

Chapter 13

Transport

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

The Government provides an efficient transport infrastructure to meet the challenges of population growth and continuous development. It encourages use of public transport by ensuring quality service while managing road use to reduce congestion and promote safety. It also supports special measures to protect the environment in places used by public transport.

Rail is the backbone of the public transport system. The MTR Corporation Limited (MTRCL) operates the railway system in Hong Kong.

Development of new railway projects progressed smoothly in 2011. Construction of the West Island Line and the Hong Kong section of the Guangzhou–Shenzhen–Hong Kong Express Rail Link continued. The Kwun Tong Line Extension and the South Island Line (East) commenced construction in May 2011 for completion in 2015. Planning for the Sha Tin-to-Central Link was also proceeding. The advance works for building the Sha Tin-to-Central Link started in May 2011.

Works in respect of the Hong Kong-Zhuhai-Macao Bridge (HZMB), including the Main Bridge and local works in the Hong Kong Special Administrative Region (HKSAR), progressed well. Funding for local works has been approved by the Legislative Council and the works commenced in late 2011 for commissioning in 2016.

Implementation of an Intelligent Transport Systems Strategy continued during the year. A mobile website and mobile application 'Hong Kong eTransport' for point-to-point public transport route enquiries as well as a website for searching driving routes were all launched in 2011.

The aviation industry continued to do well, the passenger and cargo throughput at Hong Kong International Airport were 52.75 million travellers and 3.94 million tonnes respectively, while air services arrangements with aviation partners were further liberalised during the year.

Administrative Framework

The Transport and Housing Bureau of the Government Secretariat, headed by the Secretary for Transport and Housing, is responsible for, among other things, the formulation of policies on matters relating to 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 helps provide a safe, efficient, reliable and environmentally friendly transport system that meets the economic, social and recreational needs of the community, 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 quality and co-ordination 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 adopted in transport-related areas.

It has drawn up long-term transport strategies based on the recommendations of the Third Comprehensive Transport Study. Meanwhile, the objectives, promulgated in a plan entitled 'Hong Kong Moving Ahead: A Transport Strategy for the Future' include:

- better integration of transport and land use planning;
- better use of railways as the backbone of the passenger transport system;
- better public transport services and facilities;
- better use of advanced technologies in transport management; and
- better environmental protection.

Railway Development and Railway Development Strategy 2000

Railways are safe, efficient, reliable, comfortable and environmentally friendly mass carriers. They play a key role in Hong Kong's transport systems strategy and the Government gives high priority to railway development. The Railway Development Strategy 2000 (RDS 2000), which provides a blueprint for the next phase of railway development, includes a number of new railway schemes to meet

Hong Kong's increasing transport needs in a sustainable manner over the next two decades.

Hong Kong's railway development has progressed rapidly during the past few years. Over \$170 billion has been invested in six railway projects prescribed in RDS 2000. They are:

- the Kowloon Southern Link (commissioned in August 2009);
- the West Island Line (commenced construction in 2009);
- the Hong Kong section of the Guangzhou–Shenzhen–Hong Kong Express Rail Link (XRL) (commenced construction in 2010);
- the Kwun Tong Line Extension (commenced construction in 2011);
- the South Island Line (East) (commenced construction in 2011); and
- the Sha Tin-to-Central Link (the advance works commenced construction in 2011).

Construction of the West Island Line and the Hong Kong section of the XRL continued, while the Kwun Tong Line Extension, the South Island Line (East) and the advance works of the Sha Tin-to-Central Link commenced construction in May 2011. The main works of the Sha Tin-to-Central Link is in the design stage.

Since the completion of the RDS 2000 in 2000, there have been major changes to the planning parameters of various areas of Hong Kong. There have also been sharp increases in cross-boundary passenger and vehicular traffic due to closer integration of the economies and people in the Mainland and Hong Kong. It is therefore necessary to review and update the blueprint of railway development to take account of the changing needs of society and the latest planning parameters.

A consultancy study on the Review and Update of the Railway Development Strategy 2000 commenced in March 2011 for completion in 2013. It comprises a comprehensive review of railway projects recommended in the RDS 2000 that have not yet been implemented, and studies on other proposals made by the Government or the public. The study findings will help in the planning of these railway projects.

Transport Infrastructure

Road Network

Hong Kong has 2 086 kilometres of roads and 1 316 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: 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. All 11 tunnels are managed and operated by private companies under management contracts. 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. They are 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 by Discovery Bay Road Tunnel Company Limited. This is operated and maintained by the company, and is open only to vehicles taking goods to Discovery Bay, or providing services to residents there.

Rail Network

Railways are a vital part of Hong Kong's transport network and are essential to its continuous economic, social and land development. They account for about 38 per cent of daily public transport passenger travel and about 60 per cent of land-based cross-boundary passenger trips to the Mainland. They are being extended to various parts of Hong Kong.

The map below shows the existing railway network, four railway projects under construction and the indicative alignments of the five railway projects under planning, or review.

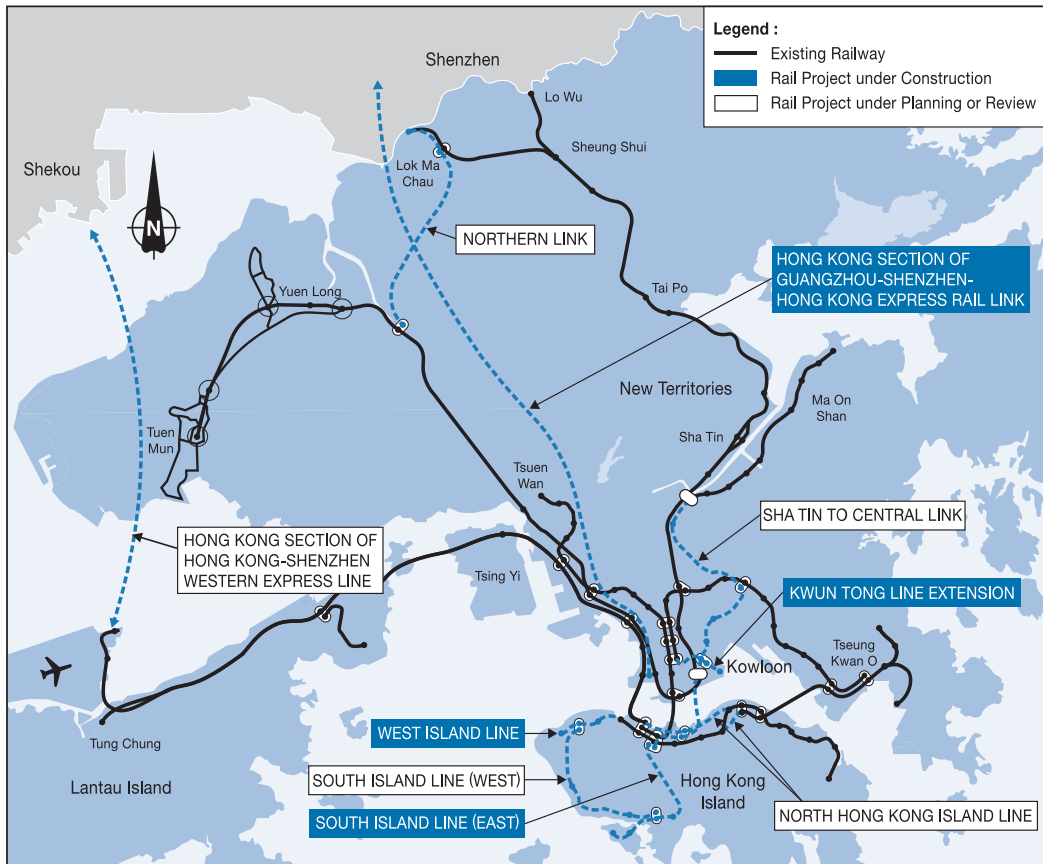
Railway Projects under Construction

The West Island Line is an extension of 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 July 2009 for completion in 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 Hong Kong section of the XRL is a 26-kilometre underground railway with the terminus at West Kowloon. Trains will be able to run through the tunnel at a maximum speed of 200 kilometres per hour. Upon completion, the journey time between Guangzhou and Hong Kong by train will be reduced from 100 minutes to 48 minutes. Passengers from Hong Kong will take only about three hours to reach Changsha, about four hours to Wuhan and Xiamen, about five hours to Fuzhou, and about six and eight hours to Shanghai and Beijing respectively. Construction of the project started in January 2010 for completion in 2015.

