loading at the busiest section in 2016	85%
Number of junctions en-route	43 for Yuen Long-bound journeys and 45 for Tuen Mun-bound journeys, of which 3 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between On Lok Road / Castle Peak Road-Yuen Long Section</li> <li>2. Junction between Fung Cheung Road / Castle Peak Road-Yuen Long Section</li> <li>3. Junction between Kuk Ting Street / Tai Tong Road and Castle Peak Road-Yuen Long Section</li> </ol>

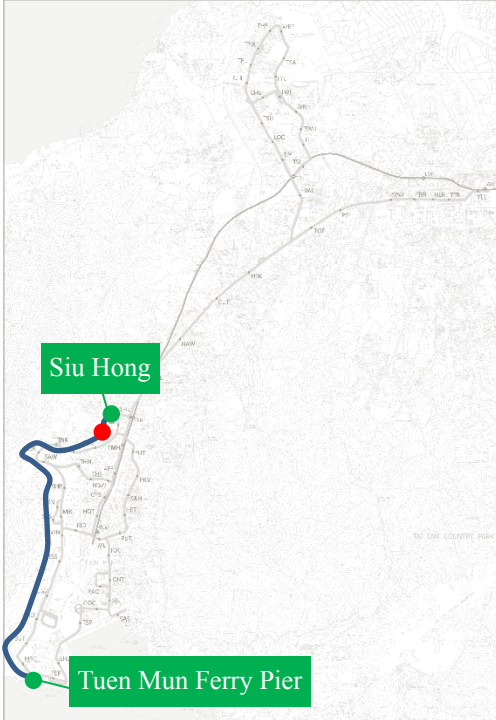
Route 614 – Tuen Mun Ferry Pier to Yuen Long (commissioned in 1992)	
	
Journey time	About 42 minutes for a single journey (Total route length: about 13.4 km)
Number of stops	24
Frequency of service	10 – 17 minutes
Number of LRVs deployed	7 single-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	980
Loading at the busiest section in 2016	69% (average loading of 614 and 614P)
Number of junctions en-route	34, of which 4 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between On Lok Road / Castle Peak Road – Yuen Long Section</li> <li>2. Junction between Fung Cheung Road / Castle Peak Road – Yuen Long Section</li> <li>3. Junction between Kuk Ting Street / Tai Tong Road / Castle Peak Road – Yuen Long Section</li> <li>4. Junction between Hoi Chu Road / Tuen Mun Heung Sze Wui Road</li> </ol>





Route 614P – Tuen Mun Ferry Pier to Siu Hong (commissioned in 2004)	
	
Journey time	About 22 minutes for a single journey (Total route length: about 5.9 km (Siu Hong-bound journeys)/ about 5.6 km (Tuen Mun Ferry Pier-bound journeys))
Number of stops	13
Frequency of service	7 – 12 minutes
Number of LRVs deployed	5 single-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	1 225
Loading at the busiest section in 2016	69% (average loading of 614 and 614P)
Number of junctions en-route	9, of which 1 is a busy junction: 1. Junction between Hoi Chu Road / Tuen Mun Heung Sze Wui Road

**Route 615 – Tuen Mun Ferry Pier to Yuen Long  
(commissioned in 1993)**

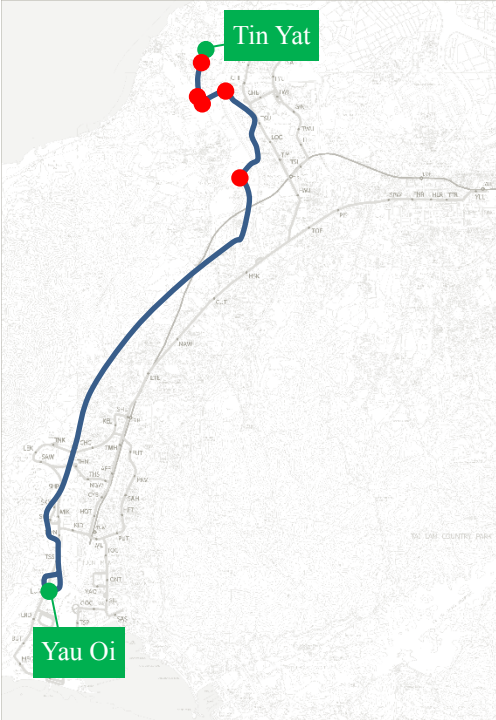
	
Journey time	About 45 minutes for a single journey (Total route length: about 13.9 km (Yuen Long-bound journeys)/ about 14.6 km (Tuen Mun-bound journeys))
Number of stops	26
Frequency of service	10 – 18 minutes
Number of LRVs deployed	7 single-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	942
Loading at the busiest section in 2016	80% (average loading of 615 and 615P)
Number of junctions en-route	41 for Yuen Long-bound journeys and 43 for Tuen Mun-bound journeys, of which 4 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between On Lok Road / Castle Peak Road – Yuen Long Section</li> <li>2. Junction between Fung Cheung Road / Castle Peak Road – Yuen Long Section</li> <li>3. Junction between Kuk Ting Street / Tai Tong Road / Castle Peak Road – Yuen Long Section</li> <li>4. Tsing Lun Road (near Tuen Mun Government Primary School)</li> </ol>

Route 615P – Tuen Mun Ferry Pier to Siu Hong (commissioned in 2004)	
	
Journey time	About 24 minutes for a single journey (Total route length: about 6.6 km (Siu Hong-bound journeys)/ about 6.8 km (Tuen Mun Ferry Pier-bound journeys))
Number of stops	16
Frequency of service	9 – 12 minutes
Number of LRVs deployed	5 single-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	1 225
Loading at the busiest section in 2016	80% (average loading of 615 and 615P)
Number of junctions en-route	18 for Siu Hong-bound journeys and 20 for Tuen Mun Ferry Pier-bound journeys, of which 1 is a busy junction: 1. Tsing Lun Road (near Tuen Mun Government Primary School)

Route 705 – Tin Shui Wai Circular (anti-clockwise) (commissioned in 2004)	
	
Journey time	About 25 minutes (Total route length: about 5.9 km)
Number of stops	15
Frequency of service	5 – 6 minutes
Number of LRVs deployed	5 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	4 900
Loading at the busiest section in 2016	87%
Number of junctions en-route	20, of which 6 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between Tin Shui Road / Tin Sau Road</li> <li>2. Junction between Tin Shui Road / Tin Tan Street</li> <li>3. Junction between Tin Shui Road / Tin Wing Road</li> <li>4. Junction between Tin Yiu Road / Tin Ho Road</li> <li>5. Junction between Tin Fuk Road / Tin Yiu Road and Ping Ha Road</li> <li>6. Junction between Tin Wing Road/ Tin Shing Road</li> </ol>

Route 706 – Tin Shui Wai Circular (clock-wise) (commissioned in 2004)	
	
Journey time	About 25 minutes (Total route length: about 5.8 km)
Number of stops	15
Frequency of service	5 – 7 minutes
Number of LRVs deployed	5 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	4 900
Loading at the busiest section in 2016	91%
Number of junctions en-route	20, of which 6 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between Tin Shui Road / Tin Sau Road</li> <li>2. Junction between Tin Shui Road / Tin Tan Street</li> <li>3. Junction between Tin Shui Road / Tin Wing Road</li> <li>4. Junction between Tin Yiu Road / Tin Ho Road</li> <li>5. Junction between Tin Fuk Road / Tin Yiu Road and Ping Ha Road</li> <li>6. Junction between Tin Wing Road/ Tin Shing Road</li> </ol>

