Chapter 14

Transport

Hong Kong's public transport system, widely regarded as one of the best in the world, provides comprehensive, comfortable and safe travel options at affordable prices.

The Transport and Housing Bureau, headed by the Secretary for Transport and Housing, formulates policies on Hong Kong's internal and external transport, including land transport, maritime transport and logistics, and air services. The bureau is supported by the Civil Aviation Department, Highways Department, Marine Department and Transport Department.

Transport Strategy and Policy Objectives

The government aims to provide a safe, efficient, reliable and environment-friendly transport system that meets the community's economic, social and recreational needs, and is capable of supporting sustainable development in Hong Kong. It does this by:

- expanding and improving the transport infrastructure in a timely manner;
- improving the coordination and, together with the operators, the quality of public transport services; and
- managing road use to reduce congestion and promote safety.

The government ensures these objectives are environmentally sustainable by supporting environmental improvement measures, and bases its public infrastructure plans on sustainable development principles. The environmental impact of new transport projects, during both construction and operation, is monitored closely and environmental mitigation measures are implemented where necessary.

Together with transport operators, the government also acts to reduce the adverse impact of road-based transport on the environment, including rationalising bus routes and deploying more environment-friendly buses.

Rail Transport

MTR

Railways are safe, reliable, efficient, comfortable and environment-friendly mass carriers. Hong Kong's railway system forms the backbone of the public transport system and is essential to the city's continued economic, social and land development. It carried a daily average of some 5.1 million passengers in 2019, accounting for about 41 per cent of public transport passenger travel and about 54 per cent of land-based passenger trips to the Mainland.

The railway system is operated and managed by the MTR Corporation Limited (MTRCL), a publicly listed company of which the government is the majority shareholder. It comprises:

- the Kwun Tong Line (Tiu Keng Leng-Whampoa)
- the Tsuen Wan Line (Tsuen Wan-Central)
- the Island Line (Chai Wan-Kennedy Town)
- the Tseung Kwan O Line (Po Lam/Lohas Park-North Point)
- the South Island Line (South Horizons-Admiralty)
- the Tung Chung Line (Hong Kong-Tung Chung)
- the Disneyland Resort Line (Sunny Bay-Disneyland Resort)
- the Airport Express (Hong Kong-AsiaWorld-Expo)
- the East Rail Line (Hung Hom-Lo Wu/Lok Ma Chau)
- the West Rail Line (Tuen Mun-Hung Hom)
- the Ma On Shan Line (Wu Kai Sha-Tai Wai)
- the Hong Kong Section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL)
- the Light Rail

The 256.9km system is made up of 94 heavy rail stations, including a 35.2km Airport Express connecting the urban areas to Hong Kong International Airport and AsiaWorld-Expo, and 68 Light Rail stops spread across a 36.2km network in the north-western New Territories. The entire system is complemented by Light Rail feeder buses.

The MTRCL also provides three types of cross-boundary train services. Intercity through-train services operate from Hong Kong's Hung Hom Station to Beijing, Shanghai and cities in Guangdong, and carried a daily average of 5,200 cross-boundary travellers in 2019. The Lo Wu and Lok Ma Chau stations, which are connected by the East Rail Line, allow travellers to reach the Shenzhen control points and together handled a daily average of 285,400 cross-boundary

travellers in 2019. The Hong Kong Section of the XRL is a 26km long underground rail corridor running from West Kowloon to Shenzhen, where it connects to the Mainland section of the XRL. It provides direct high-speed rail travel between Hong Kong West Kowloon Station and 58 Mainland destinations, comprising the six short-haul destinations of Futian, Shenzhenbei, Guangmingcheng, Humen, Qingsheng and Guangzhounan, and 52 long-haul destinations including Beijing, Shanghai, Tianjin, Chongqing, Changsha, Fuzhou, Guiyang, Hangzhou, Kunming, Nanchang, Nanning, Shijiazhuang, Wuhan, Zhengzhou, Xiamen, Shantou and Zhaoqing. The West Kowloon Station handled a daily average of nearly 46,400 travellers in 2019.

Legend: Existing railway Shenzhen Express Rail Link - Rail project under construction Sheung Shui Shekou Hong Kong Section of Guangzhou-Shenzh Hong Kong Express Rail Link **New Territories** Sha Tin Tsing Yi AsiaWorld-Expo Hong Kong West Kowloon Stati Tung Chung Hong Kong Lantau Island Chai War Island Ap Lei Chau

Map of Railway Network and Railway Project under Construction

Future Railway Development

The 17km Shatin to Central Link will have 10 stations, namely Tai Wai, Hin Keng, Diamond Hill, Kai Tak, Sung Wong Toi, To Kwa Wan, Ho Man Tin, Hung Hom, Exhibition Centre and Admiralty, and will link up a number of existing railways forming two railway corridors. The East West Corridor will connect Tai Wai Station on the Ma On Shan Rail Line with the West Rail Line in Hung Hom via Diamond Hill and south-eastern Kowloon to form the Tuen Ma Line. The North South Corridor will extend the East Rail Line from Hung Hom Station across the harbour to

Admiralty Station on Hong Kong Island. Construction started in 2012. Upon commissioning, the Shatin to Central Link will handle about 1.1 million passenger trips per day and save an average of about 75 million hours in travelling time per year. It will provide a train service for districts not currently served by the railway network, such as Hin Keng, Kai Tak and To Kwa Wan, and increase the railway capacity between Sha Tin and Hung Hom and across the harbour, relieving the burden on existing rail lines in urban Kowloon and on Hong Kong Island.

The government's Railway Development Strategy 2014 provides a framework for planning the expansion of the railway network up to 2031. The strategy recommends undertaking seven railway projects in view of the transport demand, cost-effectiveness and development needs of new development areas. These seven projects are the Northern Link and Kwu Tung Station, Tuen Mun South Extension, East Kowloon Line, Tung Chung West Extension, Hung Shui Kiu Station, South Island Line (West) and North Island Line.

Tramway

Electric trams have been running on Hong Kong Island since 1904. Hong Kong Tramways runs seven routes on 13km of double tracks along the northern shore of Hong Kong Island between Kennedy Town and Shau Kei Wan, and about 3km of single track round Happy Valley.