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. Passengers can interchange at the proposed Ho Man Tin Station for the future Sha Tin-to-Central Link. Construction started in May 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.



The South Island Line (East) is 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. Construction started in May 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.

Railway Projects under Planning or Review

The 17-kilometre long Sha Tin-to-Central Link is a strategic project providing territory-wide connections. It will have 10 stations at Tai Wai, Hin Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai, Ho Man Tin, Hung Hom, Exhibition and Admiralty. It will be linked up with 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. The railway scheme was gazetted under the Railways Ordinance on November 26, 2010. The amendment scheme was gazetted on July 15, 2011 and subsequently on November 11, 2011. Construction of the main works is expected to start in 2012 for completion in 2018 for the section between Tai Wai and Hung Hom and 2020 for the section between Hung Hom and Admiralty. Construction of the advance works of the Sha Tin-to-Central Link commenced in May 2011.

The Chief Executive announced in his 2007-08 Policy Address an initiative to foster closer Hong Kong-Shenzhen Airport Co-operation and to study the feasibility and economic benefits of establishing the Hong Kong-Shenzhen Western Express Line (WEL), to capitalise on the synergy of their complementary flight networks. Another major function of the WEL is to connect Shenzhen Qianhai and the Northwest New Territories. It is important for the design of the WEL to tie in with the planning and development programme of these two areas. The WEL is currently being further planned in the context of the consultancy study on the Review and Update of the Railway Development Strategy 2000.

Road Projects under Construction

Major road projects under construction include:

- A Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB) forming part of the east-west strategic route along the northern shore of Hong Kong Island, to alleviate traffic congestion at the existing Connaught Road Central/Harcourt Road/Gloucester Road. CWB is a 4.5-kilometre-long dual three-lane trunk road with a 3.7-kilometre-long tunnel. Construction started in December 2009 and is now in full swing. It is scheduled for commissioning in 2017.
- Reconstruction of Tuen Mun Road to bring the expressway's dual three-lane carriageway up to current standards and to provide hard shoulder lanes wherever possible. The project is scheduled for completion by 2014. Work on widening the Tuen Mun Road Town Centre section is scheduled for completion by the end of 2013.
- 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. Construction of the section between Island House Interchange and Ma Wo commenced in August 2009 for completion in 2013, while construction of the section between Ma Wo and Tai Hang commenced in February 2010 for completion by the end of 2013.
- Bus-Bus Interchanges on Tuen Mun Road involving construction of two bus-bus interchanges, one for Tuen Mun bound buses, the other for Kowloon-

bound buses plying Tuen Mun Road. Construction commenced in July 2010 for completion in 2013.

- Reclamation works for the HZMB Hong Kong Boundary Crossing Facilities (HKBCF) and the Tuen Mun–Chek Lap Kok Link (TM–CLKL) southern landfall, an artificial island of about 150 hectares in the northeast waters of the Hong Kong International Airport (HKIA), commenced in late 2011. These works are expected to be completed in 2016 to dovetail with the commissioning of the HZMB.

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:

- The TM–CLKL and Tuen Mun Western Bypass will together form an approximately 18-kilometre-long dual two-lane road to connect the Northwest New Territories to the HZMB HKBCF, HKIA and Lantau. The new road will also provide an alternative route to the airport.
- The Hong Kong Link Road, a 12-kilometre dual three-lane highway, comprising sections of a sea viaduct tunnel and at-grade road, will connect the HZMB Main Bridge to the HZMB HKBCF. The project's preliminary design has been completed and construction will start in 2012 to dovetail with the commissioning of the HZMB in 2016.
- The Central–Kowloon Route: a detailed design for a proposed 4.7-kilometre-long 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 started in mid-2011.
- Trunk Road T2: preliminary design for the project is ongoing. The proposed trunk road is a 3.6-kilometre-long dual two-lane carriageway. It will connect the Central–Kowloon Route from the Kai Tak Development to the proposed Tseung Kwan O–Lam Tin Tunnel.
- The Tseung Kwan O–Lam Tin Tunnel and the Cross Bay Link: work on a preliminary design for this project is continuing. The plan is for an additional external land route to be built to connect Tseung Kwan O to Kowloon. The Tseung Kwan O–Lam Tin Tunnel is a dual two-lane carriageway of about four kilometres long. It will connect Tseung Kwan O to Trunk Road T2 at Cha Kwo Ling. The Cross Bay Link is a dual two-lane carriageway that will link the two sides of Junk Bay.
- Fanling Highway: a detailed design for the widening of Fanling Highway between Tai Hang and the Wo Hop Shek Interchange is being prepared. This section of the Fanling Highway will be widened to turn the dual three-lane carriageway there into a dual four-lane carriageway with hard shoulders.
- Trunk Road T4: is a dual two-lane carriageway that will connect Sha Tin Road to Trunk Road T3 and Shing Mun Tunnel Road, to be used as a bypass to Tai

Po Road (Sha Tin Section), to cater for the long-term traffic flow in Sha Tin District. A review of the plan for this proposed trunk road continued after Route 8 opened at the end of 2009.

- Hiram's Highway: improvements to the highway will 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 formulated 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 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 control area is managed by a private contractor. The Lantau Link imposes a 'one-way' toll which means that vehicles travelling to Lantau on a return trip make only one payment for the journey to and from Lantau or Ma Wan. The double toll ranges from \$20 to \$80 for different types of vehicles. An average of 65 544 vehicles per day used the Lantau Link in 2011.

Tsing Sha Control Area

The Tsing Sha Control Area connects the Tsing Ma Control Area in the west to Tai Po Road in Sha Tin. It covers a 13-kilometre Tsing Sha Highway connecting Sha Tin, West Kowloon and Tsing Yi. In 2011, an average of 35 337 vehicles used this main truck road each day.

The Control Area is connected to Sha Tin by a series of three tunnels: the Eagle's Nest Tunnel, Sha Tin Heights Tunnel and Tai Wai Tunnel. Toll for all classes of vehicles travelling through this group of tunnels is \$8. The area's other tunnel is the Nam Wan Tunnel located at Tsing Yi. This tunnel is toll-free.

There is also a 1.6-kilometre bridge in the Control Area that connects Stonecutters Island to Tsing Yi. Called Stonecutters Bridge, it spans Rambler Channel and is toll-free.