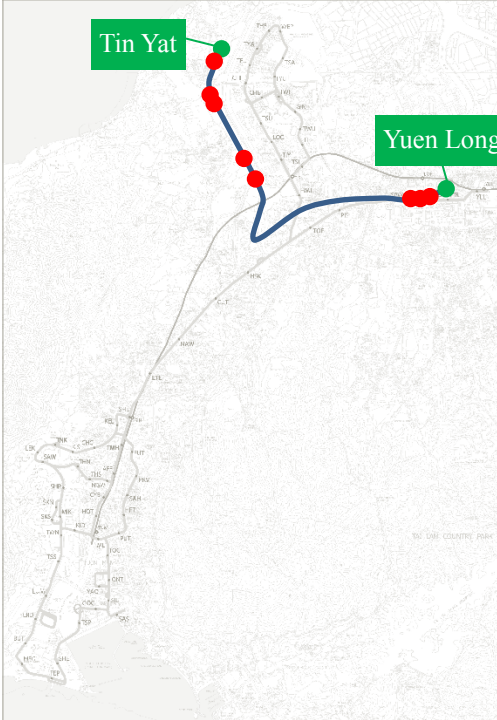


Route 751 – Yau Oi to Tin Yat (commissioned in 2003)	
	
Journey time	About 41 minutes for a single journey (Total route length: 11.9 km)
Number of stops	23 (Tin Yat-bound journeys)/ 22(Yau Oi-bound journeys)
Frequency of service	4 – 9 minutes
Number of LRVs deployed	6 single-set LRVs and 6 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	2 625
Loading at the busiest section in 2016	96%
Number of junctions en-route	30 for Tin Yat-bound journeys and 32 for Yau Oi-bound journeys, of which 5 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between Tin Shui Road / Tin Sau Road</li> <li>2. Junction between Tin Shui Road / Tin Tan Street</li> <li>3. Junction between Tin Shui Road / Tin Wing Road</li> <li>4. Junction between Tin Wing Road / Tin Shing Road</li> <li>5. Junction between Tin Fuk Road / Tin Yiu Road and Ping Ha Road</li> </ol>

**Route 751P – Tin Shui Wai to Tin Yat (commissioned in 2004)**



Journey time	About 15 minutes for a single journey (Total route length: about 3.3 km)
Number of stops	9
Frequency of service	7 – 15 minutes
Number of LRVs deployed	4 single-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	1 532
Loading at the busiest section in 2016	78%
Number of junctions en-route	12, of which 4 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between Tin Shui Road / Tin Sau Road</li> <li>2. Junction between Tin Shui Road / Tin Tan Street</li> <li>3. Junction between Tin Shui Road / Tin Wing Road</li> <li>4. Junction between Tin Wing Road / Tin Shing Road</li> </ol>

Route 761P – Tin Yat to Yuen Long (commissioned in 2005)	
	
Journey time	About 28 minutes for a single journey (Total route length: about 6.8 km (Tin Yat-bound journeys)/ about 7.4 km (Yuen Long-bound journeys))
Number of stops	14
Frequency of service	3 – 7 minutes
Number of LRVs deployed	13 coupled-set LRVs
Hourly carrying capacity (per direction) in 2016 (about 200 persons per LRV)	5 444
Loading at the busiest section in 2016	81%
Number of junctions en-route	26, of which 8 are busy junctions: <ol style="list-style-type: none"> <li>1. Junction between Tin Shui Road / Tin Sau Road</li> <li>2. Junction between Tin Shui Road / Tin Tan Street</li> <li>3. Junction between Tin Shui Road / Tin Wing Road</li> <li>4. Junction between Tin Yiu Road / Tin Ho Road</li> <li>5. Junction between Tin Fuk Road / Tin Yiu Road and Ping Ha Road</li> <li>6. Junction between On Lok Road/Castle Peak Road-Yuen Long Section</li> <li>7. Junction between Fung Cheung Road / Castle Peak Road-Yuen Long Section</li> <li>8. Junction between Kuk Ting Street / Tai Tong Road and Castle Peak Road-Yuen Long Section</li> </ol>



**Measures to increase the carrying capacity of the Light Rail**

**Increase in frequency**

The MTRCL increases the frequency of the Light Rail service during peak and non-peak hours where practicable. Since 2009, 22 newly purchased LRVs had been delivered to Hong Kong by batches, and all of them were put into service by 2011. The number of LRVs in service was increased from 118 to 140. Since 2012, Light Rail trips have been added by about 660 per week, increasing the total number of trips from 20 370 to 21 030 per week, which represents an increase of 3%. However, since the Light Rail adopts an open design and has to share certain space of the roads with other road users, the shared road sections impose certain constraints on the number of operating LRVs. Considering the current traffic condition and the capacity of the roads, the utilisation rates of certain road junctions are already very high and the room for increasing the Light Rail service frequency during morning peak hours is rather small.

**Layout and design of the LRV compartments**

2. There are currently four generations of LRVs in operation. They came into operation at different times and vary slightly in their compartment designs. In particular, the carrying capacity of the Phase 1 LRVs was slightly lower than that of LRVs of the other three generations. The MTRCL completed the refurbishment of the Phase 1 LRVs in 2014. The refurbished compartments are basically the same as those of the Phase 4 LRVs and the average carrying capacity of these LRVs was increased by about 8%. As for LRVs of the other three generations, since the layouts of the compartments have already enabled the maximum carrying capacity, it would be difficult to further increase the carrying capacity by modifying the layouts of the compartments.

**Platform Management**

3. The MTRCL strengthens its management of passenger flow at platforms through different measures, including improving the locations of the entry/exit processors and the design of the access at Light Rail platforms, and widening the space for passengers at platforms with very high utilisation rates (such as the Tai Tong Road Stop) where practicable, so that passengers can enter and leave the LRV compartments and platforms more smoothly. This will enable LRVs to depart on time, and thereby raising the overall carrying capacity of Light Rail service.

**Short-haul special service**

4. The patronage of some sections of individual Light Rail routes is higher (particularly those connecting to the West Rail Line). To enable effective diversions of passenger flow in these busier sections and stops, the best way is to introduce short-haul special service. The MTRCL has introduced short-haul special service to some busier Light Rail sections (including Route Nos. 505, 507, 614, 614P, 615P, 751, 705 and 706) to carry passengers to and from the West Rail Line stations.

Nevertheless, the short-haul special service is not applicable to all sections of all routes. The prerequisite is that there should be enough track space between the original scheduled LRV trips to accommodate the extra short-haul special service. Also, similar to addition of ordinary LRV trips, when increasing the short-haul special service, the constraint imposed by the open design of the Light Rail system on the number of operating LRVs should be considered.

#### Coupled-set LRVs

5. LRVs can be operated in the form of single-set or coupled-set. Deploying additional LRVs, either single-set or coupled-set, can increase the carrying capacity of the Light Rail. When a coupled-set LRV reaches a stop, passengers can alight from both compartments at the same time. Therefore, a coupled-set LRV can attain higher efficiency and achieve better on-time performance if compared with two single-set LRVs, enhancing the overall operational efficiency and the carrying capacity of the Light Rail. On the other hand, single-set LRVs can be deployed with greater flexibility. Nevertheless, in considering the use of more coupled-set LRVs for certain Light Rail routes or for certain sections of the routes, apart from facilities of a stop, the MTRCL will take into account traffic volume on the road, in particular the utilisation situation of junctions. At present, Light Rail routes pass through a number of busy junctions. At these junctions, the traffic volume is rather high as there are considerable numbers of other vehicles in addition to LRVs. When determining the most effective deployment of LRVs for Light Rail routes passing by these junctions in order to increase the carrying capacity, the MTRCL has to take into account such factors as the waiting time for the traffic lights, the journey time, the carrying capacity of each LRV and the distance between junctions, so as to decide whether coupled-set or single-set LRVs should be deployed for the additional services. Considering the current road situations and capacity, the utilisation rates of certain junctions passed by Light Rail routes are already very high during peak hours. If a large number of additional coupled-set LRVs are deployed during peak hours, the LRVs may obstruct one another, reducing the overall driving speed and the operational efficiency of the Light Rail. The purpose of increasing the carrying capacity cannot be achieved. The length of a coupled-set LRV is twice as that of a single-set LRV. Coupled-set LRVs take longer time than single-set LRVs when turning or passing through turnouts or inner roads, thus affecting the journey time. To maximize effectiveness of service, the MTRCL has to carefully consider the number of single-set and coupled-set LRVs that can be accommodated by individual Light Rail route.

