

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.

Administrative Framework

The government's 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, the Highways Department, the Marine Department and the 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 that 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 co-ordination and (together with the operators) the quality of public transport services; and
- managing road use to reduce congestion and to promote safety.

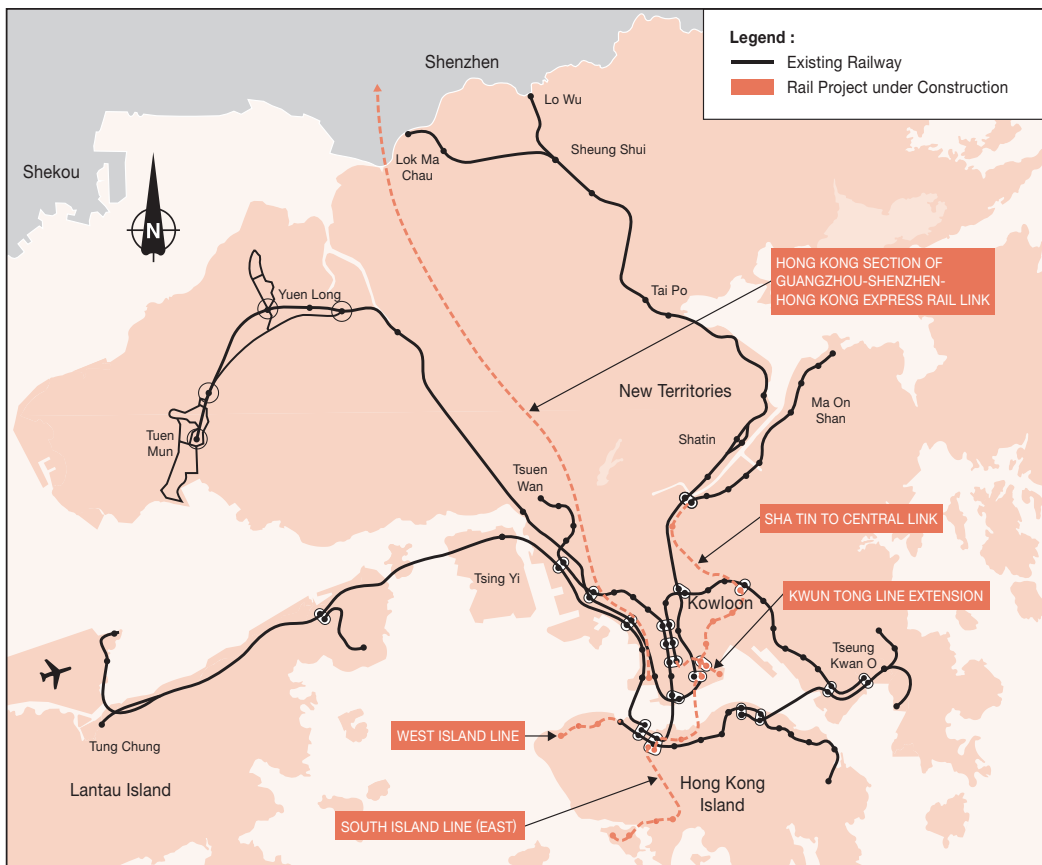
The government also ensures that these objectives are environmentally sustainable by searching for, and supporting, environmental improvement measures in transport-related areas.

Transport Infrastructure

Railway Network

Railways are safe, efficient, reliable, comfortable and environment-friendly mass carriers. They are the back bone of Hong Kong's public transportation system, and are essential to its continued economic, social and land development. They account for about 40 per cent of daily public transport passenger travel and about 60 per cent of land-based cross-boundary passenger trips to the Mainland.

The map below shows the existing railway network and five railway projects under construction. Over \$160 billion has been invested in these five railway projects.



Railway Projects under Construction

The West Island Line extends the existing Island Line from Sheung Wan to Kennedy Town, with two intermediate stations at Sai Ying Pun and the University of Hong Kong. Construction of the project started in 2009 for completion by the end of 2014. Upon commissioning, the journey

time between Sheung Wan and Kennedy Town will be less than 10 minutes, compared with the 15- to 25-minute current vehicular journey time during rush hours.

The Kwun Tong Line Extension will extend the existing Kwun Tong Line from Yau Ma Tei to Whampoa, with two new stations at Ho Man Tin and Whampoa, including an interchange at Ho Man Tin for the future Sha Tin to Central Link. Construction started in 2011 and is expected to be completed in 2015. Upon commissioning, the journey time between Mong Kok and Whampoa will be about five minutes, compared with the 25-minute current vehicular journey time during rush hours.

Construction of the South Island Line (East) (a seven-kilometre railway line running between Admiralty and South Horizons with three intermediate stations at Ocean Park, Wong Chuk Hang and Lei Tung Estate) commenced in 2011 for completion in 2015. Upon commissioning, the journey time between Admiralty and South Horizons will be about 10 minutes, compared with the 25- to 45-minute current vehicular journey time during rush hours.

Construction of the Hong Kong section of the Guangzhou–Shenzhen–Hong Kong Express Rail Link, a 26-kilometre underground railway with its terminus at West Kowloon, started in 2010 and is in progress. Trains will be able to run through the tunnel at a maximum speed of 200 kilometres per hour, reducing the journey time between Guangzhou and Hong Kong by train from 100 minutes to 48 minutes. The journey time to other major cities in the Mainland will also be greatly shortened.

The 17-kilometre long Sha Tin to Central Link is a strategic project providing territory-wide connections. It will have 10 stations (Tai Wai, Hin Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai, Ho Man Tin, Hung Hom, Exhibition and Admiralty) and will link up a number of existing railways forming two strategic railway corridors. The ‘East West Corridor’ will connect Tai Wai Station on the Ma On Shan Rail Line with the West Rail Line at Hung Hom via Diamond Hill and southeast Kowloon. 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 commenced in mid-2012 for completion in 2018 for the section between Tai Wai and Hung Hom, and 2020 for the section between Hung Hom and Admiralty.

Railway Development Strategy

The consultancy study to review and update the ‘Railway Development Strategy 2000’, which commenced in March 2011, has been completed. After considering the consultant’s overall recommendations, the government will formulate Hong Kong’s long-term railway development blueprint and announce the way forward for the new railway projects in 2014.

Road Network

Hong Kong has 2,093 kilometres of roads and 1,326 road structures, 16 road tunnels (including the three immersed-tube cross-harbour tunnels) and five major cable supported bridges.

Tunnels

The government owns 11 road tunnels, all managed and operated by private companies under management contracts: the Cross-Harbour, Lion Rock, Aberdeen, Kai Tak, Shing Mun, Tseung Kwan O, Cheung Tsing, Tai Wai, Sha Tin Height, Eagle's Nest and Nam Wan tunnels. The last four are located in the Tsing Sha Control Area, while Cheung Tsing Tunnel is located in the Tsing Ma Control Area. Use of the Kai Tak Tunnel, Cheung Tsing Tunnel and Nam Wan Tunnel is free of charge. Tolls for the rest are provided for in their governing legislation.

Four other tunnels are operated by private companies under 'Build, Operate and Transfer' arrangements: the Eastern Harbour Crossing, Tate's Cairn Tunnel, Western Harbour Crossing and Tai Lam Tunnel.

There is also a private tunnel, the Discovery Bay Tunnel Link, which was built and is operated and maintained by Discovery Bay Road Tunnel Company Limited. It is open only to vehicles taking goods to Discovery Bay, or providing services to residents there.