Public Transport

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

Railways

Railways account for about 38 per cent of all trips made on public transport each day. Hong Kong's railways are run by the MTR Corporation Limited (MTRCL), a public listed company of which the Government is the biggest 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. The entire system carries an average of 4.07 million passengers each day.

The MTRCL also operates a 36.2-kilometre Light Rail network which has 68 stops in the Northwestern part of the New Territories. The Light Rail carries about 441 900 passengers daily. Light Rail feeder bus services are also operated to provide rail passengers with a more comprehensive service network. In addition, the MTRCL provides inter-city through-train services from Hong Kong to cities in Guangdong, Shanghai and Beijing.

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 records a daily average of 216 300 passenger trips.

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 records an average of 15 600 passenger trips a day, 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 59 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, the company operated 314 bus routes in Kowloon and the New Territories and 60 cross-harbour routes on its own. It also operated 29 and 21 cross-harbour routes jointly with New World First Bus Services Limited (NWFB) and Citybus Limited (CTB) respectively.

At year-end, KMB had a licensed fleet of 3 890 buses, of which 3 840 were air-conditioned and 2 319 were wheelchair-accessible. KMB recorded 936 million passenger trips (a daily average of 2.57 million passenger trips) covering 303.79 million kilometres of roads during the year.

Bus services on Hong Kong Island are provided by NWFB and CTB. At year-end, NWFB was operating 51 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. It had a licensed fleet of 703 air-conditioned buses, of which 615 were wheelchair-accessible.

NWFB recorded 175 million passenger trips (a daily average of 479 900 passenger trips) covering 48.38 million kilometres of roads.

CTB operates two bus networks under two franchises. One of these covers 62 bus routes on Hong Kong Island, one bus route in the New Territories and 29 cross-harbour routes, 21 of which are operated jointly with KMB. The other franchise covers a network of 19 routes plying between the urban areas and North Lantau or the airport.

At year-end, CTB had a licensed fleet of 938 air-conditioned buses, of which 405 were wheelchair-accessible. The company recorded 220 million passenger trips (a daily average of 602 575 passenger trips) covering 86.4 million kilometres of road.

The Long Win Bus Company Limited provides services between the New Territories and Lantau Island and the airport. The company made 30.25 million passenger trips (a daily average of 82 900 passenger trips) covering 25.26 million kilometres of roads in 2011. At year-end, it ran 19 routes with a licensed fleet of 163 air-conditioned buses. All vehicles were wheelchair-accessible.

The New Lantao Bus Company (1973) Limited mainly provides bus services on Lantau Island. The company recorded 20.9 million passenger trips (a daily average of 57 300 passenger trips) which covered 7.02 million kilometres of road. It ran 23 routes with a licensed fleet of 104 vehicles.

Different kinds of fare concession were provided by the franchised bus companies during the year. For example, all franchised bus companies offered concessionary fares for children aged under 12 and elderly passengers on all routes (except recreational routes operated by CTB).

Bus-Bus Interchange schemes are implemented to encourage more efficient use of resources and limited road space, and to provide more choice for passengers. Fare discounts are offered to passengers when interchanging between designated bus routes. At year-end, a total of 245 bus-to-bus interchange schemes were in operation, involving about 400 routes.

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 7 071 registered non-franchised buses of which 6 986 were in operation.

Based on the recommendations of the Transport Advisory Committee's review of the licensing and regulatory framework for non-franchised bus operation completed in July 2004, the Government continued to implement measures to improve the regulation of non-franchised bus operation in 2011. The measures aim at co-ordinating changes in non-franchised bus services with demand; strengthening control over non-franchised bus operation; and enhancing the effectiveness and efficiency of enforcement actions.

Public Light Buses

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

There are two types of PLBs — green and red. Green minibuses provide scheduled services with fixed routes, fares, vehicle allocation and timetables as stipulated by the Transport Department. At year-end, there were 3 057 green minibuses operating 351 major routes, which recorded a daily average of 1 530 000 passenger trips. Red minibuses are not required to operate on fixed routes or timetables. They may set their own fares but are subject to certain restrictions on their operating areas. There were 1 293 red minibuses in operation at year-end, recording a daily average of 360 000 passenger trips.

To further enhance safe PLB operations, the Transport Department introduced in June 2010 a new licensing condition requiring all PLBs to install speed limiters with a maximum speed set at 80 km per hour. The Government also introduced in July 2011 the Road Traffic (Amendment)(No.2) Bill 2011 into the Legislative Council to provide the statutory provisions for introducing a package of measures to enhance the safety of PLB operations and quality of PLB services. The bill is being scrutinised by the Legislative Council.

To strengthen communication among passengers, the trade and the Government, the Transport Department publishes a PLB Newsletter regularly. With regard to road safety, six workshops were held for the operators and PLB drivers in 2011 to remind trade members and drivers of the importance of safe driving.

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.

To improve the operating environment for taxis, the Transport Department has extended a temporary arrangement, which was first introduced in May 2003, to January 31, 2013. This allows taxis to pick up and set down passengers during peak hours and 7 am-to-7 pm restricted zones on roads with speed limits of less than 70 kilometres per hour. At year-end, there were over 270 designated taxi pick-up/drop-off points and taxi drop-off points. The department will continue to provide taxi pick-up/drop-off facilities at suitable locations.

The department and the Quality Taxi Services Steering Committee continued to implement schemes to improve the quality of taxi service. These included updating the information on the light emitting diode display panels and providing additional taxi information plates at appropriate taxi stands. 40 000 free copies of every issue of Taxi Newsletters were published and distributed to taxi drivers, and leaflets were distributed at Hong Kong International Airport, Hong Kong Disneyland and Lok Ma Chau Control Point to provide useful information on taxi services to taxi drivers, passengers and tourists.

In addition, the department has stepped up its promotional and educational efforts to encourage the charging and paying of taxi fares according to the taximeters.

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 22 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 franchised/licensed services were supplemented by 71 'kaito' or small boats routes, which provide services to relatively remote parts of Hong Kong. Ferries recorded a daily average of about 70 500 passenger trips within the harbour and about 65 100 passenger trips to and from the outlying islands.

Transport Management

Effective transport management is essential for the orderly and safe operation of the transport system. The Government's regulatory powers are provided under the Road Traffic Ordinance. Every effort is made to improve the efficiency and effectiveness of transport management through the use of modern technology in a variety of areas.

Licensing

At year-end, there were 1 853 123 licensed drivers, 623 984 licensed private vehicles and 6 297 government vehicles. There were 434 843 licensed private cars, of which 44 569 were new vehicles registered during the year. Licensed goods vehicles numbered 111 164, of which 70 359 were light goods vehicles, 37 150 medium goods vehicles and 3 655 heavy goods vehicles. On average, there were 3 956 new learner-drivers per month.

Driver Improvement Scheme

To promote road safety and make drivers more law abiding through better understanding of good driving behaviour and attitude, the Transport Department launched a Driver Improvement Scheme in September 2002 and designated a number of driving schools for the provision of a driving improvement course. Since February 2009, persons falling within the two specified categories have been required to attend the course on a mandatory basis in accordance with the Road Traffic Ordinance and Road Traffic (Driving-offence Points) Ordinance. The two categories are (i) offenders who have been convicted of serious traffic offences; and (ii) traffic offenders who have accumulated 10 Driving Offence Points within two years. From September 2002 to December 2011, about 53 900 drivers attended the course, among them about 26 600 drivers 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 2011, 196 000 vehicles were examined at the government vehicle examination centres. In addition, 3 510 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 260 000 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 2011, 879 vehicle types were approved.