**Light Rail route rationalisation proposal**

**Cancelling Route Nos. 614 and 615 and retaining Route No. 610**

Since the commissioning of the West Rail Line in 2003, its service partly overlaps with that of Light Rail between Yuen Long and Tuen Mun, and the number of passengers using Light Rail as a long-haul transport mode (e.g. cross-district journeys between Yuen Long and Tuen Mun) has decreased. According to the MTRCL, generally speaking, long-haul passenger trips have dropped from 7% (about 25 700 passenger trips) of the daily total passenger trips in 2009 to 5% (about 23 000 passenger trips) in 2016.

2. Since the passenger demand for long-haul cross-district Light Rail routes has decreased, the MTRCL proposes cancelling two Light Rail routes between Yuen Long and Tuen Mun, namely Route Nos. 614 and 615, and retaining one, i.e. Route No. 610.

**Increasing LRVs and service frequency for Route Nos. 614P and 615P**

3. After the cancellation of Route Nos. 614 and 615, all the 14 LRVs (using single-set LRVs as an unit) originally used for these two routes will be deployed to other Light Rail routes in greater demand, such as Route Nos. 614P and 615P which overlap with Route Nos. 614 and 615 in Tuen Mun. The MTRCL also plans to re-deploy one LRV from each of Route No. 505 (Sam Shing – Siu Hong); Route No. 507 (Tuen Mun Ferry Pier – Tin King) and the maintenance pool of LRVs<sup>1</sup>. Therefore, a total of 17 single-set LRVs will be made available for deployment. The MTRCL proposes to deploy ten of them to strengthen the service of Route Nos. 614P and 615P in Tuen Mun, and the remaining seven to the new Route Nos. 610P (Siu Hong – Yuen Long)<sup>2</sup>.

**Introducing new Light Rail Route No. 610P running between Light Rail Siu Hong Stop and Yuen Long Terminus**

4. The stops originally covered by Route Nos. 614 and 615 in Tuen Mun district (i.e. from Tuen Mun Ferry Pier to Siu Hong) will continue to be served by the enhanced Route Nos. 614P and 615P; while the section within Yuen Long district (i.e. from Siu Hong to Yuen Long) will be replaced by the new Route No. 610P. According to the vehicle deployment scheme mentioned above, 7 single-set LRVs will be serving the new 610P route. Meanwhile, the cross-district Route No. 610 will be retained and continue to ply between Siu Hong and Yuen Long. The MTRCL envisages that Route Nos. 610 and 610P will provide a combined carrying capacity which is comparable to that of Route Nos. 610, 614 and 615 during peak hours for stops between Siu Hong and Yuen Long. As the number of routes serving the section will be reduced by one and 610P will only provide short-haul service, there will be more effective deployment of LRVs and hence ease the congestion at the Yuen Long Main Road. The arrival time of LRVs at stops will even out and therefore the on-time performance will be enhanced. At the same

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<sup>1</sup> Currently, seven LRVs are sent to the Light Rail Depot on a rotational basis for routine maintenance. Upon review, the MTRCL concluded that keeping six LRVs in the Depot could already fulfill the needs of maintenance, and hence, the remaining one could be used for routine service.

<sup>2</sup> For details, please see paragraph 4.

time, as the congestion at the Yuen Long Main Road will ease after rationalising the Light Rail routes, there will be more room for addition of short-haul special service during peak hours to enhance carrying capacity. If the route rationalisation proposal can be materialised, the MTRCL plans to deploy some of the 10 newly procured LRVs to serve the Yuen Long Main Road to run more short-haul special service, depending on the actual passenger demand in 2019 when the new LRVs will be gradually put into service. Other new LRVs will be deployed to routes with higher passenger demand.

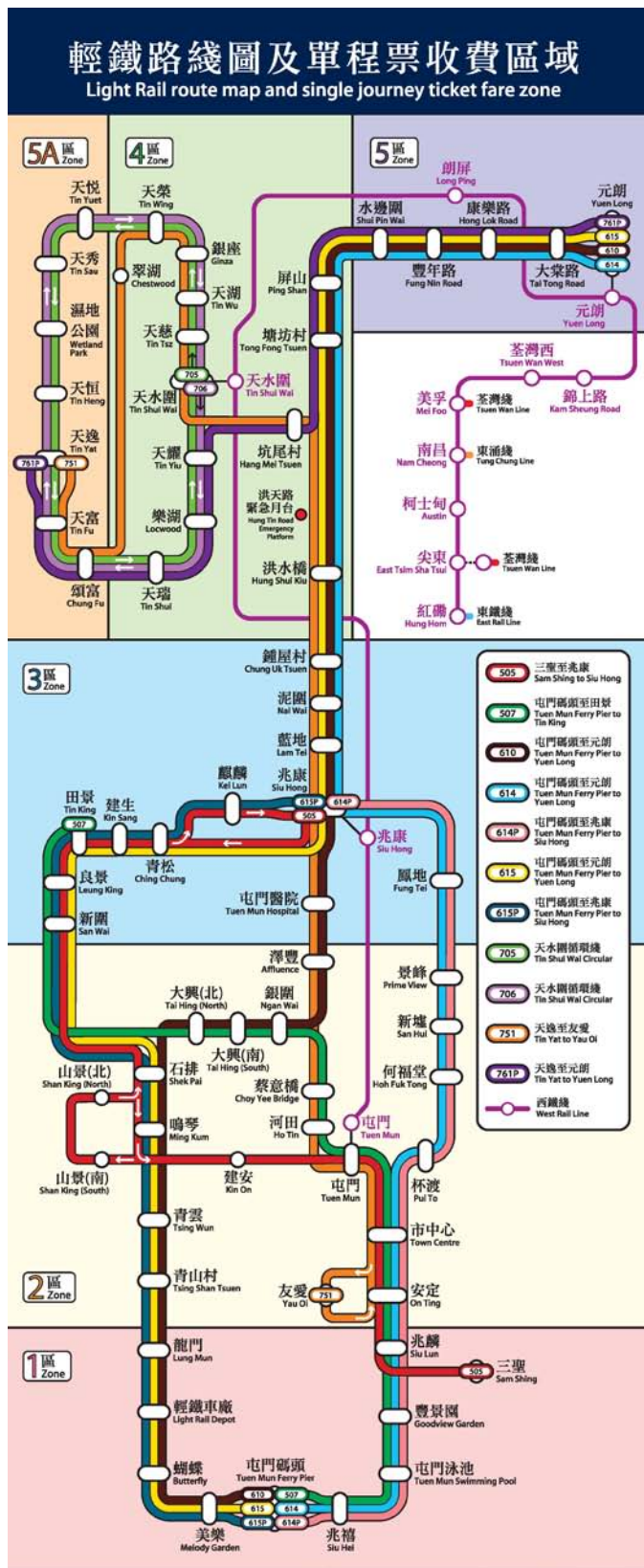
5. The Light Rail system maps before and after rationalisation are at Graph 1.

