賽馬會齡活城市
Jockey Club Age-friendly City

Thematic Report Series on the Concept of

an Age-friendly City in Hong Kong

Initiated and funded by:

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香港中文大學
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CUHK Jockey Club Institute of Ageing


TAXI

Thematic Report Series on the Concept of an Age-friendly City in Hong Kong - Transportation

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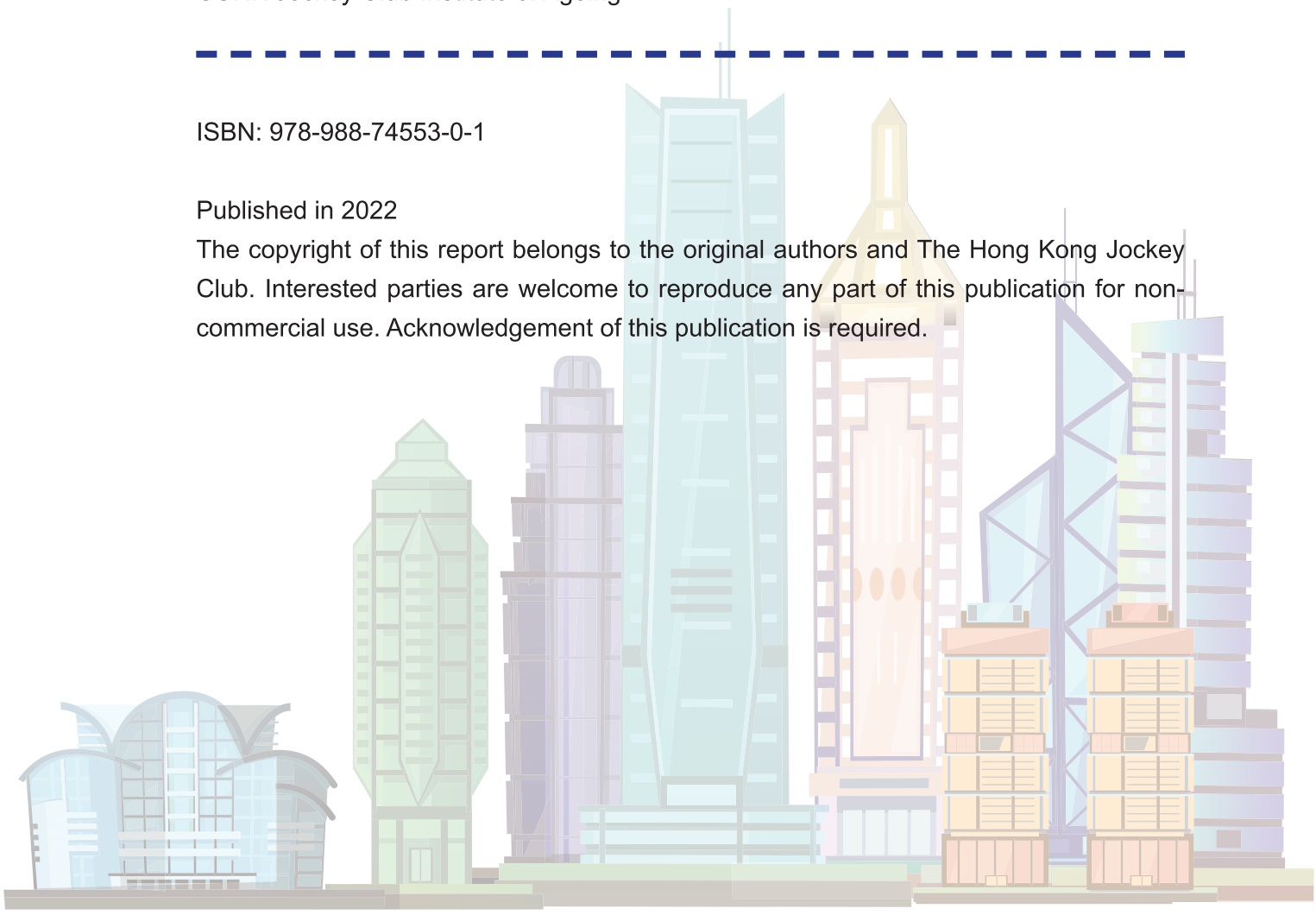

The CUHK Jockey Club Institute of Ageing

In support of its aspiration to overcome the social challenges created by an ageing population, the Chinese University of Hong Kong (CUHK) established The CUHK Jockey Club Institute of Ageing in 2014, with generous support from The Hong Kong Jockey Club Charities Trust.