Intelligent Transport Systems

Mobile applications and a mobile website of 'Hong Kong eTransport', together with a mobile website of 'Driving Route Search Service' were launched in the second half of 2011 which the general public can access free of charge.

Closed circuit television (CCTV) cameras are installed at heavy traffic spots to monitor conditions at these places so that drivers can be alerted to avoid them. There were 333 cameras installed in the urban areas and the new towns and 220 cameras operating on major highways in 2011.

More traffic condition images were disseminated to the public. In 2011, images of 166 strategic locations captured by CCTV cameras were made available to the

public on the Internet and through mobile phones. More cameras are being installed to cover other strategic locations.

A computerised 'Area Traffic Control (ATC)' system is connected to the traffic signalling system in a district, enabling better control of traffic in accordance with the changing conditions on the road. By the end of 2011, there were ATC systems operating 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.

At year-end, a total of 1 809 traffic signals was in operation at road junctions, 1 710 of which were linked to ATC systems.

Conventional traffic signals are being replaced by light emitting diode traffic signals for environmental reasons and cost savings. Replacement work in Kowloon was completed in March 2011 while works in the New Territories started in December 2010 and is expected to be completed by the end of 2012.

To facilitate traffic monitoring and incident management, traffic control and surveillance (TCS) facilities, such as CCTV, emergency telephones and lane signals, are provided in all tunnels. To enhance operational efficiency further, more TCS facilities such as variable message signs, variable speed limit signs and automatic incident detection systems have been installed, or are being retrofitted in some tunnels. The Tsing Ma Control Area, Tsing Sha Control Area and Kong Sham Western Highway are also equipped with TCS facilities.

The Red Light Camera System was further expanded to combat red light jumping at signalised junctions. There are now 155 digital red light cameras in operation throughout the territory. To enhance further the deterrent effect and strengthen the enforcement against speeding, the 'Speed Enforcement Camera (SEC) System' is being expanded. The SEC Phase 2 expansion project is scheduled for completion in 2012. Upon its completion, a total of 20 digital camera units will be operated in 120 camera housings on a rotational basis.

Five speed map panels will be installed in the New Territories to advise motorists about congestion levels along alternative routes and estimated journey time information on a map-type display. The project is scheduled for completion by mid-2012.

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

Automatic Toll Collection

Automatic toll collection (autotoll) systems were installed at all tunnels and at the Lantau Link. The systems allow motorists with tags on their vehicles to drive through designated toll booths without having to stop to pay. Since October 1998, these autotoll systems have been unified so that a subscriber needs only one tag to use all tunnels and toll roads fitted with the system. About 48 per cent of motorists used autotoll when passing through the tunnels and toll roads in 2011.

Parking

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

The Government owns 14 multi-storey car parks plus a 'Park-and-Ride Public Car Park' in Sheung Shui, bringing the number of government car parking spaces to about 7 900, run by two private operators under government contract.

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 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 203 000 off-street public parking spaces (excluding those in government car parks).

Road Safety

There were 15 339 traffic accidents, of which 2 090 were serious and 127 were fatal. This compares with 14 943 accidents in 2010, of which 2 052 were serious and 114 were fatal. Traffic accidents involving death and injury increased by 2.7 per cent in 2011, compared with 2010.

In-depth investigations were carried out at 100 traffic accident blackspots to identify common accident causes. Enhancement measures were recommended for 90 of these locations. Comprehensive route studies were conducted on two selected roads to reduce traffic accidents along the routes in a more holistic manner, and to review their safety performance.

The 'Road Traffic (Amendment) Ordinance 2011' was passed by the Legislative Council on December 14, 2011 to introduce stricter controls and to provide corresponding enforcement powers for the police to combat drug-driving more effectively. It is an offence if anyone drives with a concentration of any of the following six specified illicit drugs: heroin, ketamine ('k'), methamphetamine ('ice'), cannabis ('grass'), cocaine and MDMA ('ecstasy') present in his blood or urine, whether his driving ability is impaired or not.

The ordinance also prohibits drivers from driving under the influence of any drug to such an extent as to render him or her incapable of having proper control of the motor vehicle. The ordinance empowers the police to require drivers suspected of drug-driving to undergo preliminary drug tests.

The Government's road safety strategy during the year continued to adhere to the Road Safety Council's call for safe driving, underlined in the slogan 'Zero Accidents on the Road, Hong Kong's Goal'. Publicity campaigns in 2011 carried four main slogans: 'If you drink, don't drive', 'Love yourself and your families, be a smart pedestrian'; 'Stay alert, watch out for cyclists' and 'Drug driving may be your journey to death'. The Government also continued its campaigns on safe cycling and on advising drivers and passengers to wear seat belts.

Public Transport and Environment

The Government's planning for public transport infrastructure projects is based on sustainable development principles. It strives for the best possible integration of land use, transport and environmental planning. It is also the Government's policy to give priority to railways which it sees as the backbone of the passenger transport system. Eight new railway lines, or extensions of existing lines, were commissioned between 2002 and 2009.

Less reliance on road-based transport will alleviate the pressure on transport systems and, in turn, lessen the impact on the environment. At the same time, the rationalisation of bus routes and bus stops and the introduction of pedestrian schemes will continue. These will help reduce the adverse effect of vehicle emissions and noise pollution.

Since late 1998, about 4 490 daily bus trips have been eliminated from the busy traffic corridors of Hong Kong Island's northern shore through service cancellation, frequency reduction, route truncation and route amalgamation. On Nathan Road in Kowloon, about 1 910 daily bus trips have been eliminated since August 2002, enhancing the efficiency of bus operations along that busy road. Bus stops have also been rationalised to reduce the number of stops along busy corridors.

Franchised bus companies have been purchasing buses with environmentally friendly engines that meet the European emission standards (known as Euro engines) since 1993. At present, all franchised buses have been equipped with Euro engines. To help improve the environment, the franchised bus companies have been deploying buses with Euro II or above environmentally friendly engines on routes along Yee Wo Street in Causeway Bay, the busiest shopping area on Hong Kong Island.

The Government is working with the franchised bus companies to deploy cleaner buses along other busy corridors. The franchised bus companies and the Government have also been working to improve the overall quality of public transport interchanges to make them more user-friendly for passengers. Electronic route information panels and customer service centres have been set up at some interchanges. Other improvements included refurbishing some of the interchanges and their ventilation systems.

Since August 2001, all newly registered taxis have been required to run on Liquefied Petroleum Gas (LPG) to meet stricter emission standards to reduce air pollution. Incentive schemes to encourage the early replacement of diesel light buses

with LPG or electricity-driven vehicles were implemented between August 2002 and December 2005. Almost all taxis and 65 per cent of PLBs have switched to LPG.

Another incentive scheme was introduced between April 2007 and March 2010 (Note: the application deadline in respect of some 1 400 applications had been extended to March 2011 with the approval of Environmental Protection Department) to encourage replacement of Pre-Euro and Euro I diesel commercial vehicles with more environmentally friendly ones to comply with prevailing emission standards. By the end of March 2011 when the scheme was ended, a total of about 17 100 applications had been approved. The scheme had also been extended to cover replacement of Euro II diesel commercial vehicles from July 2010 for a period of three years to June 2013. By year-end, about 2 600 applications had been approved. In addition, a reduction in first registration tax has been offered to new buyers of environmentally friendly commercial vehicles. As at year-end, about 5 900 applications had been processed.