### **Features and benefits of the route rationalisation proposal**

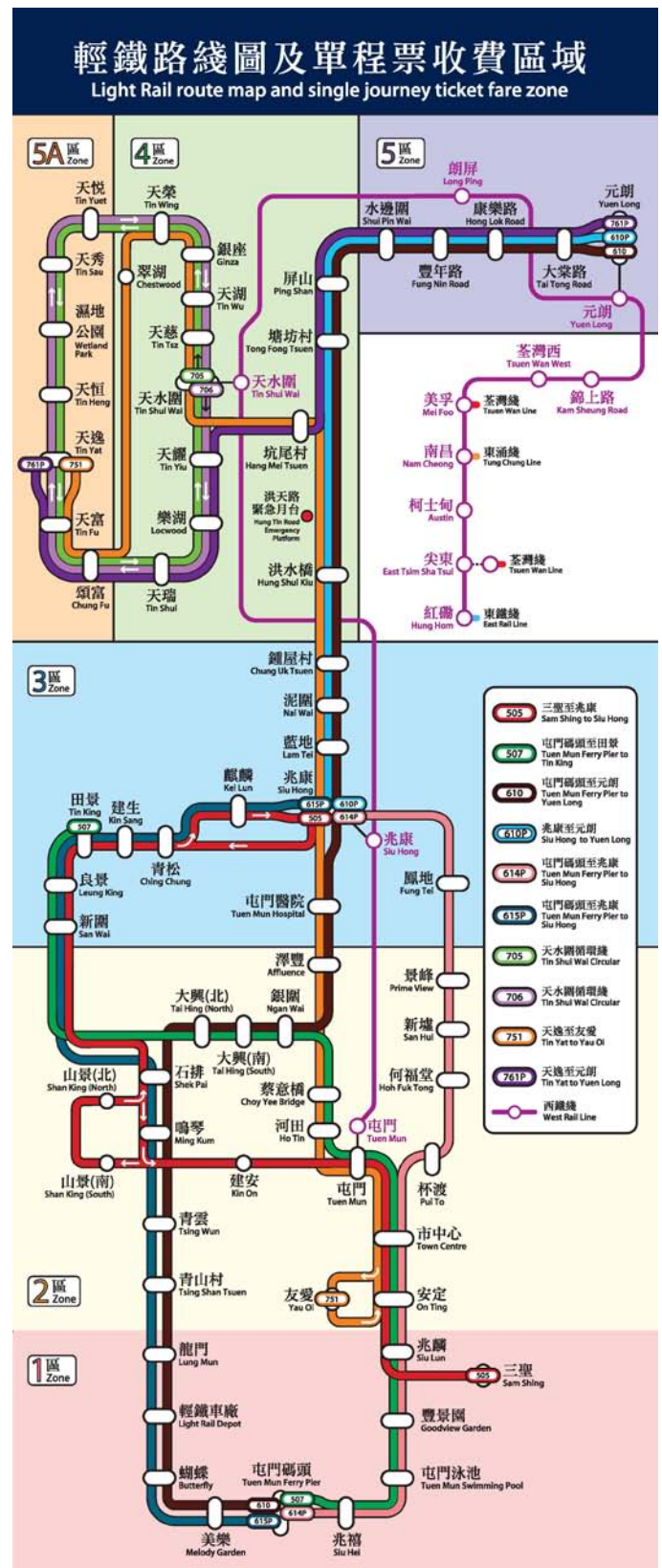
6. The rationalisation of Light Rail routes aims not only at deploying LRVs from routes of low utilisation to those of higher utilization, but more importantly, it will address the issues of overlapping Light Rail routes in busy and congested section of the network (e.g. the Yuen Long Main Road) and unevenly distributed headway. Under the present proposal, passengers of both the Tuen Mun and Yuen Long districts will benefit from the Light Rail service with enhanced efficiency. For Tuen Mun District, in the busiest one hour, the carrying capacity of the critical links of Route No. 614P and 615P will be increased. Some 10 000 Light Rail passengers travelling within Tuen Mun District every day will benefit from this enhancement. Besides, apart from special services, 614P and 615P with enhanced carrying capacity can also serve passengers of Route No. 505 and 507 in most of the shared sections. As regards Yuen Long District, some 4 400 Light Rail passengers travelling within Yuen Long District every day will benefit from the 610 and new 610P services with more punctual and evenly distributed headway as compared to the current situation. Besides, as mentioned above, should the route rationalisation proposal be materialised, some of the 10 newly procured LRVs can be deployed to serve the Yuen Long Main Road to run more short-haul special service, further increasing the carrying capacity during peak hours.

7. Under the rationalisation proposals, Route Nos. 614 and 615 will be cancelled. Route Nos. 614P/615P and 610P will meet at Light Rail Siu Hong Stop, where cross-district passengers will interchange. According to the MTRCL's estimation, upon rationalising the routes, during the busiest one hour during mornings around 230 passengers travelling from Tuen Mun to Yuen Long will need to interchange at Siu Hong Stop from 614P or 615P to 610/610P, while around 380 passengers travelling from Yuen Long to Tuen Mun will need to interchange at Siu Hong Stop from 610P to 614P or 615P, with a total of 610 passengers per hour. The MTRCL has assessed the capacity and facilities of Siu Hong Stop and considers that the Stop can handle the needs of interchanging passengers. The MTRCL will further explore ways to enhance platform facilities (e.g. by providing more chairs) and provide sufficient indication and information at the Stop so as to bring convenience to the interchange passengers.