Major Road Projects under Construction

The Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB) forming part of the east-west strategic route along the north shore of Hong Kong Island are being constructed to alleviate traffic congestion at Connaught Road Central/Harcourt Road/Gloucester Road and cater for the anticipated growth in road traffic. The CWB is a 4.5-kilometre dual three-lane trunk road with a 3.7-kilometre tunnel. When the CWB is completed in 2017, it will take about five minutes to travel from Central to the Island Eastern Corridor at North Point.

Reconstruction and improvement of Tuen Mun Road is under way to bring the expressway's dual three-lane carriageway up to current standards as far as practicable, and to provide hard shoulders wherever possible. This project and widening works of the Tuen Mun Road Town Centre section are scheduled for completion in 2014.

Widening of Tolo Highway between the Island House Interchange and Tai Hang to upgrade the existing dual three-lane carriageway to a dual four-lane carriageway is under way. Construction of this section commenced in 2009 and is expected to be largely completed in the first quarter of 2014.

Widening of Fanling Highway between Tai Hang and Wo Hop Shek Interchange to upgrade the existing dual three-lane carriageway to a dual four-lane carriageway is under way. Construction commenced in July 2013 for completion of the major works by 2018.

Construction of the Bus-Bus Interchange for Tuen Mun bound buses on Tuen Mun Road was completed and fully opened in July 2013.

Works in respect of the Hong Kong-Zhuhai-Macao Bridge (HZMB), including the Main Bridge within Mainland waters and local works in the Hong Kong Special Administrative Region (HKSAR), continued. The target is to commission the HZMB in 2016.

Reclamation works for the HZMB Hong Kong Boundary Crossing Facilities (HKBCF) and the Tuen Mun–Chek Lap Kok Link (TM–CLKL) southern landfall, located in the northeast waters of the Hong Kong International Airport, commenced in 2011. The HKBCF works are expected to be completed in 2016 to dovetail with the commissioning of the HZMB.

The Hong Kong Link Road, a 12-kilometre dual three-lane highway comprising sections of sea viaduct, tunnel and at-grade road, will connect the HZMB Main Bridge to the HKBCF. The detailed design and construction works commenced in 2012 for completion in 2016 to dovetail with the commissioning of the HZMB.

Construction works for the TM–CLKL, a dual two-lane road approximately nine kilometres long connecting Tuen Mun with the HKBCF and North Lantau, commenced in June 2013. The southern road section connecting the HKBCF with North Lantau will be substantially completed in 2016 to tally with the commissioning of the HZMB; and the northern road section connecting Tuen Mun with the HKBCF will be completed in 2018 to meet local traffic demand.

Road Projects in the Planning Stage

A number of road construction and improvement projects are being planned to enhance Hong Kong's existing road network:

- **Tuen Mun Western Bypass (TMWB):** The government is examining if there would be any room for changes to the current proposed alignment of the Tuen Mun Western Bypass which would strike a balance in terms of technical feasibility, environmental concerns, traffic performance and economic benefits.
- **Central–Kowloon Route:** Detailed design for the proposed 4.7-kilometre dual three-lane route, with 3.9 kilometres of tunnel connecting West Kowloon to the proposed Kai Tak Development and the road network in Kowloon Bay, is ongoing.
- **Trunk Road T2:** The proposed Trunk Road T2 within the Kai Tak Development is a dual two-lane carriageway approximately three kilometres long, including 2.7 kilometres of tunnel through Kwun Tong Typhoon Shelter and adjoining areas. Forming the middle section of the strategic Route 6, Trunk Road T2 will connect the proposed Central–Kowloon Route to the proposed Tseung Kwan O–Lam Tin Tunnel. The preliminary design work is ongoing.
- **Tseung Kwan O–Lam Tin Tunnel:** Detailed design has commenced for the proposed Tseung Kwan O–Lam Tin Tunnel, a dual two-lane carriageway of 4.2 kilometres with a 2.6 kilometres tunnel. It will connect Tseung Kwan O to Trunk Road T2 in the Kai Tak Development.
- **Cross Bay Link:** Preliminary design has been completed for the Cross Bay Link, which is a dual two-lane carriageway of 1.8 kilometres with a 1.1 kilometre viaduct, connecting Tseung Kwan O–Lam Tin Tunnel to Wan Po Road near Area 86, Tseung Kwan O.

- **Trunk Road T4:** The proposed dual two-lane carriageway will connect Sha Tin Road to Trunk Road T3 and Shing Mun Tunnel Road, and will be used as a bypass to Tai Po Road (Sha Tin Section) to cater for the long-term traffic flow in Sha Tin District. The planning for the proposed trunk road is being reviewed following the opening of Route 8 in 2009.
- **Tai Po Road (Sha Tin Section):** An investigation study on widening the Tai Po Road between Sha Tin Rural Committee Road and Fo Tan Road from dual two-lane to dual three-lane commenced in March 2013.
- **Hiram's Highway:** The proposed improvement works to Hiram's Highway are planned to be carried out in two stages: Stage 1 covers the section between Hiram's Villas and Marina Cove, and Stage 2 covers the area between Marina Cove and Sai Kung Town Centre. The road alignment plan under Stage 1 has been finalised. For Stage 2, a study is under way to explore options for tackling traffic congestion with as little adverse impact on the environment as possible.

Tsing Ma Control Area

The Tsing Ma Control Area, managed by a private contractor, is a 21-kilometre expressway network comprising Tsing Kwai Highway, Cheung Tsing Tunnel, Cheung Tsing Highway, the North-West Tsing Yi Interchange, Tsing Yi North Coastal Road, Lantau Link, Ting Kau Bridge, part of the North Lantau Highway and Ma Wan Road. The Lantau Link imposes a 'one-way' toll ranging from \$20 to \$80 for different types of vehicles. As the Lantau Link is the only road access to Lantau Island and motorists travelling to and from the airport must go through the Lantau Toll Plaza, a one-way toll collection arrangement is adopted at the Lantau Link for the convenience of motorists and to streamline airport-bound traffic. An average of 73,177 vehicles per day used the Lantau Link in 2013.

Tsing Sha Control Area

The Tsing Sha Control Area, managed by a private contractor, is a 13-kilometre expressway network comprising Stonecutters Bridge, Nam Wan Tunnel, a series of tolled tunnels (the Eagle's Nest Tunnel, Sha Tin Heights Tunnel and Tai Wai Tunnel) and associated slip roads. All classes of vehicles using the tolled tunnels pay an \$8 toll. In 2013, an average of 42,797 vehicles per day used this expressway.

'Universal Accessibility' Programme — Provision of Barrier-free Access Facilities

In August 2012 the government announced that the scope of its 'Universal Accessibility' programme to retrofit barrier-free access facilities to existing public walkways (public footbridges, elevated walkways and subways) maintained by the Highways Department would be expanded.

The government obtained the approval of the Legislative Council's Finance Committee in January 2013 to create a dedicated block allocation to implement the programme. The government consulted the 18 District Councils in 2013 on the priority for implementation of the public's proposals for retrofitting of lifts under the new policy. Each District Council has selected three priority projects for implementation. Technical feasibility studies are being

conducted for these priority projects. At the same time, 158 projects under the original scope of the programme are being implemented.

Public Transport

Hong Kong's transport system is modern, efficient and provides affordable, comfortable and safe travel on a wide choice of carriers.

Railways

Hong Kong's railways are run by the MTR Corporation Limited (MTRCL), a public listed company of which the government is the majority shareholder.

The MTR system comprises:

- the Kwun Tong Line (Tiu Keng Leng — Yau Ma Tei);
- the Tsuen Wan Line (Tsuen Wan — Central);
- the Island Line (Chai Wan — Sheung Wan);
- the Tung Chung Line (Hong Kong — Tung Chung);
- the Tseung Kwan O Line (Po Lam/LOHAS Park — North Point);
- 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); and
- the Disneyland Resort Line (Sunny Bay — Disneyland Resort).