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

To make it easier for people to make their way through busy and congested roads, pedestrian schemes have been introduced to reduce pedestrian congestion in a number of streets. These schemes have been implemented in Central, Wan Chai, Causeway Bay, North Point, the Peak, Stanley, Tsim Sha Tsui, Jordan, Mong Kok, Sham Shui Po, Yuen Long and Sheung Shui.

They have been well received by the public, and more will be introduced, including conversion to traffic calming streets, or streets converted to accommodate wider footpaths and fewer parking spaces and to slow down passing vehicles, of the sections of Saigon Street between Shanghai Street and Parkes Street, Ning Po Street between Shanghai Street and Nathan Road, Pak Hoi Street between Shanghai Street and Nathan Road, and Kweilin Street between Yu Chau Street and Un Chau Street.

In addition, studies on improving the environment for pedestrians in Causeway Bay, Mong Kok and Yuen Long were continuing. The preliminary studies for Causeway Bay and Mong Kok have been completed.

The Highways Department is carrying out a technical feasibility study on alignment options for the proposed subway system in Causeway Bay. The department is also carrying out a technical feasibility study for extending the footbridge system in Mong Kok. Engineering studies for developing conceptual ideas for improving the pedestrian environment in Yuen Long Town have been completed. The public had been consulted on the matter.

Cross-boundary Traffic

Overall Cross-boundary Traffic

Cross-boundary vehicular traffic decreased by about 0.6 per cent in 2011 compared with the previous year, averaging 42 800 vehicles a day, whereas the total

cross-boundary passenger traffic by rail, road and ferry increased by about 5 per cent, reaching 597 000 passengers a day.

Rail Crossings

At present, there are two rail-based boundary crossings in Hong Kong at Lo Wu and Lok Ma Chau. The Lo Wu crossing into the Mainland operates daily between 6.30 am and midnight. In 2011, it handled an average of 254 000 passengers a day, and more than 374 000 on a festive day.

The crossing at the Lok Ma Chau Spur Line operates between 6.30 am and 10.30 pm daily. Cross-boundary travellers can reach this crossing either by rail or designated local public transport. In 2011, the East Rail (Lok Ma Chau Spur Line) handled an average of about 50 700 passengers daily, and more than 82 900 travellers on a festive day.

Cross-boundary travellers may also take the MTR Intercity through-trains to the Mainland from Hung Hom. In 2011, a daily average of 10 700 travellers made the crossing in through-trains.

Road Crossings

Four road crossings between Hong Kong and the Mainland are open daily for goods and travellers. These are at Lok Ma Chau, Man Kam To, Sha Tau Kok crossings and at the Shenzhen Bay Port. The Lok Ma Chau crossing operates round-the-clock. The Sha Tau Kok and Man Kam To crossings are open from 7 am to 10 pm, while the Shenzhen Bay Port crossing is open from 6.30 am to midnight.

The passenger clearance area at Wenjindu Port in Shenzhen is closed for reconstruction but clearance for cargoes and for students crossing the boundary to attend school in Hong Kong, has been maintained. Coach operators run six coach round trips between Sheung Shui and Wenjindu Port during morning and evening peak hours each day.

The daily average number of vehicle trips recorded at the Lok Ma Chau, Man Kam To, Sha Tau Kok crossings and Shenzhen Bay Port during the year was 26 600, 4 200, 2 400 and 9 500 respectively, and the daily average number of travellers using these crossings was 86 000, 500, 8 500 and 68 600 respectively. Travellers cross the boundary in cross-boundary coaches most of the time. There are also shuttle buses at the Lok Ma Chau crossing, plying between Huanggang in Shenzhen and the public transport interchange at San Tin, while travellers using the Shenzhen Bay Port may use the local public transport services there.

In 2011, about 120 companies operated cross-boundary coach services, carrying an average of about 68 100 passengers a day. The shuttle bus service at Lok Ma Chau carried a daily average of about 26 600 passengers and the designated local public transport services at Shenzhen Bay Port carried an average of 42 200 passengers a day.

New Boundary Crossings under Construction or Planning

To meet the continuous growth in cross-boundary traffic, new roads and rail crossings were planned in co-ordination with the Mainland authorities. The HZMB will provide direct connection between Hong Kong and the western part of Pearl River Delta. In March 2010, the Ministry of Transport of the Central People's Government approved the preliminary design of the HZMB Main Bridge. The governments of Guangdong, HKSAR and Macao Special Administrative Region established a 'Joint Works Committee of the Three Governments' in May 2010 to oversee the implementation of the HZMB project. In August, the three governments appointed the senior officials of the HZMB Authority which then formally came into operation.

The HZMB Authority is responsible for co-ordinating the construction, operation, maintenance and management of the HZMB Main Bridge, and for implementing various policies of the 'Joint Works Committee of the Three Governments'. Local works within HKSAR waters commenced in end-2011 and will dovetail with those in the Mainland for the commissioning of the HZMB in 2016.

The XRL will reduce rail travel time between Guangzhou and Hong Kong. It will also link Hong Kong to Beijing and other major Mainland cities via the Beijing–Guangzhou Passenger Line and the Hangzhou–Fuzhou–Shenzhen Passenger Line. It also will connect Hong Kong to cities in the Pan-Pearl River Delta region via the Rapid Transit System now under development in the Mainland. Construction of the Hong Kong section of XRL commenced in January 2010 for completion in 2015.

As for the Northern Link and the WEL, both schemes are currently being reviewed under the consultancy study on the Review and Update of the Railway Development Strategy 2000.

The proposed Liantang/Heung Yuen Wai Boundary Control Point (BCP), by connecting with the Eastern Corridor in Shenzhen, will provide efficient access to the eastern part of Guangdong, Fujian and Jiangxi Provinces via Shenzhen-Huizhou and Shenzhen-Shantou expressways. After the new BCP is commissioned in 2018, it will shorten significantly the 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 boundary crossings in the eastern part of the New Territories (Man Kam To and Sha Tau Kok crossings).

Cross Boundary Ferries

Cross-boundary ferry services to about 12 Mainland ports and Macao are provided by eight operators at the Hong Kong–Macao Ferry Terminal in Sheung Wan, the China Ferry Terminal in Tsim Sha Tsui and the Tuen Mun Ferry Terminal. The number of cross-boundary travellers using these services to travel to and from Mainland ports totalled 4.8 million, and the number to and from Macao was 20.6 million in 2011.

The Port

In 2011, Hong Kong handled a total of 24.38 million 20-foot Equivalent Units of containers (TEUs), maintaining its status as the largest container port serving southern China and one of the busiest ports in the world.

Some 410 560 vessels arrived in and departed from Hong Kong during the year, carrying 277 million tonnes of cargo and about 28 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, making Hong Kong a port with one of the world's largest number of high-speed craft.

Hong Kong is a modern, well equipped deep-water port serving two main types of maritime transport — large ocean-going vessels from all parts of the world and smaller, coastal and river-trade vessels from the Pearl River. Hong Kong is the focal point of all maritime trading activities in the region.

A daily average of around 90 ocean-going vessels work in the port; nearly 470 river-trade vessels enter or leave the port; and many high-speed ferries and local craft 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 infrastructure of the logistics sector, which together with trading forms one of the four pillar industries of Hong Kong. The nine container terminals at the Kwai Chung–Tsing Yi area, which handle around 70 per cent of Hong Kong Port throughput, have 24 berths with a total handling capacity of over 19 million TEUs per year.