Graph 1 Light Rail system maps before and after rationalization



Before rationalisation

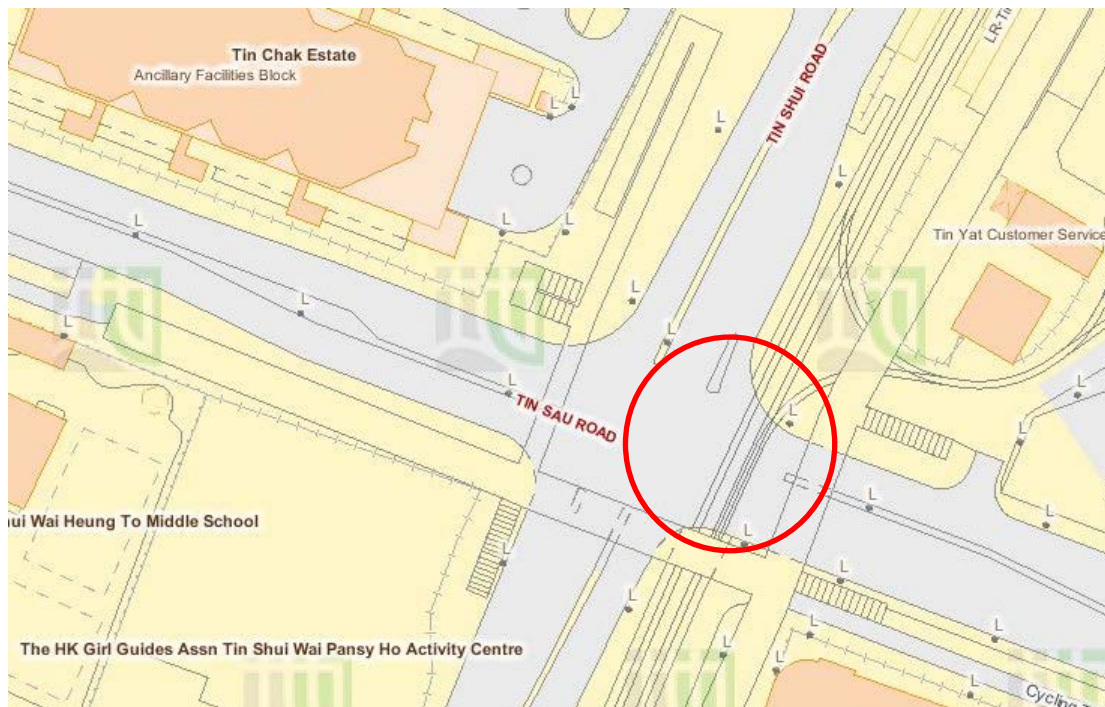


After rationalisation



**Busy junctions en-route for Light Rail routes**

**1. Junction between Tin Shui Road/ Tin Sau Road**



**2. Junction between Tin Shui Road/ Tin Tan Street**





3. Junction between Tin Shui Road/ Tin Wing Road

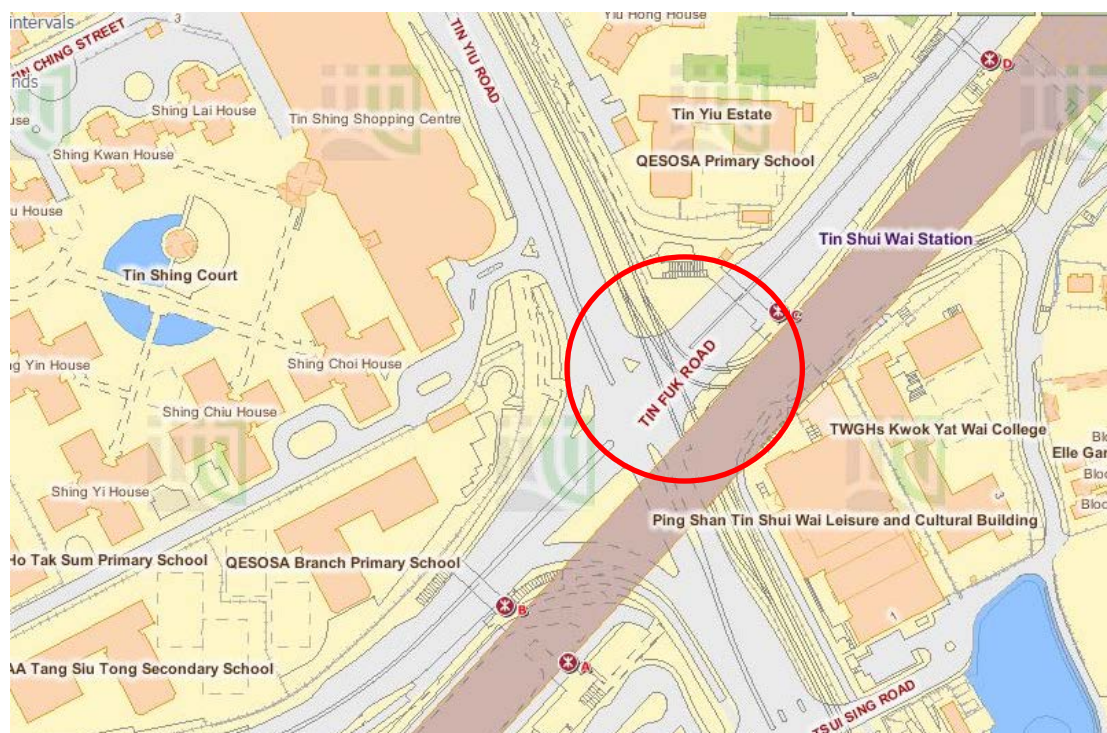


4. Junction between Tin Yiu Road/ Tin Ho Road





5. Junction between Tin Fuk Road/ Tin Yiu Road and Ping Ha Road

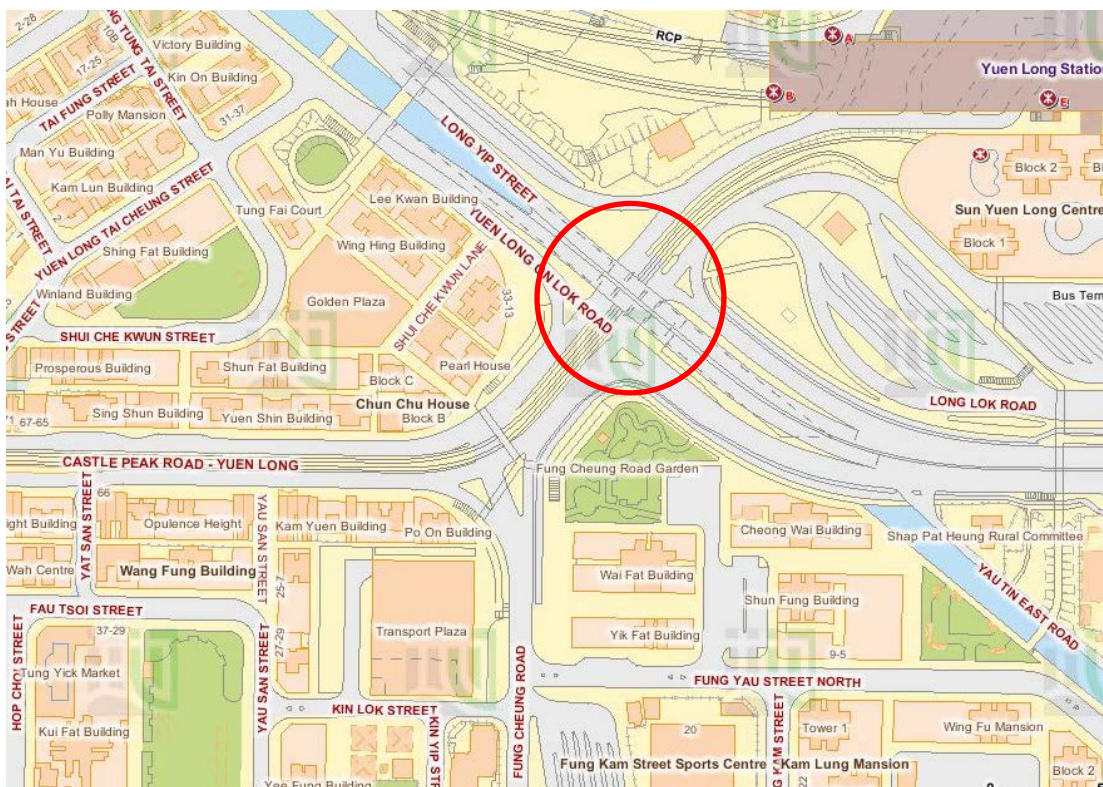


6. Junction between Tin Wing Road/ Tin Shing Road

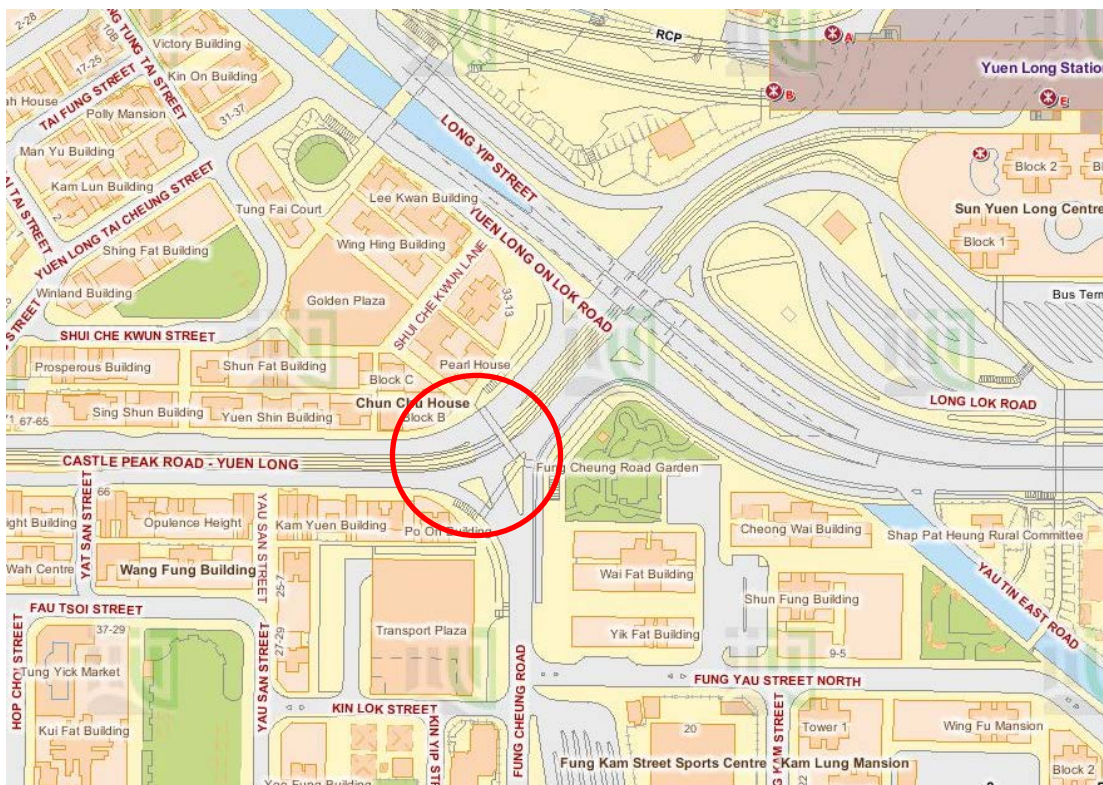




7. Junction between On Lok Road/ Castle Peak Road Yuen Long Section

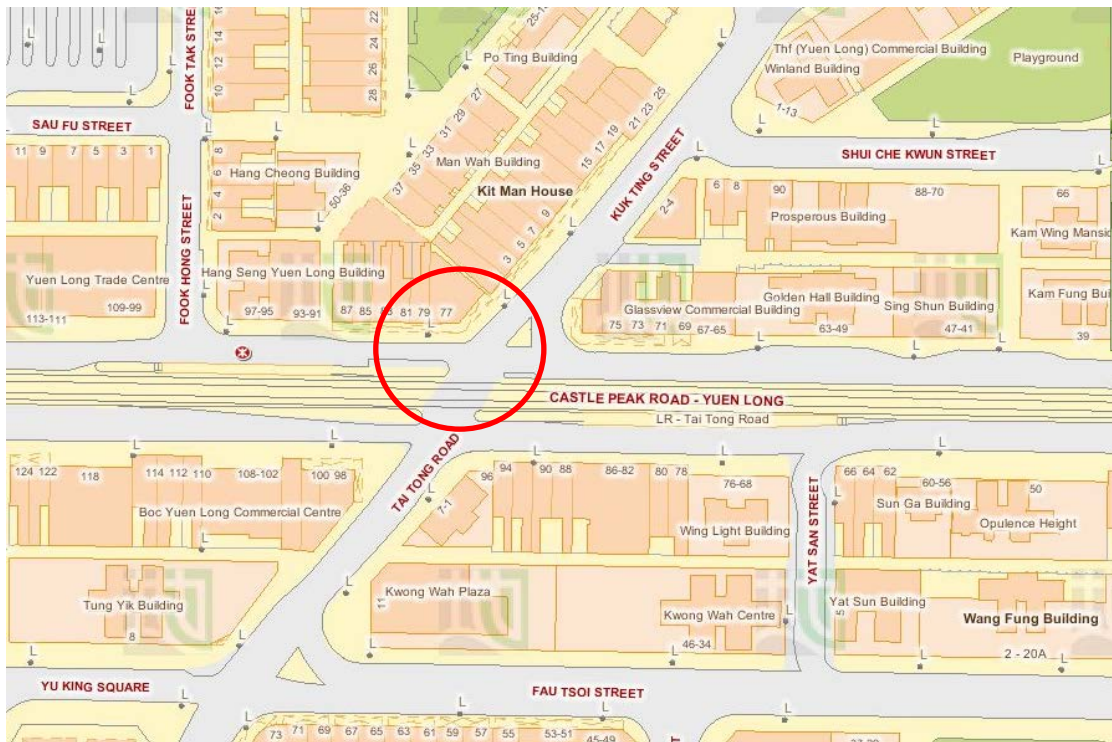


