

# Hong Kong's transportation and transport infrastructure network

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# Overview

Located at the south-eastern tip of China possessing world-class infrastructure, and **Hong Kong** stands as the region's premier transport hub. The city's well-connected internal transport system is renowned as one of the most developed and efficient in the world. Hong Kong is seamlessly linked to both the Mainland and the rest of the world. It takes only four hours to fly from Hong Kong to any major Mainland city, and one hour to travel between Hong Kong, Macao and the western Pearl River Delta. More than half of the world's population can be reached within five hours' flight from Hong Kong.

This **Policy Pulse** briefly describes Hong Kong's transport network, major transport infrastructure development projects, cross-boundary transport links with the Mainland, recent developments in the local aviation and maritime industries, and summarizes relevant discussions in the Legislative Council ("LegCo").

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Note 1 Railways account for about 44% of domestic public transport in 2023

Note 2 Yuen Long to North Lantau

# Hong Kong's well-connected transport network

- ➤ Hong Kong's road network is amongst the most heavily used in the world, with over 810 000 vehicles travelling on a road network of 2 241 km in total length
- ➤ The 271-km railway network is the backbone of the city's public transport system Note 1, with 167 stations/stops covering districts where over 70% of Hong Kong's population live and about 80% of the population work
- ➤ A highly efficient and convenient public transport system, comprising the MTR, franchised buses, public light buses, trams, taxis, non-franchised buses, ferries, etc., provides more than 11 million passenger trips per day, accounting for nearly 90% of daily passenger trips, one of the highest ratios in the world
- > New railway projects in progress:
  - The construction works of the Tung Chung Line Extension, Tuen Mun South Extension, Kwu Tung Station as Phase 1 of the Northern Link project and Oyster Bay Station have commenced in 2023 and are expected to be completed progressively from 2027 onwards
  - The construction of Hung Shui Kiu Station has commenced in 2024 while the construction of the Northern Link Main Line is expected to commence in 2025
- ➤ Road infrastructure projects under planning/construction:
  - Route 11 Note 2, Tsing Yi-Lantau Link Road
  - Central Kowloon Route, Trunk Road T2 and Cha Kwo Ling Tunnel
- Planned implementation of the Smart and Green Mass Transit Systems ("SGMT") in East Kowloon, Kai Tak and Hung Shui Kiu/Ha
  Tsuen to provide smart and low-carbon transport services to local residents

# Hong Kong's long-term development plan for transport infrastructure



The "Three Railways and Three Major Roads" recommended by the Study

In response to Hong Kong's long-term development needs, the Government has commissioned the "Strategic Studies on Railways and Major Roads beyond 2030" ("the Study"), which provides a macro-plan of the major transport infrastructure projects that Hong Kong needs to drive district development, enhance inter-district connectivity and promote cross-boundary integration with the Mainland cities of the Guangdong-Hong Kong-Macao Greater Bay Area ("Greater Bay Area")

To meet Hong Kong's transport and logistics needs up to 2046 and beyond, the Study recommends the construction of "Three Railways and Three Major Roads" Note 3, with the new "Two Railways and One Major Road" Note 4 further proposed by the Government thereafter

Objectives of developing the relevant railways and major roads

- ➤ To build a direct north-south corridor for the Northeast New Territories and urban Kowloon to relieve congestion on major trunk roads
- ➤ To improve the connectivity of the Northern Metropolis with the Mainland and the rest of Hong Kong, and to increase the capacity and efficiency of the existing railways and trunk roads
- ➤ To connect the Northern Metropolis with the Harbour Metropolis by providing additional transport corridors to and from the eastern, central and western parts of Hong Kong to link the two metropolises, thereby facilitating the establishment of a new industry pattern of "South-North dual engine (finance-innovation and technology)" in Hong Kong
- ➤ To meet the travel needs of the **new population** in Tseung Kwan O