Competition between the container terminals and alternative modes of container handling motivates the operators to improve their efficiency and quality of service. The investment in upgrading equipment and systems in the terminals at Kwai Chung–Tsing Yi over the past few years has enabled the port to enhance its productivity, as well as to handle the world's largest container ships.

The container port is vital, not only to Hong Kong, but also to southern China, an area with robust external trade growth. Almost 70 per cent of freight throughput handled by Hong Kong is related to southern China.

Strategic Planning

The Government is currently studying the technical feasibility for developing a new container terminal in the southwestern part of Tsing Yi Island. It has also 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.

To strengthen Hong Kong's position as a regional hub port in Asia-Pacific, the Government is pressing ahead with dredging the Kwai Tsing Container Port Basin

and its approach channel to enable the new generation of ultra-large container ships to call at the port under all tidal conditions.

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 (PDC), chaired by the Secretary for Transport and Housing, is a high-level advisory body comprising key industry players and senior government officials. The PDC advises the Government on port development strategies and port 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) is a high-level advisory body chaired by the Secretary for Transport and Housing. Comprising industry leaders and senior government officials, it advises the Government on the formulation of 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.

Over the years, the MIC has launched various incentive and scholarship schemes to support manpower development at both technical and professional levels for the maritime sector. In 2011, it provided, among other things, scholarships to students of selected post-graduate programmes in maritime services and maritime law. MIC has also helped promote Hong Kong's maritime services to local and overseas markets.

Maritime Industry

Over 80 international shipping lines offer ocean liner services in Hong Kong, with about 440 sailings weekly to 500 destinations around the world. 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 is one of the world's most renowned maritime centres. Its 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 succeeded in making such arrangements with 31 tax administrations, including Austria, Belgium, Brunei, Chile, Czech Republic, Denmark, France, Germany, Hungary, Indonesia, Ireland, Japan, Jersey, Kuwait, Liechtenstein, Luxembourg, the mainland of China, Malta, the Netherlands, New Zealand, Norway, Portugal, 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. Its principal task is 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 Marine Department notices and details of the department's services and facilities.

Special features include the application of Really Simple Syndication (RSS) to publish frequently 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 movements of ocean-going vessels and non-convention vessels in port, including local vessels, river-trade, coastal and Macao vessels, and visiting yachts; 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 providing the latest monthly and quarterly statistics on vessel arrivals, cargo and container throughput.

The Marine Department e-Business System, which provides a one-stop solution to simplify and speed up the submission and processing of port formalities, offers comprehensive e-Business services such as online submission of applications, auto-approval for online application, self printing of permits/certificates, online payment via auto-pay and online enquiry for application status.

Vessel Traffic Services

The Marine 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, VHF radios and a dedicated information system to maintain full coverage of all navigable waters in Hong Kong.

Harbour Patrol and Local Control Station

The Harbour Patrol Section operates a fleet of 25 patrol launches and provides on-site support for the Vessel Traffic Centre. Apart from responding to maritime emergencies, the patrol launches help enforce marine legislation and maintain port and shipping safety.

The Marine Department's local traffic control station at Kwai Chung Container Terminal 8 operates round-the-clock. Equipped with a dedicated patrol launch, the station provides information service and traffic organisation service 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. The dangerous goods legislation is being revised to conform with the International Maritime Dangerous Goods Code. An enhanced system for monitoring dangerous goods carried by local vessels will be introduced in April 2012.

Pilotage Service

Pilotage is compulsory in Hong Kong waters for vessels 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. The committee's membership covers a wide spectrum of port users and shipping interests. Pilotage services are provided round-the-clock throughout the year by a commercial company.

Local Vessels

In 2011, about 15 400 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. To improve the licensing and management of these vessels, the new Merchant Shipping (Local Vessels) Ordinance was enacted and came into force in January 2007.

Hydrographic Service

The Hydrographic Office carries out hydrographic surveys and produces nautical charts and publications in Chinese and English. It also produces Electronic Navigational Charts. 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 the department's website (www.mardep.gov.hk/en/publication/portstat.html).

All designated port facilities in Hong Kong comply fully with the International Ship and Port Facility Security Code of the International Maritime Organisation. The department administers the implementation of 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 11 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 Tuen Mun Ferry Terminal is operated by a ferry operator under a tenancy agreement. It has three berths and operates daily from 7 am to 10 pm. The department controls and regulates the use of these three 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. Shipping agents may apply for immigration and quarantine services, including advance clearance, for ships.

The Tuen Mun Immigration Anchorage operates round-the-clock for river-trade vessels plying between Hong Kong and Pearl River Delta ports. Pre-arrival clearance has been extended to all Mainland river- and coastal-trade vessels. Operators of such vessels may submit pre-arrival clearance applications to the Immigration Department's Harbour Control Section.

Mooring Buoys

The Marine Department provides a total of 17 mooring buoys for ship operation, including 13 Class 'A' buoys for vessels of up to 183 metres long and four class 'B' buoys for vessels of up to 137 metres long. Buoy bookings may be made through the Vessel Traffic Centre.

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 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 implemented in 2007, 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 Marine 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 department has a co-operation arrangement with the port administration of Guangdong, Shenzhen and Macao, under which they adopt the Regional Maritime Oil Spill from Ship Response Plan for the Pearl River Estuary as the action guide for regional co-operation on response to major maritime oil spills from ships.

In November 2011, the department's Pollution Control Unit organised a large-scale, oil spill clean-up drill with participants from government departments and local oil companies. The purpose of the drill was to test the oil spill response preparedness of the government and private sector in handling major oil spills from ships.

Cleansing of Maritime Hazardous and Noxious Substances (HNS) Spillage

Maritime HNS spillage cleansing is a new service introduced in the fourth quarter of 2011. The service 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.

Shipping

Hong Kong Shipping Register

The Hong Kong Shipping Register (HKSR), administered by the Marine Department, is regarded highly as a world-class register providing excellent services.

The HKSR continued to attract quality ships in 2011. The total gross tonnage of ships registered in Hong Kong was over 68 million, making the HKSR one of the top four shipping registers in the world.

To maintain high standards, the 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 2011, the department's surveyors carried out a total of 14 PRQC inspections and made 69 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 Tokyo Memorandums of Understanding (MoU) of Port State Control; and is classified as low risk ships under the Paris MoU. In addition, Hong Kong also acquires the status of Qualship 21 of the United States Coast Guard.

Marine Accident Investigations

The Marine Department's Marine Accident Investigation and Shipping Security Policy Branch (MAISSPB) investigates all serious ship related accidents occurred on Hong Kong-registered ships and in Hong Kong waters. The purpose of the investigation is to identify the possible causes of accidents and recommend preventive measures against recurrences. In 2011, the MAISSPB investigated 19 serious accidents. To promote maritime safety, investigation reports of all serious accidents are posted on the department's website.

The Chief Executive may order a public inquiry by a Marine Court for serious accident that has a public interest. For accidents involving licensed pilots, a Board of Investigation may be ordered by the Director of Marine. In 2011, the MAISSPB investigated 17 serious accidents.

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 2011, some 29 740 seafarers of different nationalities served on board Hong Kong-registered ocean-going ships. About 1 307 officers and ratings served on high-speed ferries plying within the Pearl River Delta Region.