There are 82 stations in the 175-kilometre network. The MTRCL also operates the 35.2-kilometre Airport Express Line and a 36.2-kilometre Light Rail network which has 68 stops in the northwest New Territories. Light Rail feeder bus services provide rail passengers with a more comprehensive service network. The entire system carries an average of around five million passengers each day.

In addition, the MTRCL provides cross-boundary through-train services from Hong Kong to Beijing, Shanghai and cities in Guangdong.

The Review of Fare Adjustment Mechanism of MTRCL

The government and the MTRCL completed the five-yearly review of the Fare Adjustment Mechanism (FAM) of MTRCL in April 2013 and the new FAM took effect in June. It adopts a new, objective and transparent methodology for calculating the Productivity Factor (PF). The new PF value will moderate any fare increase by an additional 0.5 percentage points each year from

2013 to 2017. Any future fare increase under the FAM formula will be capped so that it does not exceed the change in the Median Monthly Household Income for the corresponding period.

The new FAM also introduces a profit sharing mechanism to enable the MTRCL to share its yearly profit with passengers by way of a concession scheme. A new service performance arrangement addresses public concerns that the MTRCL should be penalised for serious service disruptions. Proceeds of any fine thus imposed will go towards the MTRCL's concession scheme.

In addition, new types of concessionary tickets have been introduced to benefit medium and long-distance frequent travellers.

Tramway

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

The company's 164 trams, including two open-balcony trams for tourists and private hire, and one special maintenance tram, make up the world's largest fleet of double-deck trams in operation. The tramway recorded a daily average of 198,000 passenger trips in 2013.

Peak Tram

Hong Kong's other tramway is a cable-hauled funicular railway operated by the Peak Tramways Company Limited from Central (Garden Road) to the Peak. The 1.4-kilometre line began operation in 1888 and was modernised in 1989. The Peak Tram recorded an average of 17,100 passenger trips a day in 2013, made up mostly of tourists and local sightseers.

Other Road-based Passenger Transport

The other road-based passenger transport modes (mainly franchised buses, public light buses, taxis and residents' non-franchised buses) account for 57 per cent of all public transport passenger journeys.

Franchised Buses

Franchised buses are the largest road-based carriers and account for 32 per cent of the total daily public transport volume. Bus services in Kowloon and the New Territories are largely provided by The Kowloon Motor Bus Company (1933) Limited (KMB). At year-end, KMB operated 310 bus routes in Kowloon and the New Territories and 10 cross-harbour routes on its own. At year-end, KMB had a licensed fleet of 3,844 buses, of which 2,706 were wheelchair-accessible low-floor buses. KMB recorded 953 million passenger trips in 2013 (a daily average of 2.61 million passenger trips) covering 300.66 million kilometres of roads.

Bus services on Hong Kong Island are provided by New World First Bus Services Limited (NWFB) and Citybus Limited (CTB). At year-end, NWFB was operating 49 bus routes on Hong Kong Island, eight in Kowloon and Tseung Kwan O and 33 cross-harbour routes, 29 of which were run jointly with KMB. NWFB had a licensed fleet of 715 buses, of which 657 were wheelchair-

accessible low-floor buses. NWFB recorded 182 million passenger trips in 2013 (a daily average of 498,800 passenger trips) covering 46.8 million kilometres of roads.

CTB operates two bus networks under two franchises. One covers 59 bus routes on Hong Kong Island, one bus route in the New Territories and 30 cross-harbour routes, 22 of which are operated jointly with KMB. The other franchise covers a network of 19 routes plying between the urban areas and North Lantau and the airport. At year-end, CTB had a licensed fleet of 952 buses, of which 624 were wheelchair-accessible low-floor buses, and in 2013 recorded 235 million passenger trips (a daily average of 643,300 passenger trips) covering 81.23 million kilometres of road.

The Long Win Bus Company Limited provides services between the New Territories and North Lantau and the airport with a licensed fleet of 172 buses, all wheelchair-accessible low-floor buses. The company made 33.18 million passenger trips (a daily average of 90,900 passenger trips) over its 19 routes, covering 25.82 million kilometres of roads in 2013.

The New Lantao Bus Company (1973) Limited provides bus services on Lantau Island with a licensed fleet of 108 vehicles, of which 43 were wheelchair-accessible low-floor buses. The company recorded 23.6 million passenger trips in 2013 (a daily average of 64,700 passenger trips) covering 7.7 million kilometres of road over its 23 routes.

In 2013, the government began rationalising bus services more vigorously through an Area Approach (ie bus services are reviewed on an area, rather than route by route, basis) to enhance network efficiency, alleviate traffic congestion, reduce fare increase pressure and improve roadside air quality. Passengers could enjoy a more extensive interchange network and fare concessions when interchanging. New routes will be introduced where there are service needs. Better hardware, such as electronic panels providing information on real-time traffic conditions and estimated bus arrival time, has been provided at selected interchanges. Area Approach proposals were implemented in North District and Tuen Mun in 2013 and other districts will benefit in subsequent years.

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 the gaps which cannot be met by regular public transport services, and provide tailor-made services to specific groups of passengers. They mainly serve tourists, groups of residents, employees and students. At year-end, there were 7,054 registered non-franchised public buses.

Public Light Buses

Hong Kong's public light buses (PLBs) are licensed to carry a maximum of 16 passengers per vehicle. At year-end, there were 4,350 PLBs.

There are two types of PLBs — green and red. Green minibuses (GMBs) provide scheduled services with fixed routes, fares, vehicle allocation and timetables as stipulated by the Transport Department. At year-end, there were 3,110 GMBs operating 345 routes, which recorded a daily average of 1,512,200 passenger trips. Red minibuses (RMBs) are not required to operate on fixed

routes or timetables and may set their own fares but are subject to certain restrictions on their operating areas. There were 1,240 RMBs in operation at year-end, recording a daily average of 348,300 passenger trips.

Preparatory work to introduce two statutory measures (mandatory completion of a pre-service course by applicants for a PLB driving licence and the installation of approved electronic data recording devices on newly registered PLBs) is under way. The new measures are expected to be implemented in 2014.

Taxis

At year-end, there were 15,250 red urban taxis, 2,838 green New Territories taxis and 50 blue Lantau taxis in Hong Kong, carrying about one million passengers per day. There were about 750 taxi stands and designated taxi pick-up/drop-off points.

The Transport Department and the Quality Taxi Services Steering Committee implement schemes to improve the quality of taxi service and an annual Quality Taxi Drivers Commendation Scheme is held to give due recognition to good taxi drivers.

Ferries

Ferries provide essential transport links to outlying islands where no land transport alternatives are available. They also provide an alternative transport service to and from the inner harbour and other areas in Hong Kong.

At year-end there were 13 franchised and licensed ferry operators running 20 regular passenger ferry services, two dangerous goods vehicular ferry services and two special services for the harbour and for trips to the new towns and outlying islands. These were supplemented by 71 'kaito' ferry services, which provide services to relatively remote parts of Hong Kong. Ferries recorded a daily average of about 69,600 passenger trips within the harbour and about 66,100 passenger trips to and from the outlying islands.

Fare Concessions provided by Public Transport Operators

The government encourages public transport operators to provide fare concession schemes, taking into account their respective operating and financial conditions, market situation and passenger needs.

The MTRCL offers various concessions to passengers, including Monthly Passes for East Rail, West Rail and Tung Chung Lines, a Student Travel Scheme, fare concessions for children, Fare Savers discounts, 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 (ie about 440 routes) in Hong Kong and the bus 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 PLB routes run concessionary fare schemes.

The Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities

To encourage the elderly and eligible persons with disabilities to participate more in community activities, the government implemented the Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities on the MTR, franchised buses and ferries in phases between June 2012 and March 2013. Those eligible can travel on most MTR, franchised bus and ferry services at a concessionary fare of \$2 per trip any time. As at the end of 2013, the average daily number of passenger trips under the scheme was about 693,100. The government is considering the technical and operational arrangements for extending the scheme in the first half of 2014 to children with 100 per cent disabilities aged below 12 and receiving Comprehensive Social Security Allowance or Disability Allowance.

Transport Management

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

Licensing

At year-end, there were 2,010,715 licensed drivers, 674,609 licensed private vehicles and 6,305 government vehicles. Of the 475,752 licensed private cars, 45,382 were new vehicles registered during 2013. Of the 116,996 licensed goods vehicles, 74,339 were light goods vehicles, 37,902 medium goods vehicles and 4,755 heavy goods vehicles. On average, 4,921 new learners' driving licences were issued per month.

Driver Improvement Scheme

The Road Traffic Ordinance and the Road Traffic (Driving-offence Points) Ordinance require offenders who have been convicted of serious traffic offences and traffic offenders who have accumulated 10 Driving Offence Points within two years to attend a driving improvement course provided by a designated driving school. The courses are also open to the general public. From September 2002 to December 2013 about 98,900 drivers attended the course, including 67,500 drivers who were required to attend the course on a mandatory basis. About 80 per cent of drivers who attended the course did not incur new driving-offence points for six months after the course.

Vehicle Examination

Vehicles are examined routinely to ensure they are safe, roadworthy and properly maintained. In 2013, 219,000 vehicles were examined at the government vehicle examination centres. In addition, 3,343 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 22 designated car testing centres run by the private sector. These centres carried out 297,000 vehicle examinations.

All vehicles imported into Hong Kong must be examined to make sure they meet statutory requirements before they can be registered and licensed. In 2013, 884 vehicle types were approved.

Intelligent Transport Systems

Real-time traffic data (including closed circuit television (CCTV) traffic snapshot images, cross-harbour journey times, traffic speed maps, and special traffic news) can be downloaded by the public for free through the government Data.One portal. The 'Hong Kong eTransport' website and mobile applications were enhanced in 2013, making it easier for the public to search for public transport information. Since the mobile application of 'Hong Kong eRouting' was launched in early 2013, the public can now search with mobile phones and tablets for driving routes and obtain real-time traffic information any time and anywhere.

As at the end of 2013, there were 668 CCTV cameras installed at busy traffic spots across the territory to monitor traffic conditions so that drivers can be alerted to avoid adverse traffic conditions as soon as possible. Snapshot images from CCTV cameras at 180 strategic locations are available to the public online and on mobile devices.

A computerised Area Traffic Control (ATC) system connected to the traffic signalling system in the urban areas and in the new towns at Tsuen Wan, Kwai Tsing, Sha Tin, Ma On Shan, Tai Po, North District, Tuen Mun, Yuen Long and Tseung Kwan O enables better traffic control in response to changing road conditions. At year-end, 1,858 traffic signals were in operation at road junctions, 1,761 of which were linked to the ATC system. The remaining junctions will be linked to the ATC system progressively. To save costs and the environment, all conventional traffic signals on public roads have been replaced with light emitting diode traffic signals.

Traffic control and surveillance (TCS) facilities, such as CCTV, emergency telephones and lane signals, are provided in all tunnels and at the Tsing Ma Control Area, the Tsing Sha Control Area and the Kong Sham Western Highway. Additional TCS facilities such as variable message signs, variable speed limit signs and automatic incident detection systems, were installed, or will be installed in some tunnels.

Digital red light cameras are in operation at 155 signalised junctions throughout the territory to combat red light jumping, and new red light cameras will be installed at another 40 junctions by 2015. The Speed Enforcement Camera System was expanded in 2012. At present, there are 20 digital camera units operating in 120 camera housings on a rotational basis.

Five speed map panels have been in operation in the New Territories since January 2013 to advise motorists on the congestion level of alternative routes and to provide information on the estimated journey time.

A Traffic and Incident Management System is being developed to improve efficiency and effectiveness in managing traffic and transport incidents and in disseminating relevant information to the public. The project is scheduled for completion in 2015.

Automatic Toll Collection

Except 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. About 48 per cent of motorists used autotoll when driving through the tolled tunnels and tolled roads in 2013.

Parking

On-street parking is provided where there is demand and only when traffic conditions permit. At year-end, Hong Kong had about 18,000 parking spaces with electronic parking meters in operation, managed and operated by a private operator under government contract.

The government owns 13 multi-storey public car parks and a 'Park-and-Ride' public car park in Sheung Shui which are run by two private operators under government contract and provide about 7,000 public car parking spaces.

In addition to government car parks, off-street public parking is provided by the Airport Authority at the Hong Kong International Airport, the Housing Department and The Link REIT in some public housing estates, and by the private sector in multi-storey 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, at Hong Kong, Kowloon and Tsing Yi stations on the Airport Express, Hung Hom Station on the East Rail Line, Kam Sheung Road Station on the West Rail Line, and at some commercial car parks located near Olympic Station on the Tung Chung Line and Hang Hau Station on the Tseung Kwan O Line. In all, there are 197,500 off-street public parking spaces (excluding those in government car parks).

Road Safety

There were 16,089 traffic accidents involving injuries in 2013, of which 2,476 were serious and 128 were fatal. This compares with 15,894 accidents in 2012, of which 2,385 were serious and 116 were fatal. Traffic accidents involving injuries increased by 1.2 per cent in 2013, compared with 2012.

Public Transport and the Environment

The government bases its plans for public infrastructure projects on sustainable development principles. Together with the operators, it also takes a range of measures to reduce the adverse impact on the environment of road-based transport, including the rationalisation of bus routes and the deployment of more environment-friendly buses.

All franchised buses are now equipped with engines that meet the European emission standards (known as Euro engines). New buses purchased by franchised bus companies must be of Euro V emission standard and the bus operators have also been replacing old buses before they reach 18 years old. All Euro II and III buses have been retrofitted with Diesel Particulate Filters where possible to reduce particulate emission. The government and the franchised bus companies plan to retrofit Selective Catalytic Reduction devices on these buses to cut nitrogen oxides emissions in the coming years. There are also plans to start trials on the use of hybrid and electric buses in Hong Kong in 2014. The government is working with the franchised bus companies to deploy cleaner buses along busy urban corridors in Central, Causeway Bay and Mong Kok. In 2013, about 1,100 daily bus trips were eliminated from the busy traffic corridors through service cancellation, frequency reduction, route truncation and

route amalgamation. Bus stops have also been rationalised to reduce the number of stops along busy corridors.

All newly registered taxis equipped with internal combustion engines are required to run on Liquefied Petroleum Gas (LPG) or petrol to reduce air pollution. Almost all taxis and 67 per cent of PLBs have switched to LPG. As at January 2014, 40 electric and 17 hybrid taxis and one hybrid PLB were in operation.

Another incentive scheme between April 2007 and March 2010 encouraged the replacement of Pre-Euro and Euro I diesel commercial vehicles with more environment-friendly ones and about 17,100 applications were approved. A similar scheme was extended from July 2010 to June 2013 to cover the replacement of Euro II diesel commercial vehicles. By year-end, about 7,000 applications had been approved, with about 2,500 approved in 2013. In addition, a reduction in the first registration tax has been offered to new buyers of environmentally-friendly commercial vehicles. As at year-end, about 21,600 applications had been processed, with about 8,000 applications approved in 2013.

The environmental impact of new transport projects, during both their construction and operation phases, is monitored closely. Environmental mitigation measures are implemented where necessary to reduce this impact.