Note 3 "Three Railways and Three Major Roads": Central Rail Link, Hong Kong-Shenzhen Western Rail Link (Hung Shui Kiu – Qianhai), Tseung Kwan O ("TKO") Line Southern Extension, Northern Metropolis Highway, Shatin Bypass, TKO-Yau Tong Tunnel

Note 4 "Two Railways and One Major Road": Northern Link Eastern Extension, Northeast New Territories Line, Northern Metropolis Highway (New Territories North New Town Section)



#### Members' views

- ➤ Members support the "Three Railways and Three Major Roads" and the "Two Railways and One Major Road" proposals and consider that the Central Rail Link is of strategic importance in the overall transport layout of Hong Kong. Members also suggest that the Administration should study the feasibility of connecting the Hong Kong-Shenzhen Western Rail Link (Hung Shui Kiu-Qianhai) with the Xili Hub in the Mainland and the Hong Kong International Airport, and explore arrangements to facilitate cross-border travel.
- Moreover, Members call for the **introduction of an intelligent transport system**, including the SGMT System in East Kowloon and the one in Kai Tak, to improve efficiency and safety. As regards the cost of the development projects, Members **suggest** that **various financing options should be explored**, including public-private partnership and bond issuance.

LegCo Relevant paper



# Cross-boundary transport network between Hong Kong

and the Mainland

Hong Kong has a well-developed transport network linking it to the Mainland, with nine fully equipped land boundary control points ("BCPs") connected to The Hong Kong section of the the Mainland. Guangzhou-Shenzhen-Hong Kong Express Rail Link ("XRL") integrates Hong Kong into the national high-speed rail network, significantly reducing travel time between Hong Kong and Mainland cities. The commissioning of the Hong Kong-Zhuhai-Macao ("**HZMB**") also presents opportunities for the interconnectivity and overall development of the Greater Bay Area, serving as a key facility in realizing the one-hour living circle within the Greater Bay Area.

# Facilities at land boundary control points

At present, there are a total of eight land BCPs in Hong Kong Note 5:

- ➤ Lo Wu, Lok Ma Chau Spur Line and West Kowloon Station of XRL are rail-based passenger ports
- the five control points at Lok Ma Chau, Shenzhen Bay, Man Kam To, HZMB Hong Kong Port and Heung Yuen Wai are passenger and/or cargo ports, providing clearance services for both passengers and cross-boundary vehicles

## Improving customs clearance efficiency

> Implementation of the "East in East out, West in West out" planning strategy for cross-boundary cargo: The cargo clearance facilities at the Liantang/Heung Yuen Wai BCP can significantly reduce the cross-boundary travel time between Hong Kong and Shenzhen as well as the eastern part of Guangdong Province; and the cargo clearance service at Shenzhen Bay Port has been extended to 24 hours to facilitate the movement of crossboundary cargo to and from the western part of Shenzhen

Hong Kong is connected to the Mainland by nine land BCPs



- Taking forward the redevelopment of BCPs: The SAR Government is working with the Shenzhen Municipal Government to take forward the redevelopment of the **Huanggang** and **Sha Tau Kok BCPs** to ensure that the relevant facilities can effectively promote the flow of people between the two places
- > Innovation in immigration and customs clearance: The redeveloped Huanggang Port will adopt the "co-location arrangement" and implement the new clearance mode of "collaborative inspection and joint clearance". Visitors only need to queue up to have their documents inspected and their identities verified once to pass through the immigration facilities of both sides in order to complete the respective immigration procedures, thereby improving clearance efficiency
- > Utilizing technology to enhance clearance facilitation: This includes continuous upgrading and **expansion** of the automated passenger clearance system (i.e. e-Channel), the implementation of the Mutual Use QR Code between HKSAR and Macao SAR Clearance Service, etc.