The company's 167 trams, including one sightseeing tram, one air-conditioned tram, three trams for tourists and private hire and three special maintenance trams, make up the world's largest fleet of double-decker trams in operation. The tramway recorded a daily average of about 149,400 passenger trips in 2019.

Road Transport

Road Network

The territory has 2,127km of roads, 1,357 road structures, 21 road tunnels including three immersed-tube cross-harbour tunnels, and five major cable-supported bridges.

Tunnels

The government owns 18 road tunnels, all managed and operated by private companies under management contracts: the Cross-Harbour Tunnel, the Eastern Harbour Crossing, and the Lion Rock, Aberdeen, Kai Tak, Shing Mun, Tate's Cairn, Tseung Kwan O, Scenic Hill, Airport, Lung Shan, Cheung Shan, Central-Wan Chai Bypass, Cheung Tsing, Tai Wai, Sha Tin Heights, Eagle's Nest and Nam Wan tunnels. The Cheung Tsing, Central-Wan Chai Bypass, Lung Shan, Cheung Shan, Kai Tak, Nam Wan and Airport tunnels, as well as the Scenic Hill Tunnel that forms part of the Hong Kong-Zhuhai-Macao Bridge (HZMB) Hong Kong Link Road, are toll-free.

Two other tunnels are operated by private companies under build-operate-transfer arrangements: the Western Harbour Crossing and Tai Lam Tunnel. The franchises of these tunnels will expire in 2023 and 2025 respectively.

There is also a private tunnel, the Discovery Bay Tunnel Link, which is open only to vehicles taking goods or providing services to Discovery Bay.

Bridges

The five major cable-supported bridges are Tsing Ma, Kap Shui Mun, Ting Kau, Stonecutters and a section of Shenzhen Bay Bridge. Only the first two levy toll charges and carry both road and rail traffic. Tsing Ma Bridge, with a main span of 1,377m, is one of the world's longest span suspension bridges.

The HZMB includes the Main Bridge, Hong Kong Port and Hong Kong Link Road.

The Tuen Mun-Chek Lap Kok Link is a dual two-lane carriageway of about 9km long connecting Tuen Mun with the HZMB Hong Kong Port and North Lantau. It consists of the Southern Connection, fully commissioned in November 2018, and the Northern Connection, anticipated to be completed by end-2020 at the earliest.

Tsing Ma Control Area

The Tsing Ma Control Area is a 21km expressway network which covers mainly Tsing Kwai Highway, Cheung Tsing Tunnel, and the Ting Kau, Tsing Ma and Kap Shui Mun bridges. An average of 97,400 vehicles per day used Tsing Ma Bridge and Kap Shui Mun Bridge in 2019.

Tsing Sha Control Area

The Tsing Sha Control Area is a 13km expressway network. It consists of Stonecutters Bridge, Nam Wan Tunnel, Eagle's Nest Tunnel, Sha Tin Heights Tunnel and Tai Wai Tunnel. In 2019, an average of 61,600 vehicles per day used this expressway.

Road Boundary Crossings

There are five road-based boundary crossings between Hong Kong and the Mainland, at Lok Ma Chau, Man Kam To, Sha Tau Kok, Shenzhen Bay Port and the HZMB Hong Kong Port. Cross-boundary travellers can also use the HZMB to travel to and from Macao. All the five crossings open daily for goods and passenger vehicles. The Lok Ma Chau Control Point and HZMB Hong Kong Port operate round the clock. The Sha Tau Kok and Man Kam To control points are open from 7am to 10pm. The Shenzhen Bay Port is open from 6.30am to midnight.

In 2019, the control points of Lok Ma Chau, Man Kam To, Sha Tau Kok, Shenzhen Bay Port and HZMB Hong Kong Port respectively recorded on average 20,200, 4,200, 2,200, 12,700 and 4,200 daily vehicle trips, and 68,000, 9,900, 7,300, 105,600 and 53,200 daily passenger trips. The total number of cross-boundary passengers travelling by rail, road and sea decreased 3.5 per cent to 691,200 a day. Most travellers using the road-based control points take cross-boundary coaches, shuttle buses or local public transport, which carried an average of 64,400, 60,100 and 85,700 passengers a day respectively.

Future Road Network Development

The Central-Wan Chai Bypass and Island Eastern Corridor Link, forming part of the east-west strategic route along the northern shore of Hong Kong Island, aims to alleviate traffic congestion at Connaught Road Central/Harcourt Road/Gloucester Road and shorten the travel time between Central and North Point to five minutes. This 4.5km dual three-lane trunk road with a 3.7km tunnel was fully commissioned in February.

The Liantang/Heung Yuen Wai Boundary Control Point will connect with the Shenzhen Eastern Corridor, providing efficient access to eastern Guangdong, Fujian and Jiangxi provinces via the Huiyan and Shenshan expressways. Upon its commissioning, travel between Hong Kong and eastern Shenzhen, eastern Guangdong and the nearby provinces will be shortened significantly, facilitating regional cooperation and development. Heung Yuen Wai Highway connects the new control point to Fanling Highway, whose majority section between Fanling Highway and Lin Ma Hang Road Interchange opened to the public on 26 May, bringing early improvement to local traffic. It provides residents living in the Sha Tau Kok, Ta Kwu Ling and Ping Che areas with a direct and convenient route to Fanling Highway, facilitating their access to Sheung Shui, Tai Po, Kowloon and other districts.

The widening of Fanling Highway between Tai Hang and Wo Hop Shek Interchange from a dual three-lane to a dual four-lane carriageway was commissioned in August.

The Central Kowloon Route is a 4.7km dual three-lane route with a 3.9km tunnel connecting West Kowloon to Kowloon Bay and the Kai Tak Development in East Kowloon. It is scheduled for completion around 2025. Upon commissioning, peak-hour journeys between Yau Ma Tei and Kowloon Bay will take about five minutes, down from the current half an hour.

The Tseung Kwan O-Lam Tin Tunnel is to cope with traffic demand arising from further developments in Tseung Kwan O and Kwun Tong and ease the traffic load on the existing Tseung Kwan O Tunnel. It is a 3.8km dual two-lane highway with a 2.2km main tunnel connecting Tseung Kwan O with the Eastern Harbour Crossing and Cha Kwo Ling Road in Kwun Tong. It will provide an additional main connection between Tseung Kwan O and East Kowloon. Subject to review, the project is planned for completion in end-2021.