Pedestrian schemes have been introduced to reduce pedestrian congestion in Central, Wan Chai, Causeway Bay, Stanley, Tsim Sha Tsui, Jordan, Mong Kok, Sham Shui Po, Yuen Long and Sheung Shui. Feasibility studies on proposed pedestrian environment improvement schemes in Causeway Bay and Yuen Long, and an investigation study on similar improvements in Mong Kok, are in progress.

Cross-boundary Traffic

Overall Cross-boundary Traffic

Total cross-boundary vehicular traffic increased by about 0.1 per cent in 2013 as compared with the previous year, averaging 42,600 vehicles a day, whereas the total cross-boundary passenger traffic by rail, road and ferry increased by about three per cent, reaching 648,000 passengers a day.

Rail Boundary Crossings

At present, there are two rail-based boundary crossings in Hong Kong at Lo Wu and the Lok Ma Chau Spur Line. The Lo Wu Control Point operates daily between 6.30 am and midnight, handling an average of 252,000 passengers a day in 2013, and more than 363,000 on a holiday. The Lok Ma Chau Spur Line Control Point, which connects to Futian Port in Shenzhen, operates between 6.30 am and 10.30 pm daily for travellers by rail or specified road-based public transport. In 2013, the Lok Ma Chau Spur Line handled an average of about 69,000 passengers daily, and more than 110,000 travellers on a holiday.

In addition, in 2013 a daily average of 12,000 travellers took the MTR Intercity through-trains between the Mainland and Hung Hom.

Road Boundary Crossings

The four road-based boundary crossings between Hong Kong and the Mainland at Lok Ma Chau, Man Kam To, Sha Tau Kok and Shenzhen Bay Port are open daily for goods and passenger vehicles. The Lok Ma Chau Control Point, which connects to Huanggang Port in Shenzhen, operates round-the-clock. The Sha Tau Kok and Man Kam To control points are open from 7 am to 10 pm, while the Shenzhen Bay Port is open from 6.30 am to midnight. Following the reconstruction of the passenger clearance area at Wenjindu Port in Shenzhen, the clearance services for cross-boundary vehicles and passengers at Hong Kong's Man Kam To Control Point resumed full operation in August 2013.

The daily average number of vehicle trips recorded at the control points of Lok Ma Chau, Man Kam To, Sha Tau Kok and Shenzhen Bay Port during 2013 was 25,500, 4,400, 2,600 and 10,000 respectively, and the daily average number of travellers using these control points was 77,900, 3,200, 9,300 and 88,900 respectively. Most travellers using these control points take cross-boundary coaches. There is also a shuttle bus service plying between the public transport interchange at San Tin and Huanggang Port in Shenzhen via the Lok Ma Chau Control Point. Travellers who use the Shenzhen Bay Port may use the specified local public transport services there.

In 2013, about 120 companies operated cross-boundary coach services, carrying an average of about 62,500 passengers a day. The shuttle bus service at the Lok Ma Chau Control Point carried a daily average of about 26,500 passengers and the specified local public transport services at Shenzhen Bay Port carried an average of 59,000 passengers a day.

New Boundary Crossings under Construction or Planning

In 2010, the Ministry of Transport of the Central People's Government approved the preliminary design of the Hong Kong-Zhuhai-Macao Bridge (HZMB), which will connect Hong Kong to the western part of Pearl River Delta. The governments of Guangdong, the HKSAR and the Macao Special Administrative Region established a 'Joint Works Committee of the Three Governments' to oversee the implementation of the HZMB project.

The HZMB Authority was set up in 2010 to co-ordinate the construction, operation, maintenance and management of the HZMB Main Bridge, and to implement various policies of the joint works committee. Local works within HKSAR waters continued in 2013 and will dovetail with those in the Mainland for the commissioning of the HZMB in 2016.

The Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) will reduce rail travel time between Guangzhou and Hong Kong and link Hong Kong to Beijing and other major Mainland cities via the Beijing–Guangzhou passenger line and the Hangzhou–Fuzhou–Shenzhen passenger line. It will also connect Hong Kong to cities in the Pan-Pearl River Delta region via the Mainland's Rapid Transit System now under development. Construction of the Hong Kong section of the XRL commenced in January 2010 and is in progress.

The proposed Liantang/Heung Yuen Wai Boundary Control Point (BCP) will provide efficient access to the eastern part of Guangdong, Fujian and Jiangxi Provinces via the Shenzhen-Huizhou and Shenzhen-Shantou expressways. When the new BCP is commissioned in 2018, it

will significantly shorten the travelling distance between Hong Kong and Shenzhen and the nearby provinces and greatly facilitate future regional co-operation and development. It will also help redistribute the cross-boundary traffic among the existing Man Kam To and Sha Tau Kok boundary crossings in the eastern part of the New Territories.

Cross Boundary Ferries

Cross-boundary ferry services to Macao and some 11 Mainland ports are provided by six operators at the Hong Kong–Macao Ferry Terminal in Sheung Wan and the China Ferry Terminal in Tsim Sha Tsui.

In 2013, 20.99 million travellers used cross-boundary ferry services to travel to and from Macao, while the number travelling to and from Mainland ports was 4.97 million.

The Port

In 2013, Hong Kong handled a total of 22.35 million Twenty-foot Equivalent Units of containers (TEUs), and was the fourth busiest port in the world. Some 376,100 vessels arrived in and departed from Hong Kong during the year, carrying 270 million tonnes of cargo and about 28.8 million passengers. Most of these passengers commuted on a highly efficient fleet of high-speed ferries, including jetfoils and catamarans, to and from Macao and ports on the Mainland.

Hong Kong is a modern, well equipped deep-water port serving two main types of maritime transport: ocean-going vessels from all parts of the world and coastal and river-trade vessels from the Pearl River. A daily average of around 82 ocean-going vessels and nearly 432 river-trade vessels arrive at the port; and many high-speed ferries and local vessels work in, or pass through, the harbour. Hong Kong's ship turnaround performance is among the best in the world: the average turnaround time for container vessels at the container terminals is estimated to be about 10 hours.

Port Development

Container handling facilities are a key part of the logistics sector's infrastructure. The nine container terminals at the Kwai Chung–Tsing Yi area, which handle 77 per cent of Hong Kong's container throughput, have 24 berths with a total handling capacity of about 21 million TEUs per year.

To strengthen Hong Kong's position as an Asia-Pacific regional hub port, in August the government commenced dredging works for the Kwai Tsing Container Basin and related fairways to a depth of 17.5 metres. When completed in 2015, this will enable the new generation of ultra-large container ships to use the port at all tides.

Strategic Planning

The government has commissioned a 'Study on the Strategic Development Plan for Hong Kong Port 2030' to update port cargo forecasts, to find ways of using existing port facilities more efficiently and to plan for the future development of the Hong Kong Port. The study is expected to be completed in 2014.

Hong Kong Port Development Council

In Hong Kong, all container terminal facilities are financed, developed, owned and operated by the private sector. The government's role is to undertake long-term strategic planning for port facilities and to provide the necessary supporting infrastructure, such as roads and channels to the terminals.

The Hong Kong Port Development Council, chaired by the Secretary for Transport and Housing and comprising industry representatives and senior government officials, advises the government on port development strategies and facility planning to meet future demands. It also assists the government in promoting Hong Kong as a regional hub port and a leading world container port.

Hong Kong Maritime Industry Council

The Hong Kong Maritime Industry Council (MIC), chaired by the Secretary for Transport and Housing and comprising industry leaders and senior government officials, advises the government on measures and initiatives to develop further Hong Kong's maritime industry. It also assists the government in promoting Hong Kong's maritime services and its status as an international maritime centre. In 2013, the MIC continued to finance various incentive and scholarship schemes to assist manpower development for the industry at both technical and professional levels, including scholarships for students of selected post-graduate programmes in maritime services and maritime law.