The Sha Tau Kok BCP is excluded. Passenger and cargo clearance services at Sha Tau Kok BCP have been suspended to facilitate the redevelopment of Sha Tau Kok Port



- Members have made various suggestions on how to further enhance the operation and clearance model of the existing and redeveloped land BCPs, including extending the operating hours of the BCPs at Heung Yuen Wai and Shenzhen Bay; extending the collaborative inspection and joint clearance mode to every BCP and utilizing technologies such as **facial recognition** to achieve contactless clearance; and enhancing the dissemination and publicity of information on the real-time usage of BCPs and various clearance facilitation measures.
- Moreover, Members suggest that the Administration should rationalize the existing arrangement that the Lok Ma Chau MTR station is only for use by cross-boundary passengers, and finalize the planning of transport infrastructure between the Northern Metropolis (in particular the San Tin Technopole) and BCPs at the earliest possible time, so as to facilitate daily commuting and travel between the two places and promote economic development.



Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link

The Hong Kong section of XRL is an integral part of the extensive Greater Bay Area transport network and economic circle, reinforcing Hong Kong's position as a regional transport hub. The Hong Kong section of XRL directly connects to 80 short- and long-haul destinations and the 45 000 km national high-speed rail network. In the first 10 months of 2024, the patronage of the Hong Kong Section of XRL has exceeded 21 million passenger trips, surpassing the annual total in 2023.

- ➤ "Evening Departures and Next Morning Arrivals": Starting in June 2024, direct sleeper train services to Beijing West Station and Shanghai Hongqiao Station have been introduced, with intermediate stations at Shijiazhuang in Hebei Province and Hangzhou in Zhejiang Province
- ➤ Increased frequency and number of stations: With the convenience of the "co-location arrangement", the number of directly connected Mainland destinations on the XRL Hong Kong section has increased from 44 at the beginning of its operation to 80 currently. A minimum of



**160 short-haul** and **40 long-haul** train trips are operated **per day**, and train service to and from Guangzhoudong Station has been enhanced to the present 26 train trips per day

➤ Serving with efficiency: In addition to the introduction of the Same-day "Flexi-trip" Arrangement and multi-ride tickets which allow passengers to travel between Hong Kong and 10 short-haul stations at concessionary fares, baggage service has also been launched at the West Kowloon Station to provide baggage check-in and delivery services for passengers transferring from XRL to flights

#### Fastest travel time from XRL West Kowloon Station to various destinations Shanghai Hongqiao **Shenzhen North Guangzhou South Beijing West Station** Changsha South Station 7 hours 8 hours 2 hours 18 minutes 47 minutes 56 minutes 47 minutes 10 minutes



- Members have been monitoring the operational efficiency and service quality of the Hong Kong section of XRL, and suggest the introduction of an XRL monthly pass and the "MTR-ization of XRL" in terms of management. For example, offering "standing" tickets for short-haul journeys so that passengers can buy tickets and board the train at any time. Moreover, Members suggest that the MTR Corporation Limited should carry out enhancement works at the waiting hall for departing passengers of the XRL West Kowloon Station to cope with patronage growth.
- As XRL sleeper trains plying between Hong Kong and Beijing/Shanghai are well received by travellers, Members suggest that long-haul sleeper train services should be provided for more destinations, such as Xi'an and Chengdu, so as to open up more long-haul rail passenger market. Members also suggest that Hong Kong should strengthen its cooperation with the Mainland in the operation of XRL, particularly the coordination of the ticketing system and immigration management.





# Hong Kong-Zhuhai-Macao Bridge



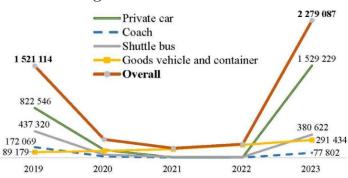
HZMB is one of the most important cross-boundary transport infrastructure projects in the Greater Bay Area and is the longest bridge-cumtunnel sea crossing in the world. Operating 24 hours a day, HZMB puts major cities in the Pearl River Delta within a three-hour commute from Hong Kong, and reduces the travel time between Hong Kong, Macao and Zhuhai to just 40 minutes.