The Trunk Road T2 and Cha Kwo Ling Tunnel is a 3.4km dual two-lane trunk road with a 2.1km subsea tunnel passing under the seabed of Kwun Tong Typhoon Shelter. It will link up with the Central Kowloon Route on the west and the Tseung Kwan O-Lam Tin Tunnel on the east, forming the strategic Route 6 to provide an express road link between Tseung Kwan O and Kowloon West. The entire Route 6 is expected to be commissioned around 2026.

The Cross Bay Link will connect the Tseung Kwan O-Lam Tin Tunnel with Wan Po Road in Area 86 of Tseung Kwan O. It is a 1.8km dual two-lane carriageway with a 1km marine viaduct across Junk Bay, aimed at providing alternative access to the south-eastern part of Tseung Kwan O. Construction is scheduled for completion in 2022.

The Hiram's Highway improvement stage 1 project, under which the single carriageway is widened to a dual two-lane carriageway at the section between Hiram's Villa and Marina Cove, is expected to be commissioned by end-2020. Stage 2 will cover the section between Marina Cove and Sai Kung Town Centre, and is under planning.

The dual two-lane Tai Po Road (Sha Tin Section) between Sha Tin Plaza near Sha Tin Rural Committee Road and Man Wo House of Wo Che Estate near Fo Tan Road is being widened to a dual three-lane carriageway. Construction is slated for completion in the second half of 2023.

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Transport

The government is carrying out a further investigation study to ascertain the feasibility of the Tuen Mun Western Bypass.

The proposed Trunk Road T4 is a dual two-lane carriageway that will connect Sha Tin Road to Tsing Sha Highway and Shing Mun Tunnel Road, and will become a bypass to Tai Po Road (Sha Tin Section) to cater for long-term traffic flow in Sha Tin. An investigation study will be completed in 2021.

The single-lane Lin Ma Hang Road is proposed to be widened to a single two-lane carriageway between Ping Yuen River and Ping Che Road (Western Section), and between Tsung Yuen Ha and Lin Ma Hang (Eastern Section). A tender assessment for the Western Section and a review for the Eastern Section are in progress.

The proposed Fanling Bypass (Eastern Section) is a dual two-lane carriageway of about 4km, connecting the Fanling North new development area to Fanling Highway. The tender exercise is under way. The Fanling Bypass (Western Section) is under a design and construction consultancy study that began in December.

The government is carrying out a feasibility study to establish the technical feasibility and scope of Route 11, intended to link up Yuen Long and North Lantau, to meet traffic demand arising from developments in the north-western New Territories.

Buses

Franchised Buses

Franchised buses are the largest road-based carriers, accounting for 32.9 per cent of total daily public transport volume. Bus services in Kowloon and the New Territories are largely provided by the Kowloon Motor Bus Company (1933) (KMB). At the year end, KMB was operating 354 bus routes in Kowloon and the New Territories and 64 cross-harbour routes, 51 of which were run jointly with another operator. KMB had a licensed fleet of 4,065 buses, all of which were wheelchair-accessible low-floor vehicles. It recorded an average of 2.8 million passenger trips per day in 2019.

Bus services on Hong Kong Island are provided mainly by New World First Bus Services (NWFB) and Citybus (CTB). At the year end, NWFB was operating 47 bus routes on Hong Kong Island, 13 in Kowloon and Tseung Kwan O and 33 cross-harbour routes, 28 of which were run jointly with KMB. NWFB had a licensed fleet of 685 buses, all of which were wheelchair-accessible low-floor vehicles. It recorded a daily average of 458,000 passenger trips in 2019.

CTB operates two bus networks under two franchises. One covers 52 bus routes on Hong Kong Island, two in Kowloon, one in the New Territories and 34 cross-harbour routes, 23 of which are operated jointly with KMB. The other franchise covers a network of 28 routes linking the urban areas with North Lantau and the airport, and one route for West Kowloon Station. At the year end, CTB had a licensed fleet of 992 buses, all of which were wheelchair-accessible low-floor vehicles. It recorded 611,400 passenger trips on average per day in 2019.

Bus routes connecting the New Territories with North Lantau and the airport are run mainly by Long Win Bus Company. It was operating 36 routes at the year end with a licensed fleet of 279, all of which were wheelchair-accessible low-floor buses. The company recorded an average of 125,500 passenger trips a day in 2019.

The New Lantao Bus Company (1973) was operating 26 routes on Lantau Island and one route for Shenzhen Bay Port at the year end. It had a licensed fleet of 156 buses, of which 98 were wheelchair-accessible low-floor vehicles. There were 96,600 passenger trips on average daily in 2019.

The government works with these bus operators to rationalise their services, so as to enhance network efficiency, improve service quality, alleviate traffic congestion and improve roadside air quality.

Non-franchised Buses

Non-franchised bus services play a supplementary role in the public transport system. They relieve heavy demand on regular public transport services primarily during peak hours, fill gaps which cannot be met by regular public transport and provide tailor-made services to specific groups of passengers. They serve mainly tourists, estate residents, employees and students. At the year end, there were 7,187 registered non-franchised public buses.

Public Light Buses

The number of public light buses (PLBs) has been capped at 4,350 since 1976. These vehicles handle 1.77 million passenger trips per day.

There are two types of PLBs – green minibuses (GMBs) and red minibuses (RMBs). GMBs provide scheduled services with fixed routes, fares, vehicle allocation and timetables as stipulated by the Transport Department. At the year end, 3,306 GMBs were operating 355 routes, recording a daily average of 1,482,500 passenger trips. RMBs are not required to operate on fixed routes or timetables and may set their own fares but have limited operating areas. There were 1,044 RMBs in operation at the year end, recording a daily average of 282,700 passenger trips.

Taxis

At the year end, there were 15,250 red urban taxis, 2,838 green New Territories taxis and 75 blue Lantau taxis. These carried about 854,100 passengers per day in 2019. There were about 780 taxi stands and designated taxi pick-up/drop-off points.

Private Cars

At the year end, there were 573,932 licensed private cars, of which 37,349 were new vehicles registered during 2019.