Maritime Industry

About 80 international shipping lines offer ocean liner services in Hong Kong, with around 380 sailings weekly connecting to about 550 destinations worldwide. In addition, there are over 700 shipping-related companies operating in Hong Kong, providing a great variety of quality maritime services, ranging from ship agency and management, ship owning and operation, ship broking, marine insurance to inland water transport. Other related services such as ship registration, ship finance, and maritime law and arbitration are also available. Hong Kong's ship owners control about 9 per cent of the world's merchant fleet in terms of deadweight tonnage.

Some of the world's largest and oldest shipping companies are based in Hong Kong, providing professional services not only to Hong Kong-registered ships but also to ships calling at Hong Kong. Other international maritime service providers have also set up offices in Hong Kong, providing various supplies and support services including ship maintenance and repair, bunkering, ship replenishment, waste disposal, information technology and communication services, auditing and tax advisory, and training services. The maritime sector contributes significantly to Hong Kong's economy and the job market.

Hong Kong is proactive in negotiating double taxation relief arrangements covering shipping income with its trading partners. It has so far made such arrangements with 37 tax administrations: Austria, Belgium, Brunei, Canada, Chile, the Czech Republic, Denmark, France, Germany, Guernsey, Hungary, Indonesia, Ireland, Italy, Japan, Jersey, Kuwait, Liechtenstein, Luxembourg, the mainland of China, Malaysia, Malta, Mexico, the Netherlands, New Zealand,

Norway, Portugal, Qatar, the Republic of Korea, Singapore, Spain, Sri Lanka, Switzerland, Thailand, the United Kingdom, the United States of America, and Vietnam.

Port Administration

The Marine Department administers the port, with its principal task to ensure 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 mooring buoys and strict enforcement of rules and standards of the major international maritime conventions.

The department liaises closely with shipping and commercial organisations through a number of advisory and consultative committees. Through these channels, users and operators of port facilities can advise the government on port administration matters. The Port Operations Committee advises on all matters related to efficient operation of the port, the Pilotage Advisory Committee on pilotage services, and the Port Area Security Advisory Committee on port security. In addition, the Local Vessels Advisory Committee deals with matters related to local vessels, while the Shipping Consultative Committee advises on the operation of the Hong Kong Shipping Register (HKSR) and Hong Kong's participation in the International Maritime Organisation.

The department's website (www.mardep.gov.hk) provides a wide range of information on the port and the HKSR, such as notices and details of the department's services and facilities. Special features include the application of Really Simple Syndication to publish updated Hong Kong Merchant Shipping Notices, Hong Kong Merchant Shipping Information Notes and Marine Accident Investigation Reports; maritime security levels of the port and the Hong Kong-registered ships; the Hong Kong Shipping Directory in which Hong Kong-based marine services companies are listed; real-time vessel arrival and departure information; examination schedules for seafarers; verification of Port Clearance Permits issued; allocation of approved berthing slots at the Hong Kong-Macao Ferry Terminal and the China Ferry Terminal; and port and maritime statistics.

The department's Electronic Business System provides a one-stop solution to simplify and speed up the submission and processing of port formalities, offering services such as online submission of applications, auto-approval for online applications, self printing of permits/certificates, online payment via auto-pay and online checking of application status.

Vessel Traffic Services

The department's Vessel Traffic Centre operates round-the-clock to monitor and regulate the movements of vessels by providing vessel traffic services (VTS) with a modern VTS surveillance system, and a Very High Frequency radio system with full coverage of all navigable waters in Hong Kong.

Harbour Patrol and Local Control Station

The department's Harbour Patrol Section operates 25 patrol launches which help enforce marine legislation, maintain safety of the port and shipping, as well as respond to marine emergencies.

The department's local traffic control station at Kwai Chung Container Terminal 8 operates 24 hours. Equipped with a dedicated patrol launch, the station provides information and traffic organisation services to vessels in the vicinity of the Kwai Chung–Tsing Yi container port area.

Carriage of Dangerous Goods

The Marine Department conducts random shipboard inspections of vessels in Hong Kong waters in accordance with international and local standards. An effective notification system for monitoring dangerous goods carried by local vessels was introduced in 2012.

Pilotage Service

Pilotage is compulsory in Hong Kong waters for any vessel of 3,000 gross tonnage and above, oil tankers of 1,000 gross tonnage and above, and all gas carriers. The Director of Marine is the pilotage authority, who regulates and monitors pilotage services with the assistance of the Pilotage Advisory Committee. Pilotage services are provided round-the-clock throughout the year.

Local Vessels

In 2013, about 17,220 local vessels (including passenger, cargo, fishing and pleasure vessels) were licensed in Hong Kong to provide a variety of services for the port and the community.

Hydrographic Service

The Hydrographic Office carries out hydrographic surveys and produces nautical charts, Electronic Navigational Charts and publications in Chinese and English. It issues Notices to Mariners for updating the charts once every two weeks, and also provides real-time information about tides, and Ma Wan transit tidal window predictions through the internet (www.hydro.gov.hk).

Planning, Development and Port Security

The Marine Department provides professional advice on the planning of projects that affect the port and marine traffic, and promulgates in Marine Department Notices the details of marine works. The department's statistical unit compiles and analyses maritime and port statistics on vessel movements and container throughput, and publishes them periodically on its website (www.mardep.gov.hk/en/publication/portstat.html).

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

Marine Industrial Safety

The Marine Department 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 Merchant Shipping (Local Vessels)(Works) Regulation. Its Marine Industrial Safety Section conducts safety checks on works carried out on board vessels, and promotes safe working practices and regulations for frontline workers.

Port Services and Facilities

Mainland and Macao Ferry Services

The Marine Department operates two cross-boundary ferry terminals: the Hong Kong–Macao Ferry Terminal with 10 berths and the China Ferry Terminal with 12 berths. The Hong Kong–Macao Ferry Terminal operates round-the-clock. The China Ferry Terminal is open daily from 7 am to midnight. The department controls and regulates the use of these cross-boundary ferry terminals under the Shipping and Port Control (Ferry Terminals) Regulations.

Immigration and Quarantine Services

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. Shipping agents may apply for immigration and quarantine services, including advance clearance, for ships.

Mooring Buoys

The Marine Department provides 13 Class ‘A’ and four Class ‘B’ mooring buoys for vessels up to 183 metres and 137 metres long respectively.

Bunkering and Potable Water Supply

Bunkering is readily available at commercial wharves and oil terminals or from a large fleet of private bunkering barges. Bunker supplies meet the latest requirements under Annex VI of the International Convention for the Prevention of Pollution from Ships (also known as the MARPOL Convention). Fresh water can also be supplied alongside berths or from a fleet of private water boats.

Local Vessels Safety Certification Service

The Marine 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. Under the Merchant Shipping (Local Vessels) Ordinance, the plan approval and ship survey work for certain types of local vessels may be carried out by recognised authorities, organisations or professionals authorised by the department.

Public Cargo Working Areas

The Marine Department manages six public cargo working areas, which are open to cargo operators for loading and unloading cargo onto and from barges and coasters. The combined length of berths in these working areas is about 5,000 metres.

Collection of Marine Refuse and Waste

The Marine Department's contractors collect domestic refuse from both ocean-going vessels and local vessels. Sewage and oily chemical waste are collected from ships by registered collectors. The collected sewage is taken to the sewage treatment facility in the harbour for disposal, and the oily chemical waste is shipped to the Chemical Waste Treatment Centre on Tsing Yi Island for treatment.