Measures to promote economic and trade development between the three places via the Hong Kong-Zhuhai-Macao Bridge

- ➤ With the implementation of the "Northbound Travel for Hong Kong Vehicles" in July 2023, Hong Kong private cars are allowed to travel between Hong Kong and the Guangdong Province via HZMB without the need to obtain regular quotas
- ➤ As of July 2024, more than 64 000 Hong Kong private cars have valid licences to travel to the Guangdong Province, i.e. about one in every seven Hong Kong private cars participating in the "Northbound Travel for Hong Kong Vehicles"

- ➤ Both customs authorities formally implemented the Single Submission for Dual Declaration Scheme in November 2024 to expedite the flow of cargo imported from the Mainland to Hong Kong via HZMB
- ➤ The cross-boundary logistics transfer facility at the HZMB Macao Port started operation in August 2023 to facilitate the flow of goods between Hong Kong and Macao
- ➤ In March 2024, the governments of Guangdong, Hong Kong and Macao launched the Guangdong-Hong Kong-Macao Three-Places-One-Lock Scheme, which uses the electronic lock and the global positioning system technology to monitor cargo in real time, enhance customs clearance efficiency and accelerate the development of trade and logistics among the three places

Traffic volume on the Hong Kong-Zhuhai-Macao Bridge



➤ In May 2024, the two-way vehicular flow on HZMB totalled about 360 000 vehicles, with a daily average of about 12 000 vehicles, representing an increase of about 120% as compared to the same period in 2023; among which, vehicles under the "Northbound Travel for Hong Kong Vehicles" accounted for about 36% of HZMB's daily vehicular flow



#### Members' views

- At its meeting on 7 June 2023, LegCo passed a motion on "Maximizing the effectiveness of the Hong Kong-Zhuhai-Macao Bridge and promoting the synergistic development of Guangdong, Hong Kong and Macao", proposing that the Administration should introduce specific measures to, among others, foster the development of the cross-regional logistics industry and the flow of people, and enhance the local public transport services to and from Hong Kong BCPs.
- ➤ In view of the strong demand for northbound travel among Hong Kong people, Members recommend streamlining the application procedures for the "Northbound Travel for Hong Kong Vehicles" and increasing the daily number of applications to be processed under this scheme. Members also recommend further enhancing the capacity of HZMB during peak travel periods, including enhancing manpower and facilities, increasing the number of vehicular accesses to divert vehicular flow, and disseminating real-time traffic information to the public. Besides, Members are also concerned about whether other BCPs will be opened under the "Northbound Travel for Hong Kong Vehicles" and the timetable and specific measures for implementing the "Southbound Travel for Guangdong Vehicles".

LegCo Relevant paper



# **Hong Kong International Airport**

## Hong Kong is an international aviation hub.

This positioning is recognized in the National 14th Five-Year Plan and the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area. To meet the air traffic demand in the long run and enhance the passenger and cargo handling capacity, the Airport Authority Hong Kong ("AAHK") is striving to **develop the Airport City** at the Hong Kong International Airport ("HKIA") to **complement the developments** following the commissioning of **the Three-Runway System** ("3RS").

# Hustle and bustle with a wellconnected network

- ➤ In 2023, HKIA handled 40 million passenger trips, about 276 000 flight movements, and 4.3 million tonnes of cargo
- ➤ In December 2023, around 120 airlines served at HKIA, operating over 750 daily flights to approximately 180 destinations worldwide, including about 30 in the Mainland
- ➤ Hong Kong has signed Air Services Agreement or Air Services Transit Agreement with about 50 countries along the Belt and Road
- ➤ New direct flights from Hong Kong to Riyadh, the capital of Saudi Arabia, have been launched from October 2024 to further strengthen Hong Kong's connectivity with Belt and Road countries

# Renowned awards obtained and rankings of HKIA

- ➤ Asia's Leading Airport 2023 and China's Leading Airport 2023 (World Travel Awards)
- ➤ World's busiest cargo airport in 2023 (ranked by Airport Council International)
- ➤ Airport of the Year 2022 (Air Cargo Week the World Air Cargo Awards 2022)
- ➤ Cargo Airport of the Year Asia Pacific (9th Payload Asia Awards)