8. Junction between Fung Cheung Road/ Castle Peak Road Yuen Long Section

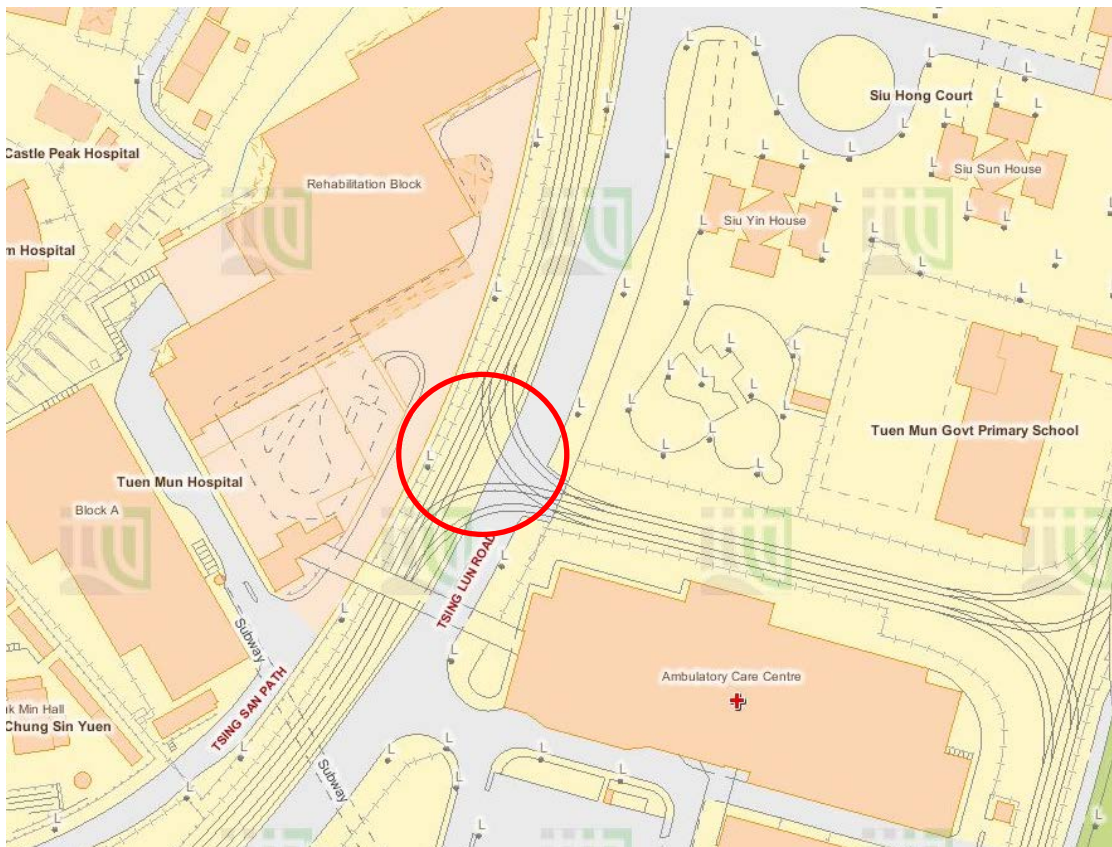




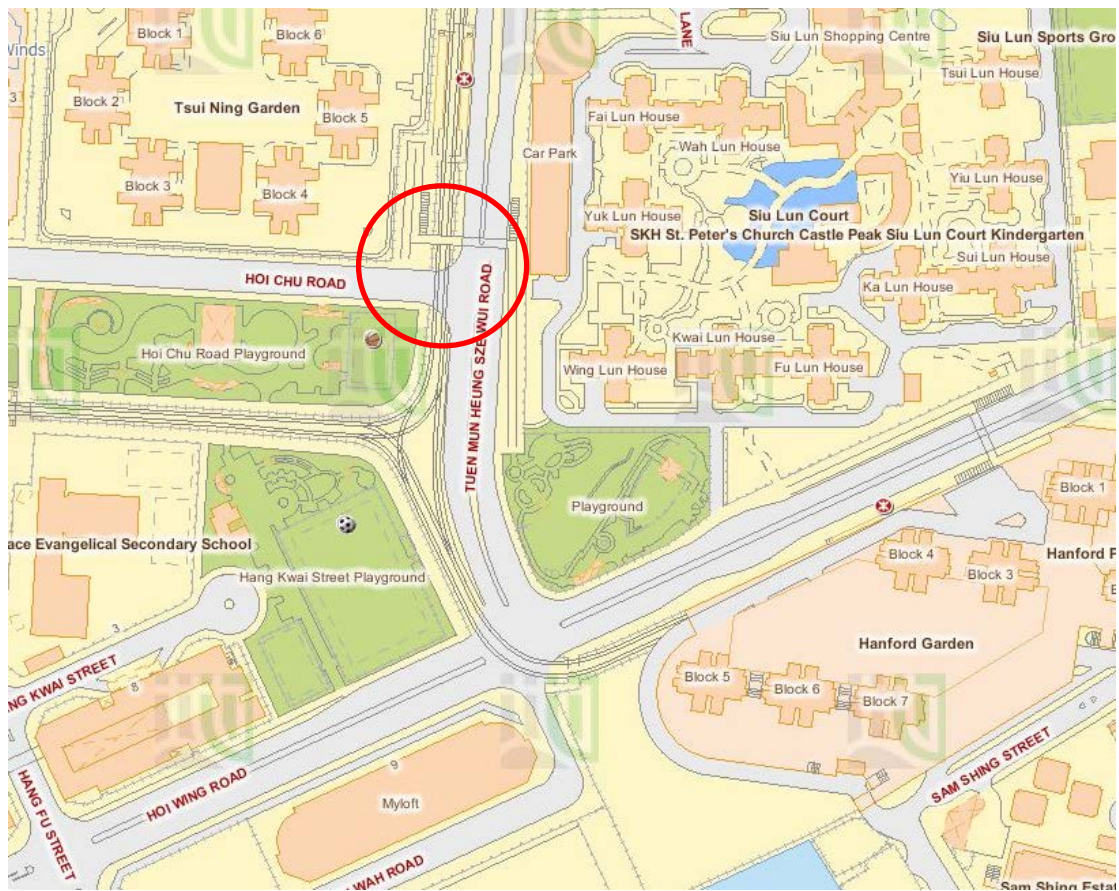
9. Junction between Kuk Ting Street/ Tai Tong Road and Castle Peak Road- Yuen Long Section



10. Tsing Lun Road (near Tuen Mun Government Primary School)



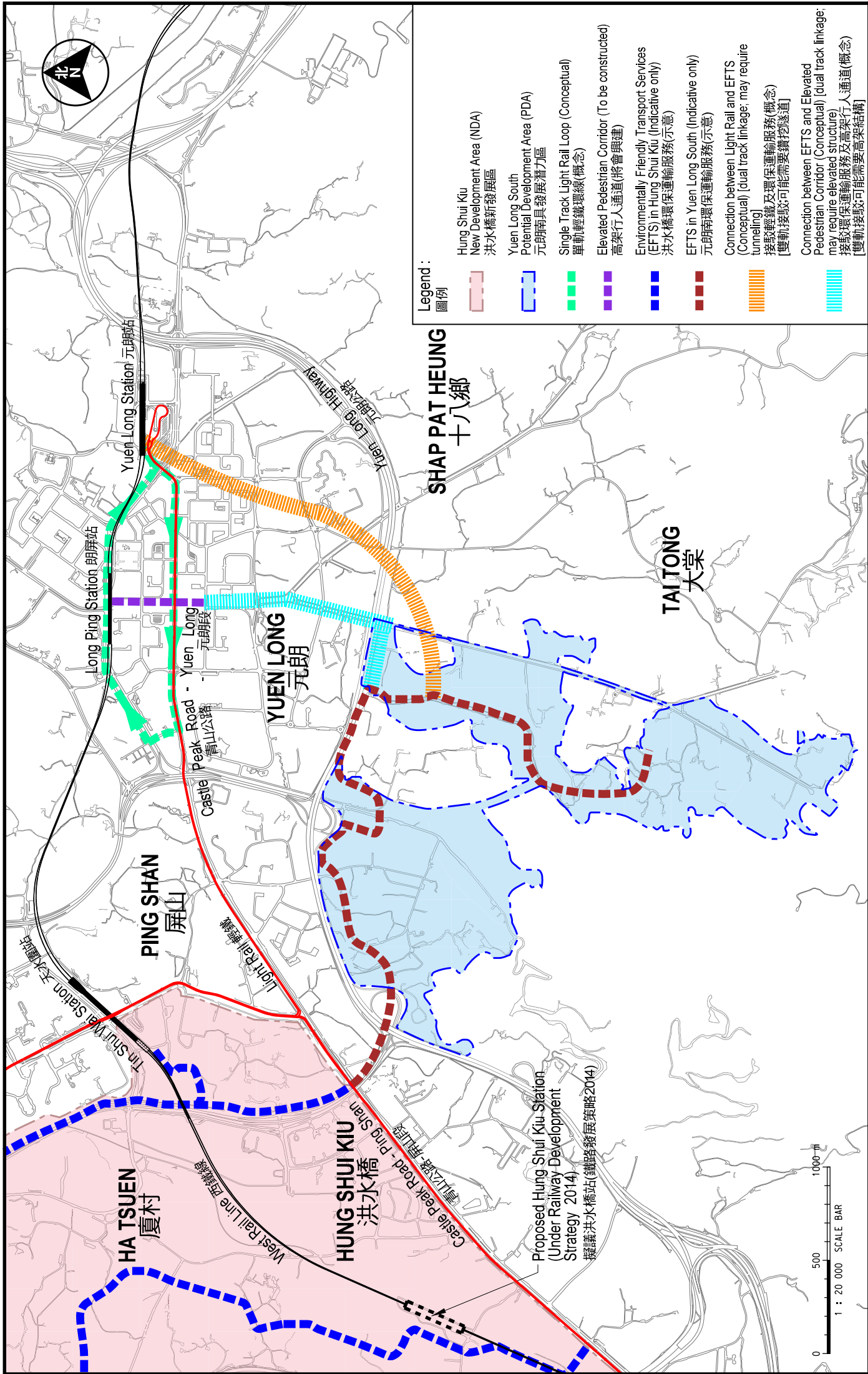
# 11. Junction between Hoi Chu Road/ Tuen Mun Heung Sze Wui Road



**Annex 7****Preliminary assessment of technical feasibility of segregating Light Rail tracks  
from roads/footpaths at 11 busy junctions**

<b>Name of Junction</b>	<b>Technical Feasibility of Segregating Light Rail Tracks from Roads/Footpaths</b>
Junction between Tin Shui Road and Tin Tan Street (near Tin Shui Wai Hospital)	Very difficult
Junction between Tin Shui Road and Tin Wing Road (near Tin Shui Wai Hospital)	Very difficult
Junction between Tin Yiu Road and Tin Ho Road	Very difficult
Junction between Tin Shui Road and Tin Sau Road	Very difficult
Junction between Tin Wing Road and Tin Shing Road	Very difficult
Junction between Kuk Ting Street/ Tai Tong Road and Castle Peak Road Yuen Long Section	Very difficult
Junction between Tin Fuk Road/ Tin Yiu Road and Ping Ha Road	Basically not feasible
Junction between Fung Cheung Road and Castle Peak Road Yuen Long Section	Basically not feasible
Junction between On Lok Road and Castle Peak Road Yuen Long Section	Basically not feasible
Tsing Lun Road (near Tuen Mun Government Primary School)	Basically not feasible
Junction between Hoi Chu Road and Tuen Mun Heung Sze Wui Road	Basically not feasible