Road Transport Management

Effective transport management is essential for the safe and orderly operation of the transport system. Modern technology is used in a variety of ways to enhance transport management.



Licensing

At the year end, there were 2,326,760 licensed drivers, 787,983 licensed private vehicles and 6,383 government vehicles. The licensed private vehicles comprised 58,937 motorcycles and motor tricycles, 573,932 private cars, 18,132 taxis, 13,328 public buses, 729 private buses, 4,315 PLBs, 3,457 private light buses, 71,610 light goods vehicles, 35,322 medium goods vehicles, 6,393 heavy goods vehicles and 1,828 special purpose vehicles. On average, 4,603 new learners' driving licences were issued per month.

Driver Improvement Scheme

The Road Traffic Ordinance and the Road Traffic (Driving-offence Points) Ordinance require that offenders who have been convicted of serious traffic offences and traffic offenders who have accumulated 10 driving-offence points within two years shall attend a driving improvement course. In 2019, about 24,900 people attended the course, about 23,700 of whom were on a mandatory basis. About 93 per cent of participants who attended the course did not incur new driving-offence points within six months of completing the course.

Pre-service Course

Applicants for a full driving licence to drive a PLB must complete a pre-service course. In 2019, about 1,400 people attended the course. The government was exploring an extension of the mandatory pre-service course requirement to applicants for a full driving licence to drive a taxi or public bus, in order to enhance the safety and service quality of these passenger vehicles. Eligibility criteria for the commercial driving licence would also be relaxed by shortening the licence-holding period.

Vehicle Examination

Vehicles are examined routinely to ensure they are safe, roadworthy and properly maintained. Commercial vehicles are checked annually at the four government vehicle examination centres. In 2019, these centres conducted 221,000 vehicle examinations. In addition, 3,550 spot checks were carried out on franchised buses to determine their safety, roadworthiness and service standards.

Private cars over six years old and light goods vehicles not exceeding 1.9 tonnes are inspected annually at 40 designated car testing centres run by the private sector. These centres perform 355,000 vehicle examinations a year.

All imported vehicles must be examined to ensure the statutory requirements are met before they can be registered and licensed. During the year, 1,173 vehicle types were approved.

Intelligent Transport Systems

Smart mobility is an integral part of the government's transport policy. The government develops Intelligent Transport Systems under a three-pronged approach: dissemination of traffic information to the public, traffic control and support for traffic enforcement. The systems help road users receive real-time traffic information, improve traffic monitoring and control, and strengthen the management of incidents.

Real-time information is available for free through the Transport Department's Road Traffic Information Service and the government's public-sector information portal, data.gov.hk. The department publishes an annual open data plan on its website which lists the datasets uploaded to the portal and other datasets to be released in the next three years. As at end-2019, the data included traffic snapshots captured by fixed closed-circuit television (CCTV) cameras and traffic detectors at 374 strategic locations, estimated journey times of various cross-harbour routes and major routes between the New Territories and Kowloon at critical diversion points, traffic speed maps and special traffic news.

The department's all-in-one mobile application HKeMobility and website provide real-time traffic information, public transport information and walking and driving routes. People without mobile data services, such as tourists, may make use of 18 Hong Kong Traveller Information Kiosks installed at 15 locations, including the arrival hall of the airport's Terminal 1, the Hong Kong Convention and Exhibition Centre, Peak Galleria and public transport interchanges.

A computerised Area Traffic Control system, connected to almost all traffic signal junctions, is responsive to changing road conditions. The system enables a series of green signals to light up for vehicles passing through the signalised junctions, thus achieving smooth traffic flow by minimising stops and delays. It was linked to 1,880 out of 1,916 road junctions operating with traffic signals at the year end, and will be connected to the remaining junctions progressively. To save costs and conserve the environment, light-emitting diode traffic signals are adopted.

Traffic control and surveillance facilities, such as vehicle detectors, CCTVs, variable message signs, variable speed limit signs and lane control signals, are in place on trunk highways. These facilities are provided in all tunnels and the respective approach roads, the HZMB Hong Kong Link Road, the Tsing Ma and Tsing Sha control areas, Airport Road, Shenzhen Bay Bridge and Tolo Highway, and are being installed on major highways under construction or reconstruction. CCTVs and variable message signs are also found on Kong Sham Western Highway, San Tin Highway, San Sham Road, Tsing Long Highway, Tuen Mun Road, West Kowloon Highway and Yuen Long Highway. About 1,200 traffic detectors and 19 sets of a new Journey Time Indication System are being installed on strategic routes and major roads. A Traffic and Incident Management System, launched in end-2017, further supports the management of traffic and transport incidents and dissemination of information.

To enforce traffic rules, fixed digital red-light cameras are in operation at 203 signalised junctions to combat red-light jumping, while 36 digital speed enforcement cameras are deployed on a rotational basis in 179 fixed camera housings to combat speeding.

Electronic Toll Collection

Except for the Discovery Bay Tunnel Link, all tolled tunnels and the Lantau Link have automatic toll collection (autotoll) systems, allowing motorists with autotoll tags on their vehicles to drive through designated toll booths without having to stop to pay. During the year, 49.5 per cent of motorists used autotoll.

A 'stop-and-go' electronic payment service lets motorists pay tolls with Octopus cards and certain contactless credit cards. As at end-2019, the service was provided at the Cross-Harbour,

Shing Mun, Aberdeen, Lion Rock and Tseung Kwan O tunnels, the Eastern Harbour Crossing, the Lantau Link and the Sha Tin Heights-Eagle's Nest-Tai Wai tunnels.

Parking

Where there is demand and traffic conditions permit, on-street parking is provided to meet the short-term parking needs of motorists. At the year end, there were about 18,000 parking spaces with electronic parking meters installed and about 16,600 non-metered on-street parking spaces.

The Transport Department owns 11 multistorey public car parks across the city and an open-air public car park for coaches at Wong Tai Sin Public Transport Terminus. These are run by two private operators under government contracts and provide about 5,500 public parking spaces.

In addition to government car parks, about 198,700 off-street public parking spaces are provided by the Airport Authority Hong Kong at the airport, the Housing Department and the Link Reit in some public housing estates, and the private sector in multistorey commercial/residential buildings and open-air public car parks.