The Sea-going Training Incentive Scheme, launched in July 2004, is conducive in attracting local graduates to join the maritime profession to meet the manpower demand of the maritime industry in Hong Kong. The scheme provides financial incentives to attract local graduates to take up sea-going cadetship training. By end-2011, 191 cadets had joined the scheme. The increase in the number of applicants for the related programmes in training institutes and universities in the past two years reflects the interest of local youth in the maritime profession.

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 about, all issues discussed at IMO meetings that may affect Hong Kong. In 2011, HKSAR Government officials attended a total of 22 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 participated in its various activities including leading the Technical Co-operation Advisory Group and as a member of three other working groups.

The department's PSC officers are well known for their professionalism and impartiality in conducting ship inspections. In 2011, the department continued to conduct daily PSC inspections, even at weekends whenever practicable. The officers conducted 746 inspections on ocean-going vessels, or 15 per cent of all ocean-going vessels that visited Hong Kong. About 3 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) is responsible for co-ordinating search and rescue operations carried out in response to serious incidents in Hong Kong waters and within a large part of the South China Sea, covering some 450 000 square nautical miles of sea.

The centre is manned round-the-clock by professional staff and equipped with modern communications equipment, which complements the Global Maritime Distress and Safety System.

In 2011, the MRCC handled 207 marine-related emergencies, 37 of which involved search and rescue operations. A total of 83 people were rescued.

In recognition of its expertise, the MRCC was chosen by the International Maritime Organisation to be one of the eight maritime members in the International Civil Aviation Organisation/International Maritime Organisation Joint Working Group on Harmonisation of Aeronautical and Maritime Search and Rescue.

Government Fleet and Dockyard

Government Fleet

The government fleet, with over 780 vessels of different types and sizes, including 110 major mechanised vessels and large-type high-speed craft, serves 14 government departments including the Hong Kong Police Force, the Customs and Excise Department and the Fire Services Department. Some of the user departments manage their specially-built vessels. The Government Fleet Division of the Marine Department controls and manages 75 vessels, of which 43 are provided with manning by the department. These include patrol launches, purposely built conveyance launches, pontoons and some specialised vessels, such as 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.

Since 1999, the department has been awarding contracts to private operators to provide conveyance launches, tugboats and various marine transport services for the department. It had 26 vessels under contract in 2011.

Government Dockyard

The Government Dockyard, managed by the Government Fleet Division, is responsible for the design, procurement and maintenance of 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 operational bases of the Marine Department. For repair and maintenance of vessels, the dockyard has four movable canopies, 12 covered docking and repair sheds and over 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 2011, 17 new small craft, costing \$4.9 million, were built for the Government and 12 new small craft building contracts, worth \$4.5 million, were awarded to shipbuilders in Hong Kong and overseas. The total expenditure in maintaining the Government Dockyard systems and Government fleet is close to \$393 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 carries out maintenance work on public landing steps and ferry piers and other public and government marine facilities, as well as ensuring regular maintenance dredging of the harbour, navigation channels and major river channels. The department currently maintains 506 hectares of typhoon shelters, five kilometres of quays at public cargo working areas, 123 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 department is also responsible for the planning, design and construction of public marine facilities. In 2011, widening of Tung Wan Tau Road at Silver Mine Bay was completed. The department continued the planning and design of Lung Mei Beach, Cycle Parking Area near Yung Shue Wan Ferry Pier, Yung Shue Wan Development Phase 2, a new public landing facility at Lei Yue Mun and improvement works to the public landing facility at Trio Beach, short-term improvement works at Golden Beach, Upper Cheung Sha Beach, Stanley Main Beach, Deep Water Bay Beach, Butterfly Beach and Big Wave Bay Beach.

International Transport and Logistics Hub

Logistics is an important sector of the economy, accounting for 5 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 500 destinations across the globe. Coupled with its round-the-clock operation, the nine container terminals at Kwai Chung–Tsing Yi provide a total handling capacity of more than 19 million TEUs per year.

Development of Hong Kong Logistics Industry

The Government is committed to maintaining and strengthening Hong Kong as Asia's preferred international transport and logistics hub. It 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 to strengthen Hong Kong's position as the leading logistics hub in Asia. Project groups have been set up under the council to develop and implement work programmes for physical infrastructure, information connectivity, human resource development, support for small and medium enterprises, and marketing and promotion.

To enhance the competitiveness of Hong Kong's trucking sector and the logistics industry in general, the Government sponsored a pilot project on the development of an On-Board Trucker Information System (OBTIS). The OBTIS is an information and communications technology platform, which helps enhance efficiency in fleet management and connectivity between truckers and stakeholders along the supply chain. It has also been connected to the Road Cargo System (ROCARS) of the Customs and Excise Department as an additional feature to provide for advance electronic submission of road cargo information to facilitate seamless customs clearance.

The first phase involving testing the system's basic features in 50 trucks was completed in 2008. A full exercise to test the integrated functions of the system and its connection with external parties for some 500 trucks was also completed in October 2011. The OBTIS pilot project has facilitated the wider adoption of IT applications by the logistics companies to enhance their operational efficiency and overall competitiveness.

To ensure that employees of the logistics sector are kept abreast of new technology, the council also jointly organised training programmes, workshops and forums with industry associations for logistics practitioners.

The outline of the 12th Five-Year Plan for National Economic and Social Development of the People's Republic of China as promulgated in March 2011 indicated support for Hong Kong to develop into a high-value goods inventory management and regional distribution centre. To support the industry's development in this direction, the Government continued to make available sites in Kwai Tsing for developing modern logistics centres that can best meet the operational needs of third party logistics service providers.

To further raise Hong Kong's profile as an international maritime centre, and a high-value goods inventory management and regional distribution centre, the Government co-organised the Asia Logistics and Maritime Conference with the Hong Kong Trade Development Council on November 25, 2011 to foster exchanges among industry stakeholders on the development trends affecting the trades in Asia, the opportunities and challenges involved, and Hong Kong's unique role in providing quality logistics and maritime solutions for the burgeoning consumer markets in the Mainland.

Civil Aviation

Hong Kong is a major international and regional aviation centre. At year-end, there were more than 105 airlines providing about 6 300 weekly scheduled services between Hong Kong and more than 160 cities worldwide. In addition, there were, on average, about 170 charter flights each week.

Air Traffic in 2011

The total number of passengers passing through Hong Kong International Airport (HKIA) during the year was 52.75 million, a rise of 6 per cent over 2010. The airport handled 3.94 million tonnes of cargo, a decrease of 4.6 per cent over 2010. The number of flights to and from Hong Kong was 333 805, a rise of 8.9 per cent over 2010.

Hong Kong's total imports, domestic exports and re-exports carried by air accounted for 39 per cent, 30.3 per cent and 33.6 per cent respectively in value terms in 2011.

Home Market Expansion

As a multi-modal transport centre, the airport continues to expand its extensive land and sea connections to the Pearl River Delta (PRD) region.

In 2011 there were over 90 daily ferry trips between SkyPier and Nansha, Shenzhen's Shekou and Fuyong, Dongguan's Humen, Zhongshan, Zhuhai's Jiuzhou and Macao's Maritime Ferry Terminal and Taipa.

With 460 daily scheduled coach trips, passengers enjoy convenient services between the airport and 115 destinations not only in Guangdong, but also in Guangxi and Fujian provinces. The number of cross-boundary trips limousines serving PRD cities and towns reached 290.