Combating Oil Pollution

The Marine Department maintains a maritime oil spill response plan to ensure a timely and effective response to oil spills in Hong Kong waters. The guide for regional co-operation used by the department and the port administrations of Guangdong, Shenzhen and Macao in response to major maritime oil spills is the Regional Maritime Oil Spill from Ship Response Plan for the Pearl River Estuary.

In October 2013, the department's Pollution Control Unit organised a large-scale, oil spill clean-up drill with participants from government departments and local oil companies to test the preparedness of the government and the private sector in handling major oil spills from ships.

Cleansing of Maritime Hazardous and Noxious Substances (HNS) Spillage

Maritime HNS spillage cleansing is carried out by a private contractor under an outsourcing arrangement with the Marine Department. The contractor is also required to clean up marine oil spills in Hong Kong waters.

In October 2013, a joint departmental HNS spill response exercise was co-organised by the Marine Department and the Environmental Protection Department to test the government's Maritime HNS Spill Response Plan.

Shipping

Hong Kong Shipping Register

In 2013, the total gross tonnage of ships registered on the Hong Kong Shipping Register (HKSR), administered by the Marine Department, rose to over 86.43 million. In 2013, the HKSR ranked within the world's top five shipping registers. To maintain high standards, the Marine Department conducts a Pre-registration Quality Control (PRQC) assessment of ships intending to join the register and implements a Flag State Quality Control (FSQC) System to ensure ships on the register comply with international standards. In 2013, the department's surveyors carried out 11 PRQC inspections and made 91 FSQC visits to ships and related companies. As a result of these quality control measures, the Port State Control detention rate of Hong Kong-registered ships remained well below the world average, which enabled the Hong Kong flag to maintain its position among the top performance flags in the white list established by the Tokyo Memorandum of Understanding (MoU) of Port State Control; and for its ships to be classified as low risk under the Paris MoU. In addition, Hong Kong also holds the United States Coast Guard's 'Qualship 21' status.

Marine Accident Investigations

The Marine Department's Marine Accident Investigation and Shipping Security Policy Branch (MAISSPB) investigates all serious ship related accidents occurring on Hong Kong-registered ships and in Hong Kong waters. The purpose of the investigation is to determine the circumstances and the possible causes of the accident and recommend preventive measures against recurrences. In 2013, the MAISSPB investigated 27 serious accidents. To improve public awareness of maritime safety, investigation reports of all serious accidents are published on the department's website.

The Chief Executive may order a public inquiry by a Marine Court or a Commission of Inquiry into a serious accident. For accidents involving licensed pilots, a Board of Investigation may be ordered by the Director of Marine.

Seafarers

The Marine Department's Shipping Registry and Seafarers Branch supervises the registration, employment, competence, discipline, health, safety and welfare of Hong Kong seafarers, as well as seafarers working on board Hong Kong-registered ships. In 2013, 48,455 seafarers of different nationalities served on board Hong Kong-registered seagoing ships and 1,290 officers and ratings served on high-speed ferries plying within the Pearl River Delta Region.

The Sea-going Training Incentive Scheme is designed to attract local graduates to join the maritime profession in Hong Kong by providing financial incentives for them to take up sea-going cadetship training. By December 2013, 285 cadets had joined the scheme since it started in July 2004.

Participation in International Shipping Activities

International Maritime Organisation

The HKSAR Government, under the name 'Hong Kong, China', is an associate member of the International Maritime Organisation (IMO) and has a permanent representative in London. The Hong Kong maritime industry is consulted on, and closely informed of, all issues discussed at IMO meetings that may affect Hong Kong. In 2013, HKSAR Government officials attended 19 IMO meetings. Topics discussed included enhancing maritime safety and security, measures to reduce marine pollution, matters related to maritime laws, seafarers' training and certification of standards, facilitation of international maritime traffic, and other maritime matters.

Port State Control

Hong Kong is a member of the Memorandum of Understanding on Port State Control (PSC) in the Asia-Pacific Region. The Marine Department participates in its various activities, including leading the Advisory Group on Technical Co-operation Programmes and as a member of three other working groups.

In 2013, the Marine Department's officers conducted 740 initial PSC inspections on foreign ocean-going ships, or 15 per cent of all foreign ocean-going ships that visited Hong Kong. About 5.4 per cent of ships inspected were detained because of serious deficiencies that needed immediate attention.

Maritime Search and Rescue

The Marine Department's Maritime Rescue Co-ordination Centre (MRCC) co-ordinates search and rescue operations within Hong Kong waters and in international waters of the South China Sea. Its area of responsibility covers about 450,000 square nautical miles. The MRCC is manned by professional staff and equipped with modern communications equipment for receiving distress alerts and communicating with ships.

The Hong Kong MRCC is one of the eight maritime members nominated by the International Maritime Organisation (IMO) to participate in a 16-member international joint working group, which was established by the International Civil Aviation Organisation and the IMO to discuss aeronautical and maritime search and rescue issues.

Government Fleet and Dockyard

Government Fleet

The government fleet, with over 800 vessels, serves 14 government departments. The Marine Department itself controls and manages 75 vessels, of which 43 are manned by the department. These include patrol launches, purpose-built conveyance launches, pontoons, hydrographic survey launches and explosives carriers. These vessels either support the department's own port operations or serve other departments that do not have their own fleets. In 2013, the Marine Department also had 26 vessels provided under contract by private operators, including conveyance launches, tugboats and various marine transport services for the department.

Government Dockyard

The Government Dockyard, managed by the Government Fleet Division, designs, procures and maintains all government vessels. It occupies a site of 9.8 hectares on Stonecutters Island and has a sheltered water basin of 8.3 hectares as one of the Marine Department's operational bases. For repair and maintenance of vessels, the dockyard has four movable canopies, 12 covered docking and repair sheds and 22 open-yard docking cradle spaces, supported by a ship-lift system and three ship-hoists capable of dry docking vessels of up to 750 tonnes.

In 2013, 34 new small craft, costing \$2.63 million, were built for the government and 14 new craft building contracts, worth \$36.63 million, were awarded to shipbuilders in Hong Kong and overseas. The total expenditure in maintaining the Government Dockyard systems and government fleet was close to \$432 million.

Marine Facilities

Hong Kong is one of the world's busiest ports, and marine civil works are essential to keep the port running smoothly. The Civil Engineering and Development Department (CEDD) carries out maintenance work on public landing steps and ferry piers and terminals, the Kai Tak Cruise Terminal, breakwaters, and other public marine facilities, as well as ensuring regular maintenance dredging of the harbour, navigation channels and major river channels. The works contract for dredging the seabed of Kwai Tsing Container Basin and portions of the Northern Fairway and Western Fairway commenced in August 2013. The CEDD currently maintains 506

hectares of typhoon shelters, five kilometres of quays at public cargo working areas, 124 kilometres of seawalls and breakwaters, 314 piers and landing steps, 101 dolphins (mooring structures), 14,100 hectares of fairways and 3,590 hectares of anchorage areas.

The CEDD also plans, designs and constructs public marine facilities. In 2013, the CEDD continued with the planning and design of a new public landing facility at Lei Yue Mun, a cycle parking area at Yung Shue Wan Ferry Pier, the improvement of Sai Kung Public Pier and sediment removal at five Fish Culture Zones, and commenced construction of a public landing facility at Trio Beach.

International Transport and Logistics Hub

Logistics is an important sector of the economy, accounting for about 4 per cent of Hong Kong's Gross Domestic Product. Given its strategic location, world class infrastructure and business-friendly environment, Hong Kong has long established itself as a preferred transport and logistics hub in Asia. It is also the world's busiest international air cargo centre and one of the world's busiest container ports. These achievements are attributed to the operators of the services and facilities — the investors and the efficient workforce, as well as the constructive partnership and co-operation between the private and public sectors. Efficient, reliable and well connected, Hong Kong's airport and seaport are vital to the territory's logistics industry.