# Development of the Three-Runway System

- ➤ The 3RS development project aims to further enhance the passenger capacity of HKIA, including construction of the Third Runway, expansion of Terminal 2 ("T2"), construction of the T2 Concourse, and installation of a new automated people mover system and a baggage handling system
- ➤ The Third Runway was designated as the North Runway in February 2022 and officially commissioned in November of the same year
- ➤ 3RS was officially commissioned on 28 November 2024
- ➤ The expanded HKIA will be able to meet its target of handling 120 million passenger trips and 10 million tonnes of cargo annually from 2035 onwards



# Developing an "Airport City"

AAHK is gradually developing HKIA into an "Airport City". Major development projects include:

#### > SKYCITY

- Construction of automated carparks on the Hong Kong Port Island of HZMB
- Construction of the Airportcity Link connecting Hong Kong Port Island and SKYCITY, and the Airport Tung Chung Link, which is an extension of the Airportcity Link to Tung Chung Town Centre
- ➤ Development of a new aviation business park on the Airport Island
- Exploration with the Zhuhai authorities the feasibility of building an aviation industrial park in Zhuhai, so as to promote the development of the aviation industry in the two places through cross-boundary cooperation

# Promoting the sea-air intermodal cargo transshipment mode

- ➤ AAHK will set up an upstream HKIA Logistics Park in Dongguan and an airside sea-air intermodal cargo handling facility in the restricted area of HKIA, so that export cargoes from the Mainland can be transported seamlessly to HKIA for transshipment to worldwide destination
- ➤ A related pilot scheme has commenced in the end of 2021, a total of 17 airlines and about 100 freight forwarders are participating in the scheme
- ➤ By the end of 2025, AAHK will complete the first-phase construction of the permanent facility of the HKIA Logistics Park in Dongguan, with its handling capacity gradually reaching 1 million tonnes of cargo per annum



# Members' views

The House Committee of the Fifth LegCo and the Sixth LegCo respectively formed a subcommittee to study issues relating to 3RS.

- Following the completion of the subcommittee's work at the end of 2017, the **Panel on Economic Development** has held a total of nine meetings since 2018 to continue to follow up on the latest progress of the 3RS project and has also conducted a site visit to the project site. Members have expressed views on issues such as ensuring a smooth **transition from the Two-runway System to 3RS** and **the timetable for** the phased **commissioning of passenger facilities**. They have also recommended that the Government should **expand the aviation network** and **attract international airlines to set up operations in Hong Kong**, thereby consolidating Hong Kong's status as an aviation hub.
- ➤ A number of questions are also raised by Members at Council meetings regarding, inter alia, pursuing positive interaction of airports in Guangdong-Hong Kong-Macao Greater Bay Area, developing HKIA Dongguan Logistics Park, developing Mainland and international flight routes, developing sustainable aviation fuel, implementation of contactless clearance, as well as ensuring manpower supply for the aviation industry.

LegCo Relevant paper



# Hong Kong's port development

Both the National 14th Five-Year Plan and the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area explicitly support Hong Kong in enhancing its status as an international maritime centre to further contribute to the country's high-quality development.

# A highly-efficient port

- ➤ Hong Kong ranks 4th globally as an international shipping centre
  (2024 Xinhua-Baltic International Shipping Centre Development Index Report released by Xinhua News Agency and the Baltic Exchange)
- ➤ The average time that sea-going cargo vessels stayed at the Hong Kong Port in 2023 was 0.95 days, which is much shorter than the average of 1.85 days for the top 20 container ports in the world

- ➤ The Hong Kong Shipping Register ranks 4th globally in terms of gross tonnage, with about 10% of the deadweight tonnage of the world's merchant fleet owned or managed by Hong Kong ship owners
- ➤ Hong Kong-registered vessels have a very low detention rate in port states worldwide, which was 0.81% in 2023, much lower than the global average of 3.39%
- ➤ The Baltic and International Maritime Council included Hong Kong as one of the four designated arbitration venues in 2020, on a par with London, New York and Singapore
- ➤ In 2023, the Hong Kong Port handled over 14.4 million twenty-foot equivalent units, connecting to nearly 500 destinations worldwide with more than 300 international container vessel sailings per week