Alteration of Light Rail System and Connection with New Development Areas  
(Preliminary Conceptual Layout)  
輕鐵改道與新發展區接駁(初步概念圖)

**Amendment on the eligibility requirement of driving licence  
for public light bus and taxi etc.**

According to section 8(1) and (1A) of the Road Traffic (Driving Licences) Regulations, applicants for driving licence to drive taxi, public/private light bus, public/private bus, franchised bus, medium/heavy goods vehicles and special purpose vehicles (hereinafter referred to as “commercial vehicles”) must have been holding the licence to drive a private car or light goods vehicles for at least 3 years<sup>1</sup>. In response to the transport trade’s request to ameliorate the lack of drivers, the Transport Department (“TD”) has conducted a review and proposes to set the relevant driving licence holding period requirement at least one year<sup>2</sup>, while maintaining the other eligibility requirements for driving licences for commercial vehicles (e.g. the age requirement of 21 years-old).

2. Having considered to the existing requirement for applicants for driving licences for commercial vehicles to pass the TD’s rigorous driving test which ensures fitness and competence to drive the relevant vehicles, as well as the transport trade’s demand to ameliorate the lack of drivers, the TD considers the proposal an appropriate arrangement. The TD has already consulted the respective transport trades and the Road Safety Council. The transport trade generally welcomes the proposal, and considers it a useful measure to mitigate the lack of drivers. The Road Safety Council also has no in-principle objection to the proposal.

3. To raise the service quality of passenger carrying public vehicles, instill a stronger sense of road safety and good driving behaviour in new drivers as well as promoting their understanding of the basics of passenger service and customer service techniques, applicants for full driving licences to drive public light bus are required to attend and pass a pre-service course designated and approved by the Commissioner since June 2015. The TD now proposes to extend the relevant requirement to applicants for full driving licence to drive taxi and non-franchised public bus to further enhance their service standard. In view of the relatively low traffic accident involvement rate of other passenger carrying vehicles such as private light bus/bus, the TD proposes to extend the pre-service course requirement to taxi and non-franchised public bus<sup>3</sup> at the current stage. In future, we will review the need to extend the requirement to other passenger carrying vehicles when necessary.

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<sup>1</sup> If the full driving licence for private car or light goods vehicle was issued upon completion of a probationary driving period (of at least one year), the relevant driving licence holding period is at least 2 years.

<sup>2</sup> If the applicant has already completed a probationary driving period of at least one year, he or she will only need to hold a full driving licence for private car or light good vehicle at the time of application.

<sup>3</sup> The franchised bus operators have been providing detailed and strict training courses to their drivers. We do not consider it necessary to require drivers of franchised buses to take part in pre-service course for now.

**Proposed Revised Guidelines on  
Working Hours of Green Minibus Drivers**

- For every 9 hours of duty, GMB drivers should have a rest time (including meal break) of at least 45 minutes, of which not less than 10 minutes should be within the first 4 hours of duty;
- Maximum duty of GMB drivers (including all rest times) should not exceed 14 hours per day;
- Driving duty of GMB drivers (i.e. maximum duty less all rest times) should not exceed 11 hours per day;
- GMB drivers working for a duty of not less than 9 hours in a working day should be provided with a meal break; and
- The break between 2 consecutive working days should not be less than 10 hours.

**Motions on personalised and point-to-point transport services  
passed at the Panel on Transport meeting on 21 April 2017**

**1. The first motion**

Moved by: Hon Frankie YICK Chi-ming

Seconded by: Hon YIU Si-wing, Hon CHUNG Kwok-pan, Dr Hon Junius HO Kwan-yiu and Hon LAU Kwok-fan

Given that the scheme introduced by the Government to issue 600 new “franchised taxi” licences fails to address the demand of the general public for enhancing the overall taxi service, while issuing 600 additional “franchised taxi” licences will only further aggravate the road traffic congestion problem, and the absence of any prior consultation with the taxi trade and the various political parties/groups of the Legislative Council (“LegCo”) has drawn criticisms from the various political parties/groups of LegCo and a strong backlash from the taxi trade, this Panel now solemnly requests the Government to shelve the “franchised taxi” scheme and expeditiously form a working group with the taxi trade and the various political parties/groups of LegCo for formulating a comprehensive proposal to comprehensively upgrade the taxi service level.

**2. The second motion**

Moved by: Hon LUK Chung-hung

Seconded by: Hon HO Kai-ming

This Panel supports the Government to upgrade the service level of the taxi trade, but before introducing the franchised taxi service, the Administration should communicate more with the taxi trade and needs to stipulate that an employer-employee relationship between franchised taxi operators and their drivers is an essential prerequisite, otherwise it is difficult to enhance service quality through improving the livelihood of drivers and employment protection; in the meantime, the Government also needs to make overall improvement to the operating environment of the trade, including relaxing the restrictions on picking up and dropping off passengers, and stepping up efforts to combat illicit acts involving “discount taxis” and “white licence cars” with a view to ensuring and enhancing the quality of taxi service in various aspects.

**3. The third motion**

Moved by: Hon Charles Peter MOK

This Panel is strongly dissatisfied with the quality of taxi service in Hong Kong. Along with the growth in the population in Hong Kong as well as the demand for local transport, and given the permanent and transferrable nature of taxi licences, Hong Kong’s taxi licences have evolved into an investment tool, while taxi drivers have to pay high rentals for taxi licences, and there is hardly any incentive for them to improve their services. This Panel urges the Government to provide more personalised and point-to-point transport services, promote market competition,



reform the licensing system for Hong Kong taxis, and introduce franchised taxis with time-limited licences which are subject to regular renewal. This Panel also proposes that the Government should review the service licences of hire cars and introduce an appropriate regulatory regime for Internet car calling services in order to improve service quality as a whole and provide the public with diversified choices.

#### **4. The fourth motion**

Moved by: Hon Michael TIEN Puk-sun

Given that introduction of franchised taxis by the Government to expand the customer base and improve the service quality of the taxi trade will however definitely increase the traffic flows on the road, while giving priority to the conversion of existing taxi licences for operating new franchised taxis can be a win-win solution, conversion of existing taxi licences should therefore be included as one of the necessary conditions. As it is essential to ensure service quality, yet the Government's proposal of a five-year franchise has limited effect on the assurance of service quality, this Panel urges the Government to set up a "Steering and Assessment Committee on Premium Taxis ("the Committee"), with minor representation from the trade in its composition, to be tasked with vetting applications for franchises to operate franchised taxis. The conditions for application should include but not limit to the installation of in-car closed-circuit television system. The franchise may be granted upon satisfaction of the relevant conditions. The Committee should be empowered to revoke, at any time, a franchise if the franchised taxi driver concerned delivers a poor service repeatedly without making improvement, so that franchisees will be mindful of any investment losses arising therefrom.

#### **5. The fifth motion**

Moved by: Hon LAU Kwok-fan

In face of the increasing public demand, both in terms of quality and quantity, for personalised and point-to-point transport services, this Panel requests the Government to assist the taxi trade in improving service quality, enhance the training of practitioners, introduce an appropriate service quality monitoring mechanism for the trade, and review the policy and legislation relating to hire cars, so that the rapidly developing car calling service mode can be operated under appropriate regulation to meet the needs of the public.