Park-and-ride facilities are operated by the MTRCL at Choi Hung Station on the Kwun Tong Line; Hong Kong, Kowloon and Tsing Yi stations on the Airport Express; Hung Hom Station on the East Rail Line; Kam Sheung Road and Tsuen Wan West stations on the West Rail Line; Ocean Park Station on the South Island Line and West Kowloon Station on the XRL, and by private operators at commercial car parks located near Olympic Station on the Tung Chung Line, Wu Kai Sha Station on the Ma On Shan Line, Tuen Mun Station on the West Rail Line and Hang Hau Station on the Tseung Kwan O Line. The government also provides a park-and-ride scheme at the public car park of Po Shek Wu Estate near Sheung Shui Station.

To help motorists find parking spaces, the parking vacancy information of about 340 government and non-government public car parks was available on the Transport Department's HKeMobility mobile application and Hong Kong eRouting website as at end-2019. The data of some of these car parks is also available on the data.gov.hk portal. The government encourages more car park operators to release parking vacancy information.

Road Safety

There were 16,102 road traffic accidents involving injuries in 2019, of which 1,831 were serious and 107 were fatal. The total number of fatal and serious road traffic accidents increased 8.3 per cent compared with 2018.

Pedestrian Transport

Walk in Hong Kong

To promote 'Walk in HK', the government encourages people to walk more under four themes: 'Make it smart', 'Make it connected', 'Make it enjoyable' and 'Make it safe'. In 2019, the Transport Department continued to enhance pedestrian connectivity between Wan Chai and Sheung Wan; extended the walking route search function, including barrier-free routes, in the HKeMobility mobile application to Yau Tsim Mong; conducted stage 2 of a public engagement

exercise on enhancing walkability; completed the synchronisation of traffic lights at 18 staggered pedestrian crossings; and continued constructing shelters above selected public walkways.

Hillside Escalator Links and Elevator Systems

To help pedestrians access hilly terrain, a newly constructed hillside escalator link and elevator system at Waterloo Hill in Kowloon City was opened in November 2019. A similar project at Cheung Hang Estate in Tsing Yi is scheduled for opening in February 2020, while main construction works for another project between Castle Peak Road and Kung Yip Street in Kwai Chung started in December 2019 for completion by the second quarter of 2023. The Transport Department has substantially completed the review of an assessment mechanism established in 2009 for hillside escalator link and elevator system proposals. It is screening and scoring 114 proposals received in the past few years according to the revised mechanism, with a view to consulting the respective District Councils and completing the entire scoring process by 2020 in order to come up with a new batch of proposals on building more hillside escalators and elevators.

Improving Pedestrian Environment

In 2019, the Highways Department completed the detailed design for a proposed elevated pedestrian corridor in Yuen Long Town connecting with Long Ping Station. It is reviewing proposed pedestrian environment improvement schemes in Mong Kok and Causeway Bay, taking into account the latest developments in the areas.

Universal Accessibility

Where technically feasible, barrier-free access facilities such as lifts and ramps may be installed at footbridges, elevated walkways and subways that span public roads. The Highways Department completed 38 retrofitting items during the year.

The government announced in the 2019 Policy Address that a special scheme would be launched under the Universal Accessibility Programme to retrofit lifts at walkways in or connecting to the common areas of Tenants Purchase Scheme Estates, Public Rental Housing Estates with properties divested and Buy or Rent Option Scheme Estates under the Hong Kong Housing Authority. The Highways Department is liaising with the other departments to work out detailed arrangements for the scheme and plans to consult District Councils in 2020 on the implementation.

Maritime Transport

Domestic Ferries

Ferries provide essential transport links to outlying islands where no or limited land transport is available. Ferries also offer an alternative transport service between the inner harbour and other areas in Hong Kong.

Fourteen franchised and licensed ferry operators run 21 regular passenger ferry services, two services for dangerous goods vehicles, and two special services for the harbour, outlying islands and other areas. These are supplemented by 70 'kaito' ferry services, which cover relatively



remote areas. Ferries recorded a daily average of about 59,700 passenger trips within the harbour and about 62,500 passenger trips serving the outlying islands in 2019.

Cross-boundary Ferries

Cross-boundary ferry services to Macao and 11 Mainland ports operate from the Hong Kong-Macau Ferry Terminal in Sheung Wan, China Ferry Terminal in Tsim Sha Tsui and Tuen Mun Ferry Terminal in Tuen Mun. In 2019, cross-boundary ferries transported 12.05 million travellers to and from Macao, and 2.34 million to and from Mainland ports.

Local Vessels

In 2019, about 18,970 passenger, cargo, fishing and pleasure vessels were licensed in Hong Kong to provide services for the port and the community.

Public Transport Fare Concessions

The government encourages public transport operators to offer fare concessions, taking into account their operating and financial conditions, the market situation and passenger needs.

MTRCL concessions include monthly passes for the East Rail, West Rail and Tung Chung lines, a Student Travel Scheme, fare concessions for children, Fare Savers and interchange discounts.

Franchised bus companies offer concessionary half fares for children under 12. Section fares are available for about 80 per cent of mid-distance and long-distance routes, involving about 440 routes. The companies also provide about 305 bus-bus interchange concession schemes, covering about 400 bus routes, or about 72 per cent of all routes. The tramway and ferries have discount fares for the elderly and children, and some GMB routes grant concessionary fares.

Government's Fare Concessions and Subsidies

The Government Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities encourages the elderly aged 65 or above and the disabled to participate in community activities. Beneficiaries pay \$2 per trip on designated public transport with designated Octopus cards, covering general MTR lines¹, franchised bus routes², ferry routes³ and GMB routes. In 2019, the scheme recorded about 1,424,000 passenger trips on average daily.

The non-means-tested Public Transport Fare Subsidy Scheme was launched on 1 January to relieve the fare burden of commuters who travel daily on local public transport and incur relatively high public transport expenses. It provides a government subsidy amounting to 25 per cent of the actual monthly public transport expenses in excess of \$400, subject to a cap of \$300 per month. The scheme covers the MTR, franchised buses, GMBs, ferries and trams, as well as designated routes of RMBs, kaitos and non-franchised buses providing residents' and

General MTR lines refer to domestic services including the Light Rail and MTR buses in the north-western New Territories, and excluding the Airport Express, East Rail Line services between Lo Wu, Lok Ma Chau and Racecourse stations, and the first-class service of the East Rail Line.