Since its establishment, the Institute has embarked on collaborative research in gerontechnology, healthy ageing, and community intervention programmes for the promotion of health and the prevention of frailty. An effort to promote messages of active ageing has been made through a dedicated series of TV programmes; announcing the results of the first multidimensional AgeWatch Index of Hong Kong in 2015; development of Hong Kong Elder Quality of Life Index incorporating AgeWatch Index for Hong Kong since 2016-2017; and supporting the implementation of the Jockey Club Age-friendly City Project, initiated and funded by The Hong Kong Jockey Club Charities Trust.

Building on the University's long-standing efforts of research into ageing and its partnership with charitable organizations, the Institute will continue to develop its capacity and serve as a platform for ageing-related research, training and community outreach programmes.

Vision

To make Hong Kong an age-friendly city in the world.

Mission

To synergize the research personnel and efforts on ageing across disciplines to promote and implement holistic strategies for active ageing through research, policy advice, community outreach and knowledge transfer.

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Preface by The Hong Kong Jockey Club

Given our city's ageing population, The Hong Kong Jockey Club Charities Trust has since 2015 been implementing the Jockey Club Age-friendly City Project in partnership with four local university gerontology research institutes to support an age-friendly culture in all 18 districts in Hong Kong.

Eight domains of an age-friendly city ("AFC") have been identified by the World Health Organization. The CUHK Jockey Club Institute of Ageing, our project partner, has published a series of thematic reports featuring four of these in the Hong Kong context, including on Transportation, Outdoor Spaces and Buildings, Community Support and Health Services, and Communication and Information.

This thematic report focuses on Transportation and examines the AFC concept with particular emphasis on the mobility needs of older people in Hong Kong. It also covers current local transport policies and measures, as well as international good practices to provide pragmatic insights to improve the transport system for all age groups.

Our support for the Jockey Club Age-friendly City Project is made possible by the Club's unique integrated business model through which racing and wagering generate tax revenue and charity donations. As one of the world's top ten charity donors, we support Hong Kong's advancement as an AFC through collaborative efforts.

On behalf of the Trust, I would like to express my heartfelt gratitude to the CUHK Jockey Club Institute of Ageing for publishing these reports. They serve to improve understanding of the AFC concept, and further discussions and joint action among diverse stakeholders to foster its progress.

Mr Leong Cheung
Executive Director, Charities and Community
The Hong Kong Jockey Club

Executive Summary

This report is one of four thematic reports in a series on the concept of an “Age-friendly City” (AFC) in Hong Kong. Each of the four reports in the series investigates a selected AFC domain by understanding relevant local initiatives as well as worldwide experiences and practices, covering Transportation, Outdoor spaces and buildings, Community support and health services, and Communication and information, respectively.

With the aim of promoting the reader’s awareness of developing an AFC, the report specifies the domain of Transportation within the local context of Hong Kong and its importance in the establishment of an AFC. It also discusses the relevant prospects and policy implications for Hong Kong.

行政摘要

本報告為香港「長者及年齡友善城市」專題報告系列的其中一本。在四本專題報告中，每本報告會透過研究香港相關的措施以及海外經驗，分別探討長者及年齡友善城市概念中的四個範疇：交通、室外空間和建築、社區支援與健康服務、以及信息交流。

為提高大眾對建立長者及年齡友善城市的關注，本報告闡述香港在「交通」範疇的情況，以及此範疇在建立長者及年齡友善城市的重要性，並就其將來的發展以及制定有關未來政策的啟示，作出討論。

Chapter 1 Introduction

Hong Kong is a compact and densely populated city. Like most of the world's metropolitan cities, Hong Kong has an ageing society. The anticipated rapid growth of the older population poses a significant challenge for different aspects of the community, including the transport system. Much research suggests that transportation significantly influences a person's mobility (ability to move around), quality of life, physical and mental health and social participation. It is conducive to developing and maintaining the functional ability that enables well-being in old age. Therefore, it is critical for different stakeholders, including policymakers, transport operators and urban planners, to start focusing more closely on understanding the mobility needs of the older population.