Airport Services

Scheduled to open in early 2013, the new air cargo terminal operated by Cathay Pacific will feature a \$1.4 billion cargo handling system. The new facility will increase the airport's total annual capacity by 50 per cent to 7.4 million tonnes.

A third hangar for business aviation will be built to cater for the sector's robust growth. The new hangar occupies an area of approximately 5 000 square metres, and is expected to become operational in 2012.

The phase 1 development of HKIA's midfield has begun. The project includes a new passenger concourse and 20 aircraft stands, a cross-field taxiway and an extension of the automated people mover that will link the Midfield Concourse to Terminal 1.

Preparation for Growth

For long-term development, the Airport Authority Hong Kong completed a three-month public consultation on the HKIA Master Plan 2030 in September 2011. The master plan outlined two development options: maintaining the existing two-runway system, and expanding into a three-runway system.

Public views on the two options were collected and analysed, and a recommendation was made to the Government in December 2011.

Recognitions

Renowned for its operational efficiency, service excellence and an extensive international aviation network, the airport has been named continuously as the 'world's best airport' for about 50 times over the years.

In 2011, the Airports Council International named HKIA as the world's best airport for five consecutive years among those serving over 40 million passengers a year. It was included in the organisation's Director General's Roll of Excellence which recognises airports that ranked among the top five in Airport Service Quality for five consecutive years.

HKIA was also voted the 'World's Best Airport' by Skytrax for the eighth time; the 'Best Airport in China' by *Business Traveller China* for the fifth time; the most efficient Asian airport for the fifth consecutive year by the Air Transport Research Society; and the 'Best Airport' for the ninth time at the TTG Travel Awards 2011. It was also voted the 'Best International Airport' by Condé Nast Traveller and the 'World's Most Loved Airport' by CNNGo.

Air Services

Under the specific authorisation of the Central People's Government, the HKSAR Government continues to negotiate and conclude 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 61 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 2011, the Government expanded traffic rights arrangements with seven aviation partners.

During the year, the Air Transport Licensing Authority granted seven new licences: one to Cathay Pacific Airways (CPA), three to AHK Air Hong Kong (AHK) and three to Hong Kong Airlines (CRK). The Procedural Guide on the Authority's procedures for processing licence applications is available at: www.thb.gov.hk/eng/boards/transport/air/atla_procedural_guide.pdf.

During the year, CPA received 13 aircraft, including six Boeing 777-300ER, four Boeing 747-8 freighters and three Airbus A330-300 aircraft. By the end of the year, CPA operated scheduled services to 65 destinations worldwide, including a newly added cargo service to Spain with its fleet of 136 aircraft.

Hong Kong Dragon Airlines (HDA) suspended scheduled passenger services to Sendai after the earthquake in Japan in March. By the end of the year, HDA was operating regional scheduled services to 29 destinations, including 15 cities in the Mainland with its fleet of 32 passenger aircraft.

AHK continued to operate regional scheduled all-cargo services. By the end of the year, AHK operated scheduled services to 11 destinations in Asia with its fleet of 11 freighters.

Hong Kong Express Airways (HKE) continued to operate regional scheduled services. By the end of the year, HKE operated scheduled services to 10 destinations in the Mainland, Japan, Korea and Southeast Asia with its fleet of five aircraft.

CRK received two Airbus A330-300 aircraft during the year. By the end of the year, CRK operated scheduled services to 15 destinations in the Mainland, Japan, Republic of Korea, Russia and Southeast Asia with its fleet of 14 aircraft.

Fourteen non-Hong Kong airlines commenced or resumed scheduled services to Hong Kong in 2011, 10 operating passenger services and four operating all-cargo services. For passenger services, Southeast Asian Airlines started services from Clark in March, Mega Global Air Services launched services from Male and Gan Island in April. Air Busan commenced services from Busan in May. MIAT Mongolian Airlines commenced services from Ulaanbaatar in June. In July, Tianjin Airlines started services from Tianjin and Airphil Express started services from Cebu. In October, Vladivostok Air launched services from Vladivostok and Jin Air launched services from Seoul. In November, Siberia Airlines started services from Vladivostok and Aviastar Mandiri started services from Denpasar.

For all-cargo services, Nordic Global Airlines started services from Helsinki in August. In October, K-Mile Air launched services from Bangkok to Hong Kong via Ho Chi Minh City and Silk Way Airlines started services from Baku. Air China Cargo resumed its services from Shanghai in March.

For domestic helicopter services, commercial helicopters share the use of the Wan Chai Temporary Helipad with the Government Flying Service. This temporary arrangement will continue until the commissioning of the permanent Government helipad near the Hong Kong Convention and Exhibition Centre, takes place in 2012 as planned.

Air Traffic Management

The Air Traffic Management (ATM) system continued to operate during the year. It handled 335 232 movements at the HKIA and 184 842 over-flights, including traffic to and from Macao, representing an increase of 8.8 per cent and 14.5 per cent respectively over 2010. Average daily flight movements at the HKIA in the fourth quarter (October – December) were 935.

The Civil Aviation Department (CAD) increased the runway capacity from 60 to 62 flight movements per hour during the year through enhancement of the airspace and flight procedures design. CAD will continue to monitor closely the air traffic demand and review the runway capacity regularly, ensuring that timely measures are in place to meet air traffic growth.

Aircraft Operation and Airworthiness

On September 28, 2011, the CAD approved a Multi-crew Pilot's Licence (MPL) training course co-organised by the Hong Kong Dragon Airlines Limited and the Oxford Aviation Academy. The training concept and methodology for the issue of a MPL is the first of its kind launched in Hong Kong, which incorporate competence-based training, advanced simulator technology, Threat and Error Management (TEM) and multi-crew operations. These are more in line with the desired competence of pilots flying modern commercial jetliners.

Aviation Security

The Aviation Security Ordinance constitutes the local legislation for implementing conventions and agreements on aviation security, promulgated by the International Civil Aviation Organisation (ICAO). The Hong Kong Aviation Security Programme (HKASP), which was developed by the Government in consultation with the aviation community and other concerned parties, stipulates the aviation security requirements for the various operators and service providers at the HKIA. The implementation of these requirements is closely monitored by the CAD to ensure that they meet international standards.

The CAD continued to oversee the effective functioning of the aviation security mechanism to prohibit the carriage of restricted articles into the HKIA's 'Enhanced Security Restricted Area' or into the cabins of passenger planes. In light of the prevailing international trends and in the overall interest of the airport community, catering knives with round-ended blunt tips have been excluded from the list of restricted articles since April 2011.

Enhancing Aviation Services

Good progress has been made in replacing the existing air traffic control (ATC) system and developing a new CAD headquarters on Airport Island to enhance operational efficiency and to support the aviation sector's long term growth. Construction of the new CAD headquarters is expected to complete in the third quarter of 2012. The tendering arrangements for replacing the system were completed at the end of 2011, with installation and testing planned to commence in the latter half of 2012.

To maintain Hong Kong's civil aviation vitality, the CAD will continue working with the ICAO and regional civil aviation authorities to develop new technologies to enable the HKSAR to maintain a safe, secure, efficient and environmentally sustainable air navigation system that meets global and regional standards.

Websites

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

Transport Department: www.td.gov.hk

Highways Department: www.hyd.gov.hk

Marine Department: www.mardep.gov.hk

Civil Aviation Department: www.cad.gov.hk

Airport Authority Hong Kong: www.hkairport.com