² Excluding 'A' and 'NA' routes to the airport, racecourse routes, and routes operating on a booking basis.

Excluding deluxe class services.

employees' services approved by the Transport Department. The government estimates the annual subsidy will amount to around \$2.3 billion and will benefit over 2.2 million commuters.

The Port

Hong Kong is an international maritime centre and a regional hub port. During the year, 320,000 ocean-going vessels from all parts of the world and river-trade vessels from the Pearl River visited and left Hong Kong, involving around 260 million tonnes of cargo and 18 million cross-boundary ferry and cruise passenger journeys. Many high-speed ferries and local vessels operate in, or pass through, the harbour. Hong Kong is also one of the world's busiest container ports, handling around 18 million twenty-foot equivalent units (TEUs) of containers in 2019.

Port Administration

The Marine Department administers the port, with its principal task to ensure the safety of navigation and efficiency of shipping activities in Hong Kong waters. This is achieved through comprehensive traffic management, harbour patrols, vessel traffic services, provision of aids to navigation and mooring buoys, and strict enforcement of the rules and standards of major international maritime conventions.

The department liaises closely with shipping and commercial organisations and takes advice on port administration from users and operators of port facilities through a number of advisory and consultative committees.

The department's website provides information on the port, the shipping register and its services and facilities. Its Electronic Business System simplifies and speeds up the processing of port formalities, including the submission and auto-approval of applications, self-printing of permits and certificates, payment via auto-pay and checking of application status.

Port Infrastructure, Facilities and Services

Marine civil works are essential to keep the port running smoothly. The Civil Engineering and Development Department carries out maintenance work on public landing steps, ferry piers and terminals, the Kai Tak Cruise Terminal, breakwaters and other public marine facilities, and regular maintenance dredging of the harbour, navigation channels and major river channels. It maintains 506 hectares of typhoon shelters, 5km of quays at public cargo working areas, 127km of seawalls and breakwaters, 323 piers and landing steps, 101 dolphin mooring structures, 109 beacons, 14,100 hectares of fairways and 3,590 hectares of anchorage areas.

The department also plans, designs and builds public marine facilities. In 2019, it completed the reconstruction of Sharp Island Pier and continued to plan and design a new public landing facility at Lei Yue Mun. Site investigation works and technical studies for pier improvement works at remote public piers in the New Territories and outlying islands were under way, with the department preparing to start detailed design work in 2020.

Container handling facilities are a key part of the logistics infrastructure. The nine container terminals at the Kwai Chung-Tsing Yi area, all privately run, handle about 78 per cent of Hong Kong's container throughput and have 24 berths with a total handling capacity of more than

20 million TEUs per year. In addition, the Marine Department manages six public cargo working areas with a total berth length of 4,852 metres, providing an alternative for operators handling cargo carried by barges and coasters.

The Kwai Tsing Container Basin and its approach channel have a navigation depth of 17 metres. This enables ultra-large container ships to use the port at all tides, strengthening Hong Kong's position as an Asia-Pacific regional port.

Cross-boundary Ferry Terminals

The Marine Department operates two cross-boundary ferry terminals, namely the Hong Kong-Macau Ferry Terminal, operating round the clock, and the China Ferry Terminal, operating daily from 7am to midnight. The Tuen Mun Ferry Terminal operates daily from 7am to 10pm under a tenancy agreement between the government and the terminal operator. The department controls the use of these ferry terminals under the Shipping and Port Control (Ferry Terminals) Regulations.

Vessel Traffic Services

The department's Vessel Traffic Centre facilitates the traffic of visiting vessels to ensure their safety and expeditious movement.

Harbour Patrol and Local Control Station

The department's Harbour Patrol Section operates 29 patrol launches to enforce marine legislation, maintain safety of the port and shipping, and respond to marine emergencies. Its local traffic control station in Kwai Chung provides information and traffic management services to vessels in the vicinity of the Kwai Tsing container port area.

Pilotage

Pilotage is compulsory in Hong Kong waters for any vessel of 3,000 gross tonnage or above, oil tankers of 1,000 gross tonnage or above, and all gas carriers. The Director of Marine regulates and monitors pilotage services.

Hydrographic Services

The Hydrographic Office carries out hydrographic surveys and produces nautical charts, electronic navigational charts and other publications to help vessels navigate in Hong Kong waters. It provides Notices to Mariners for updating the charts once every two weeks and, through the internet, real-time information about tides, forecasts about tidal streams and predictions about the Ma Wan Fairway transit tidal window.

Immigration and Quarantine

Immigration and quarantine services for ships are available at the western and eastern quarantine and immigration anchorages. Immigration service is also available at the Tuen Mun Immigration Anchorage for river-trade vessels.

Carriage of Dangerous Goods

The department conducts random shipboard inspections of vessels in Hong Kong waters according to international and local standards.

Local Vessels Safety Certification

The department's Local Vessels Safety Section provides survey and certification services for local vessels to make sure they comply with safety and pollution prevention requirements.

Port Security

All designated port facilities in Hong Kong comply fully with the International Maritime Organisation's International Ship and Port Facility Security Code. The department implements the code, including monitoring the training and qualifications of the port facilities' security personnel, overseeing security drills and exercises conducted at the port facilities and carrying out annual audits of port facility security arrangements.

Marine Industrial Safety

The department's Marine Industrial Safety Section enforces safety requirements on works carried out on board vessels, including cargo handling, ship repair and marine construction, under the Shipping and Port Control (Works) Regulation and the Merchant Shipping (Local Vessels) (Works) Regulation. It conducts safety checks on such works and promotes safe working practices and regulations.

Port Development

The department provides professional advice on the planning of projects that affect port and marine traffic, and publishes port and maritime statistics periodically on its website. The government looks at ways of enhancing port performance and operational efficiency, such as facilitating the use of port back-up land.