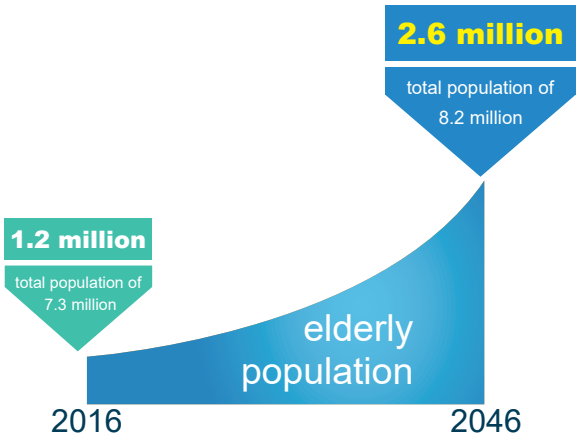
This thematic report explores the mobility needs of older people in Hong Kong and explores the satisfaction with transport from the perspective of older people. It then reviews the transport policy and measures in Hong Kong from the framework suggested by the World Health Organization (WHO) regarding age-friendly transportation. It also presents good transport policies and practices in other countries so that Hong Kong can learn from this. The main aims of the report are to raise the awareness of different stakeholders of the vital role of transport in older age and provide more insight into improving the transport system, after reviewing the existing policies and measures in Hong Kong and international societies.

In this report, chapter 1 provides a brief introduction about the report; chapter 2 introduces the background and demographical characteristics of the ageing population in Hong Kong. It also presents the frameworks and concepts of healthy ageing and an age-friendly city (AFC) suggested by the WHO; chapter 3 demonstrates the importance of transport in an AFC and its features recommended by the WHO; chapter 4 introduces the main transport modes and travel characteristics in Hong Kong. It also presents the assessment findings of the age-friendliness of transportation in Hong Kong; chapter 5 reviews the transport policy objectives and directions in Hong Kong; chapter 6 analyses the features of the age-friendliness of transportation in Hong Kong with international examples. And finally chapter 7 provides a conclusion and makes recommendation for the transport system in Hong Kong.

Chapter 2 The ageing society

2.1 The ageing population of Hong Kong

Hong Kong is experiencing the rapid growth of the ageing population. It had a total population of 7.3 million, of whom 1.2 million were older people aged 65 or above in 2016, indicating that approximately one seventh of the Hong Kong consisted of older people (Census and Statistics Department, 2016). It is estimated that the total population of Hong Kong in 2046 will be 8.2 million, of which 2.6 million will be older people, indicating that almost **one out of three will be aged 65 or above** (Census and Statistics Department, 2017).



The main reasons for Hong Kong's ageing population are a rising life expectancy and a declining fertility rate. In 2016, Hong Kong's life expectancy rate was 84.2 years, the highest in the world. At the same time, Hong Kong's fertility rate remained low, 1.2 children per woman in 2016 (Census and Statistics Department, 2017). As a result, the elderly dependency ratio (defined as the number of persons aged 65 and over per 1,000 persons aged between 15 and 64) in Hong Kong is high and will show a sharp increase over time. In 2016, the elderly dependency ratio rose from 175 in 2006 to 231 in 2016. Despite the projected social burden stemming from the increasing ageing population, many older people are healthy and well-educated in Hong Kong. Therefore, Hong Kong needs to build an age-friendly city where older people can make the most of later life.

2.2 Demographic characteristics of the older population

Understanding the demographical profile of the ageing population is critical in all policymaking. Of the 1.2 million older people in 2016, 53.3% were aged 65 to 74, 17.7% were aged 75 to 79, and 29.3% were aged 80 or above. In particular, the number of older people aged 80 or above had risen substantially by 66.7% from 2006.

The Census and Statistics Department (2016) revealed that fewer older people would be living with children while more of them will be living with their elderly spouses in the future. Compared with ten years previously, the proportion of older people living with children in 2016 decreased from 53.4% to 48.5%. The number of domestic households with senior people only surged significantly by 67.4% from 2006. It is noteworthy that there were **300,906** domestic households in which all members were older, and only 13.2% had domestic helpers. This implies that older people will need more support from the community.