Hong Kong is also home to the most productive and efficient container terminals and to the biggest private terminal operators in the world. A comprehensive network of container line services connects the port of Hong Kong with about 550 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.

Development of Hong Kong's Logistics Industry

The government provides the necessary infrastructure and environment for Hong Kong's logistics sector to grow. It also promotes closer co-operation with the Mainland, in particular the Pearl River Delta region, to achieve synergies in logistics development.

The Hong Kong Logistics Development Council, chaired by the Secretary for Transport and Housing, provides a forum for the private and public sectors to foster logistics development in Hong Kong. The council is sponsoring a study of the feasibility and effectiveness of establishing an information platform to track real-time movement of goods across the border and to improve cargo information for those in the supply chain.

In 2013 the council jointly organised with industry associations various training programmes, workshops and forums for logistics sector employees to keep them abreast of new technology and developments.

In November 2013, the Third Asian Logistics and Maritime Conference, co-organised by the government and the Hong Kong Trade Development Council, attracted more than 1,600 industry professionals from 27 countries and regions, including the Mainland, to discuss and

exchange views on regional trade flow (in particular that between ASEAN and China) and the rise of e-commerce and its impact on logistics and supply chain management.

Civil Aviation

Hong Kong is a major international and regional aviation centre. At year-end, there were more than 100 airlines providing about over 7,000 weekly scheduled services between Hong Kong and about 180 destinations worldwide.

Air Traffic in 2013

In 2013, 59.9 million passengers passed through Hong Kong International Airport (HKIA), a rise of 6.1 per cent over 2012, the airport handled 4.13 million tonnes of cargo, a rise of 2.4 per cent over 2012, and there were about over 372,080 flights to and from Hong Kong, a rise of 5.8 per cent over 2012.

Home Market Expansion

The airport continues to provide extensive land and sea connections to the Pearl River Delta (PRD) region. In 2013, there were about 87 daily ferry trips between SkyPier and Guangzhou's Nansha, Shenzhen's Shekou and Fuyong, Dongguan's Humen, Zhongshan, Zhuhai's Jiuzhou and Macao's Maritime Ferry Terminal and Taipa. With 550 daily scheduled coach trips, passengers enjoy convenient services between the airport and about 110 PRD cities and towns. The number of cross-boundary limousines serving Mainland cities and towns daily reached 280 in 2013.

Airport Services

In October, the new Cathay Pacific Cargo Terminal started full operation with a handling capacity of 2.6 million tonnes a year, increasing the total annual capacity of the airport's cargo terminals by 50 per cent to 7.4 million tonnes.

Plans to increase aircraft parking stands in the medium term were under way. These include 20 stands in the midfield development, to be completed in 2015, and 28 stands in the apron expansion development which will be operational in 2014. More stands are being planned to meet future needs.

Preparation for Growth

To cope with the air traffic demand in the long run, the government gave in-principle approval in 2012 for the Airport Authority Hong Kong (AAHK) to adopt the three-runway system for the purposes of planning the future development of the airport. The AAHK is taking forward the necessary planning works, including the statutory environmental impact assessment (EIA), scheme designs and financing arrangements. The EIA process is expected to be completed in 2014.

Meanwhile, the AAHK has started work on the related designs of the three-runway system and has begun studying different funding options. The HKIA's planned three-runway system is expected to be able to cope with air traffic demand up to at least 2030, by which time the annual passenger and cargo throughput is forecast to increase to around 100 million and 8.9

million tonnes from 59.9 million and 4.13 million tonnes (in 2013) respectively. Annual air traffic movements are forecast to increase to 602,000 in 2030 from about 372,080 in 2013.

Recognition

HKIA has been named the 'world's best airport' over 50 times since it opened in 1998. In October, HKIA was inducted into the Travel Hall of Fame at the TTG Travel Awards after it clinched the Best Airport award for the tenth consecutive year. Meanwhile, HKIA's cargo performance was recognised in the 'Airports Asia – 1 million tonnes or more' category of the Air Cargo Award of Excellence for the eighth consecutive time since 2006.

Air Services

Under 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. At present, there are 62 such agreements. The government also reviews the traffic rights arrangements with its aviation partners to expand Hong Kong's aviation network and to allow more competition in the market. In 2013, the government expanded traffic rights arrangements with eight aviation partners. The amended Air Transport (Licensing of Air Services) Regulations came into operation in April, changing the basis of granting a licence from a route-based approach to an airline-based approach, and empowering the Air Transport Licensing Authority (ATLA) to require licence holders to provide relevant information for assessing their financial position. In 2013, ATLA granted nine new licences: one to Hong Kong Express Airways (HKE), three to Hong Kong Airlines (CRK), two to Cathay Pacific Airways (CPA), one to Hong Kong Dragon Airlines (HDA) and two to AHK Air Hong Kong (AHK).

In 2013, CPA operated scheduled services to 72 destinations worldwide, while HDA operated scheduled services to 41 destinations in Asia (including 20 cities in the Mainland). AHK operated scheduled all-cargo services to 12 destinations in Asia. CRK operated scheduled services to 37 destinations, including the Maldives and various countries in Asia. HKE changed itself to the first local low-cost carrier from October and operated scheduled services to 15 destinations in Asia. The fleet complement of all the local airlines totalled 218 aircraft during the year.

Six non-Hong Kong airlines commenced or resumed scheduled passenger services to Hong Kong in 2013. Air Seychelles started services from Mahe Island in March, City Airways started services from Bangkok in May, and Mandala Airlines resumed services from Jakarta in July, Scoot started services from Singapore in November, while EasterJet and Aurora Airlines started services from Seoul and Vladivostok respectively in December.

Air Traffic Management

In 2013, the Air Traffic Management system handled about 372,000 movements at the HKIA and 219,000 over-flights, including traffic to and from Macao, representing an increase of 5.6 per cent and 7.4 per cent respectively over 2012. Average daily flight movements at the HKIA in the fourth quarter (October – December) were 1,042. The Civil Aviation Department (CAD) increased the runway capacity from 63 to 65 flight movements per hour in 2013 by improving the airspace and flight procedures design. To manage the provision of safe, efficient and

sustainable air traffic control (ATC) service to support the projected air traffic growth, the CAD continued its Replacement ATC System Project. With progressive completion of equipment installation work for the new ATC Centre in 2013, the new ATC systems have been undergoing a series of thorough and stringent acceptance tests, as well as safety assessment in accordance with established international aviation safety management standards and procedures. The new ATC Centre will commence operation after completion of comprehensive system integration testing and controller training.

Aviation Security

Conventions and agreements on aviation security, promulgated by the International Civil Aviation Organisation (ICAO), are implemented through the Aviation Security Ordinance. The Hong Kong Aviation Security Programme (HKASP), which was drawn up under the ordinance in consultation with the aviation community and other concerned parties, stipulates the aviation security requirements for the various operators and service providers at HKIA. The implementation of these requirements is closely monitored by the CAD to ensure that international standards are met. To comply with the latest air cargo security standards promulgated by ICAO, enhancement to the air cargo security regulated agent regime has been implemented in Hong Kong from July 2013.

Enhancing Aviation Services

Officially opened on 23 May 2013, the CAD headquarters provides efficient one-stop service to the industry and the public. The new facilities include dedicated aircraft accident investigation facilities, a command control centre, a centralised examination centre and a library-cum-resource centre.

Websites

Airport Authority Hong Kong: www.hkairport.com

Civil Aviation Department: www.cad.gov.hk

Highways Department: www.hyd.gov.hk

Marine Department: www.mardep.gov.hk

Transport and Housing Bureau: www.thb.gov.hk

Transport Department: www.td.gov.hk