Maritime Industry

The port of Hong Kong offers frequent and comprehensive ocean liner services, with about 300 container vessel sailings weekly to around 420 destinations worldwide. More than 800 maritime-related companies operate in the territory, providing quality services such as ship management, ship broking and chartering, marine insurance and maritime legal and arbitration services. Hong Kong is also a ship finance centre in the region. According to the Hong Kong Shipowners Association, Hong Kong's shipowners own or manage 9.3 per cent of the world's merchant fleet in terms of deadweight tonnage.

Hong Kong has in place double taxation relief arrangements covering shipping income with 48 tax jurisdictions.

Hong Kong Maritime and Port Board

The Hong Kong Maritime and Port Board is a high-level advisory body chaired by the Secretary for Transport and Housing and comprises maritime and port industry figures. It aims to create a maritime business-friendly environment, nurture local maritime talent and promote Hong

Kong's strengths in the industry, so as to enhance the territory's position as an international maritime centre.

In November, the board organised the fourth Hong Kong Maritime Week to promote Hong Kong as a preferred base for maritime businesses and to offer a networking platform. It also aimed to raise public awareness of the economic contributions made by the port and maritime sectors and the prospects of maritime careers.

The board organises promotional visits to overseas and Mainland economies to raise Hong Kong's profile as an international maritime centre and promote its quality and professional high value-added maritime services. Trips were made to Copenhagen, Oslo, Bergen, London, Guangxi and Shanghai in 2019.

Maritime and Aviation Training Fund

The maritime and aviation sectors receive government support in manpower development via the Maritime and Aviation Training Fund. This fund supports various scholarships and training and promotion initiatives to build up a diversified and competitive pool of professionals and technical personnel. During the year, \$200 million was injected into the fund to sustain and enhance existing training schemes and scholarships, and to launch new initiatives for the maritime and aviation sectors. The fund's annual internship scheme provided about 530 maritime and aviation internship opportunities for young people. A new Local Vessel Competency Enhancement Scheme was launched to encourage more local holders of the Coxswain/Engine Operator Grade 3 Certificate of Competency to acquire the Grade 2 Certificate of Competency qualification, so as to boost the manpower supply of the local vessel trade

Hong Kong Shipping Register

The Hong Kong Shipping Register, administered by the Marine Department, ranked fourth in the world in 2019 in terms of gross tonnage. As at end-December, the registered ships recorded 127 million gross tonnage in total. To ensure the Hong Kong-registered ships' compliance with international standards, the department conducts a quality control assessment before allowing ships to join the register and implements a Flag State Quality Control System. The Port State Control detention rate of Hong Kong-registered ships is well below the world average, putting the Hong Kong flag among the top performance flags in the white list under the Tokyo Memorandum of Understanding (MoU) and Paris MoU of Port State Control. Hong Kong also holds the United States Coast Guard's Qualship 21 status.

Marine Accident Investigations

The department's Marine Accident Investigation and Shipping Security Policy Branch investigates all serious accidents on board Hong Kong-registered ships and ships in Hong Kong waters. The purpose of an investigation is to determine the circumstances and possible causes of an accident and to recommend preventive measures. In 2019, the branch investigated 30 serious accidents. To raise awareness of maritime safety, the investigation reports of all serious accidents are published on the department's website.

Seafarers

The department's Shipping Registry and Seafarers Branch supervises the registration, employment, competence, discipline, health, safety and welfare of Hong Kong seafarers and seafarers working on board Hong Kong-registered ships. During the year, 52,357 seafarers of different nationalities served on board Hong Kong-registered seagoing ships and 955 officers and ratings served on high-speed ferries plying the Pearl River Delta (PRD) region.

The Sea-going Training Incentive Scheme encourages youngsters to join the maritime profession in Hong Kong by providing financial incentives to take up seagoing cadetship training. In 2019, the scheme signed up 45 cadets.

Participation in International Maritime Activities

International Maritime Organisation

The Hong Kong Special Administrative Region (HKSAR) Government, under the name 'Hong Kong, China', is an associate member of the IMO and has a permanent representative in London. The Hong Kong maritime industry is consulted on, and informed of, all issues discussed at IMO meetings that may affect Hong Kong. These topics include maritime safety and security, marine pollution, maritime laws, seafarers' training and standards of certification. HKSAR Government officials attended 18 IMO meetings in 2019.

Port State Control

Hong Kong is a member of the MoU on Port State Control in the Asia-Pacific. The Marine Department leads an Advisory Group for Technical Cooperation Programmes and is also a member of other working groups. In 2019, the department conducted 705 initial Port State Control inspections on 14 per cent of all foreign ocean-going ships which visited Hong Kong. It detained 2.9 per cent of the ships inspected because of serious deficiencies that needed immediate attention.

Maritime Search and Rescue

The Maritime Rescue Coordination Centre acts on distress alerts and coordinates search and rescue operations within Hong Kong waters and for about 450,000 square nautical miles of international waters of the South China Sea.

Government Fleet and Dockyard

A fleet of more than 900 government vessels serves 14 government departments. Eighty-three of these vessels are managed by the Marine Department to serve its port operations and the needs of other government departments. The vessels it manages include patrol launches, purpose-built conveyance launches, pontoons, hydrographic survey launches and explosives carriers. In 2019, the department also contracted 30 vessels, including conveyance launches and tugboats.

The Government Dockyard, managed by the department's Government Fleet Division, designs, procures, repairs and maintains all government vessels. It occupies a 9.8-hectare site on Stonecutters Island and has an 8.3-hectare sheltered water basin to moor vessels. There are

10 covered docking sheds, four movable canopies, 30 open-yard docking cradle spaces, a shiplift system and three ship-hoists capable of dry-docking vessels of up to 750 tonnes.

During the year, 66 new craft costing \$165 million were built for the government. Fourteen new craft building contracts, worth \$174 million, were awarded to shipbuilders. The expenditure in maintaining the Government Dockyard facilities and government fleet was close to \$644 million.

Air Transport

Hong Kong is a major international and regional aviation centre. At the year end, more than 120 airlines were providing over 1,100 flights daily between Hong Kong and over 220 destinations worldwide.

Hong Kong International Airport

In 2019, the airport handled 71.5 million passengers, a decrease of 4.2 per cent over 2018; 4.8 million tonnes of cargo including airmail, down 6.1 per cent; and 419,795 incoming and outgoing flights, down 1.9 per cent.