Established on 7 October 2024, **the Hong Kong Chamber of Shipping** aims at leveraging shipping to connect ports, energy, professional services, finance and trade, thereby enhancing Hong Kong's status as an international maritime centre

In the 2024 Policy Address, the Chief Executive proposes reconstituting the existing Hong Kong Maritime and Port Board into the Hong Kong Maritime and Port Development Board, a high-level advisory body, to assist the Government in formulating policies and long-term development strategies



# Policy Pulse - Hong Kong's transportation and transport infrastructure network

# Leveraging advantages in port development

## Strengthening collaboration with the Mainland



- ➤ In May 2023, a **Memorandum of Understanding on Greater Bay maritime cooperation** was signed with the Guangzhou Port Authority to establish a communication mechanism for ports and maritime development, as well as encourage collaboration and talent exchanges
- ➤ Committed to strengthening cooperation with western Guangdong and other cities in the Greater Bay Area, expanding cargo sources and enhancing the international connectivity of the Hong Kong Port in handling cargoes to and from more places
- Actively exploring with port cities in the Greater Bay Area the establishment of a joint training mechanism for maritime talents, and facilitating cooperation between maritime academic institutions in the two regions

# **Optimizing local policies**



- ➤ In December 2023, the Action Plan on Maritime and Port Development Strategy was promulgated, setting out 10 strategies and 32 action measures in four directions to consolidate and enhance Hong Kong's position as an international maritime centre
- Actively promoting the development of a smart port by setting up a digitalized port community system to facilitate the flow and sharing of data among stakeholders in the maritime, port and logistics industries

# Developing a green and smart port



- ➤ Committed to **developing** Hong Kong as **a green and smart port** by focusing on three aspects vessels, cargoes and destinations with a view to holistically attracting cargoes from around the world to make use of the Hong Kong Port
- ➤ The Action Plan on Green Maritime Fuel Bunkering, promulgated on 15 November 2024, expects that Hong Kong will provide bunkering services to ocean-going vessels powered by green maritime fuels, such as liquefied natural gas or green methanol, for over 60 times a year by 2030 with more than 200 thousand tonnes of green maritime fuel

## Streamlining operations and enhancing efficiency



- A data sharing platform was set up for trial in phases starting from January 2023, and the **platform** for **tracking the delivery processes of cold-chain cargoes** (including local imports and cross-boundary deliveries, as well as full and consolidated containers of export cargoes) has been rolled out for trial in the industry
- ➤ The target is to **expand** the digitalized port community system **to a wider range of products** and delivery processes beyond cold-chain products by 2025

## Members' views



- At its meeting on 3 July 2024, LegCo passed a motion on "Promoting Cooperation between Guangdong and Hong Kong and Consolidating Hong Kong's Position as an International Maritime Centre", proposing that the Government should take measures to make long-term planning to support Hong Kong as an international maritime centre, including studying how to leverage new quality productive forces to enhance the competitiveness of the maritime industry, adopting a more cost-effective approach to deal with vacant terminal sites, and promoting positive cooperation between major ports in Guangdong and Hong Kong.
- A Bills Committee on Shipping Legislation (Use of Fuels and Miscellaneous Amendments) Ordinance 2024 was formed by LegCo to scrutinize the proposed legislative amendments to allow vessels to use more environmentally friendly new fuels in Hong Kong waters. The Ordinance was passed by LegCo on 23 October 2024 and will come into effect on 10 January 2025, which will help develop Hong Kong into a green maritime fuel bunkering centre.

LegCo Relevant paper





To know more about the related discussions in the Legislative Council

please scan the **QR codes** on the right or visit the relevant Legislative Council **webpages** 



Panel on Economic
Development

Panel on Transport