The airport provides extensive intermodal connections to the PRD region by land and sea. During the year, the SkyPier recorded about 80 daily ferry trips with Guangzhou's Nansha and Lianhuashan, Shenzhen's Shekou and Fuyong, Dongguan's Humen, Zhongshan, Zhuhai's Jiuzhou and Macao's Maritime Ferry Terminal and Taipa. Another 550 daily coach trips took passengers between the airport and about 110 PRD cities and towns, while cross-boundary limousines operated around 500 trips every day.

Airport Services

The Airport Authority carries out facility enhancement and expansion projects to cope with increasing air traffic demand in the medium term under the two-runway system. The Midfield Concourse serves over one million passengers each month. The development of the remaining Midfield will be completed in phases by 2020. The Terminal 1 extension went into operation in November 2019 to provide additional passenger handling capacity.

Apart from infrastructure, the Airport Authority deploys automation and mobile technologies, such as e-Security Gates equipped with biometric technology at the security checkpoints of the airport's departure hall and smart check-in kiosks at off-site locations.

Future Development

To maintain Hong Kong's competitiveness as a global and regional aviation hub, the Airport Authority is undertaking a Three-Runway System project. This comprises the formation of some 650 hectares of land north of the existing airport island by reclamation, and the construction of the third runway, taxiways and aprons, the Third Runway Passenger Building, a new automated people mover system, a new high-speed baggage handling system, an expanded Terminal 2 and associated support infrastructure.

When the Three-Runway System is put into operation in 2024, the airport will have the capacity to handle over 100 million passengers and around nine million tonnes of cargo annually, meeting anticipated air traffic demand up to at least 2030.

Grooming Talent

The Airport Authority's Hong Kong International Aviation Academy trains local and regional air transport management talent. The training ranges from youth programmes to on-the-job training for airport employees to a master's degree programme delivered jointly with the École Nationale de l'Aviation Civile of France, the largest aeronautics and civil aviation college in Europe. In 2019, the academy attained full membership in the Trainair Plus Programme of the International Civil Aviation Organisation. The certification recognises the academy's capability to develop International Civil Aviation Organisation-compliant training packages.

Air Services

Under the authorisation of the Central People's Government, the HKSAR Government negotiates and concludes bilateral air services agreements with aviation partners to provide the legal framework for scheduled air services between Hong Kong and other places. There are 67 such agreements. Hong Kong's government also reviews traffic rights and air services arrangements with its aviation partners to expand the territory's aviation network and allow more competition in the market. In 2019, the government signed an agreed amendment to the Air Services Agreement with Germany, and reviewed or expanded air services arrangements with the Mainland of China, Egypt and Russia. Of the roughly 140 countries along the Belt and Road corridors, Hong Kong has signed air services agreements or international air transit arrangements with around 50 countries. The government will continue to discuss with other countries along the Belt and Road and other aviation partners with a view to initiating new air services agreements and expanding existing arrangements.

In 2019, Cathay Pacific Airways Limited operated direct services to 81 destinations worldwide, while Hong Kong Dragon Airlines Limited operated direct services to 50 destinations in Asia. AHK Air Hong Kong Limited operated direct all-cargo services to 14 destinations in Asia. Hong Kong Airlines Limited operated direct services to 36 destinations worldwide. Hong Kong Air Cargo Carrier Limited operated direct all-cargo services to 12 destinations worldwide. Hong Kong Express Airways Limited, the only local low-cost carrier, operated direct services to 27 destinations in Asia and the US (Saipan). All the local airlines combined had a fleet of 286 aircraft.

In the light of new scheduled passenger services to Hong Kong launched by non-Hong Kong airlines, Eznis Airways LLC started services from Ulaanbaatar, Mongolia, in June.

As regards all-cargo services launched by non-Hong Kong airlines, Egypt Air started services from Egypt in July.

Air Traffic Management

The Civil Aviation Department's Air Traffic Management System has been consistently providing safe and reliable air traffic control services to flights operating within the Hong Kong Flight Information Region since being fully commissioned in 2016. It recorded a 3.1 per cent rise in the number of aircraft movements handled in 2019 compared with 2018.



Aviation Security

Conventions and agreements on aviation security, promulgated by the International Civil Aviation Organisation, are implemented through the Aviation Security Ordinance. The Hong Kong Aviation Security Programme stipulates the aviation security requirements for the various operators and service providers at the airport. The Civil Aviation Department monitors the implementation of these requirements to ensure international standards are met.

International Transport and Logistics

Logistics is an important sector of the economy, accounting for 3.1 per cent of Hong Kong's Gross Domestic Product. Given its strategic location, world-class infrastructure and business-friendly environment, the territory is a preferred transport and logistics hub in Asia, aided by its efficient, reliable and well-connected airport and seaport. It also has one of the world's busiest international air cargo centres and container ports. These achievements are attributed to the operators of the services and facilities, the investors, the efficient workforce, and cooperation between the private and public sectors.

Hong Kong is home to the most productive and efficient container terminals, which are run by renowned international terminal operators. A comprehensive network of container line services connects the port of Hong Kong with destinations across the globe. Operating round the clock, the nine container terminals at Kwai Chung-Tsing Yi provide a total handling capacity of about 20 million TEUs per year.

Logistics Industry

The government provides the necessary infrastructure and facilitation for Hong Kong's logistics sector to grow. It also promotes closer cooperation with the Mainland, in particular the PRD region, to achieve synergy in logistics development.

The Hong Kong Logistics Development Council is a high-level advisory body chaired by the Secretary for Transport and Housing, providing a forum for the government and industry stakeholders to formulate initiatives to spur the development of the local logistics sector.

Websites

Airport Authority Hong Kong: www.hkairport.com

Civil Aviation Department: www.cad.gov.hk

Cross-boundary ferry services: crossboundary ferry services.mardep.gov.hk

Highways Department: www.hyd.gov.hk

Hong Kong Logistics Development Council: www.logisticshk.gov.hk

Hong Kong Maritime and Port Board: www.hkmpb.gov.hk

Hydrographic Office: www.hydro.gov.hk Marine Department: www.mardep.gov.hk

Public-sector information portal: data.gov.hk Transport and Housing Bureau: www.thb.gov.hk

Transport Department: www.td.gov.hk