Also, the living arrangements of older people were diverse. There were 36.7%, 19.2%, and 42.8% older people living in public rental housing, subsidized homeownership housing and

private permanent housing, respectively. In the past decade, a substantial surge of working older people was also observed. **10.8%** of the total population of older people were working in 2016. The number of working older people increased from 59,256 in 2006 to 125,177 in 2016. Older people aged 65 to 74 contributed mainly to the increase (about 80% in 2006 to 90% in 2016). This implies more working older people will have more commuting needs to get to work.

In general, with the progression of age, the older people's body function, energy, work capacity and the ability to live independently gradually decline (Lawton, 1990). As well as the effect of chronic diseases and disabilities, the accompanying physiological and mental changes can have **significant consequences for mobility**. Examples of changes include reduced flexibility and strength and increased disabling conditions. (Division for Social Policy and Development, 2015; Shrestha, Millonig, Hounsell, & McDonald, 2017).

A territory-wide survey on persons with disabilities (PwDs) and chronic diseases (Census and Statistics Department of HKSAR, 2015) revealed that the majority of those with disabilities or chronic diseases in Hong Kong were older persons (aged 60 and above). Restriction in body movement was the most common type of disability, while hypertension was the most common chronic disease.

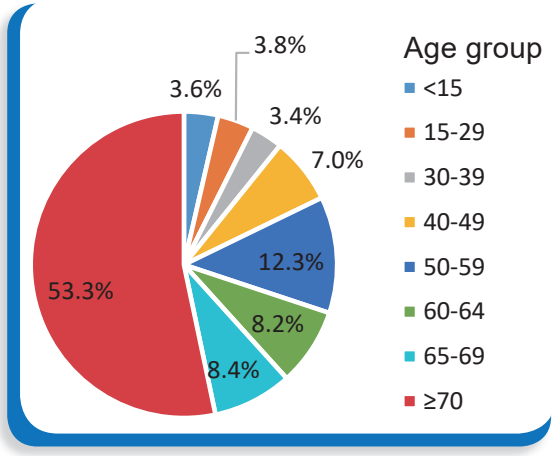


Figure 1 Persons with disabilities by age

Source: Census and Statistics Department of HKSAR (2015)

As demonstrated in figure 1, there were an estimated 578,600 PwDs in 2013 (8.1% of the total population). 8.2% were aged 60-64, 8.4% were aged 65-69, and 53.3% were aged 70 or above. **In other words, 69.9% of the PwDs were aged 60 and over.** Among all the PwDs, 320,500 (4.5% of the total population) had a restriction in body movement; 174,800 (2.4%) had difficulty seeing and 147,300 (2.2%) had a mental illness/mood disorder.

As presented in figure 2, there were 1,375,200 persons with chronic diseases in 2013 (19.2% of the total population compared with 16.7% in 2007). 12.3% were aged 60-64, 11.7% were aged 65-69, and 39.8% were aged 70 and over. **Therefore, 63.8% of those with chronic diseases were aged 60 and above.** Of the elderly with chronic diseases, 707,800 had hypertension (9.9% of the total population), 315,300 (4.4%) had diabetes mellitus, and 143,000 (2.0%) had heart disease.

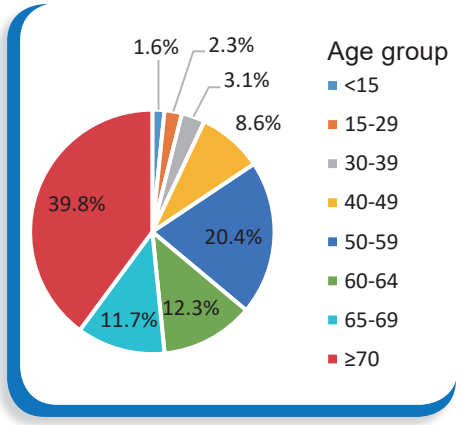


Figure 2 Persons with chronic diseases by age

Source: Census and Statistics Department of HKSAR (2015)

The survey also found that majority of the persons aged 15 and above with disabilities and chronic diseases were economically inactive. Among the 558,000 persons aged 15 and above with disabilities, **85.5% were economically inactive,** and of which, 61.2% were retired. Among the 1,352,800 persons aged 15 and over with chronic diseases, **71.4% were economically inactive,** and of which, 51.4% were retired.

The survey also found that almost 60% of the persons with disabilities residing in households did not have a person to care for them on a day-to-day basis. Nearly 90% of those with chronic diseases reported the same (figure 3).

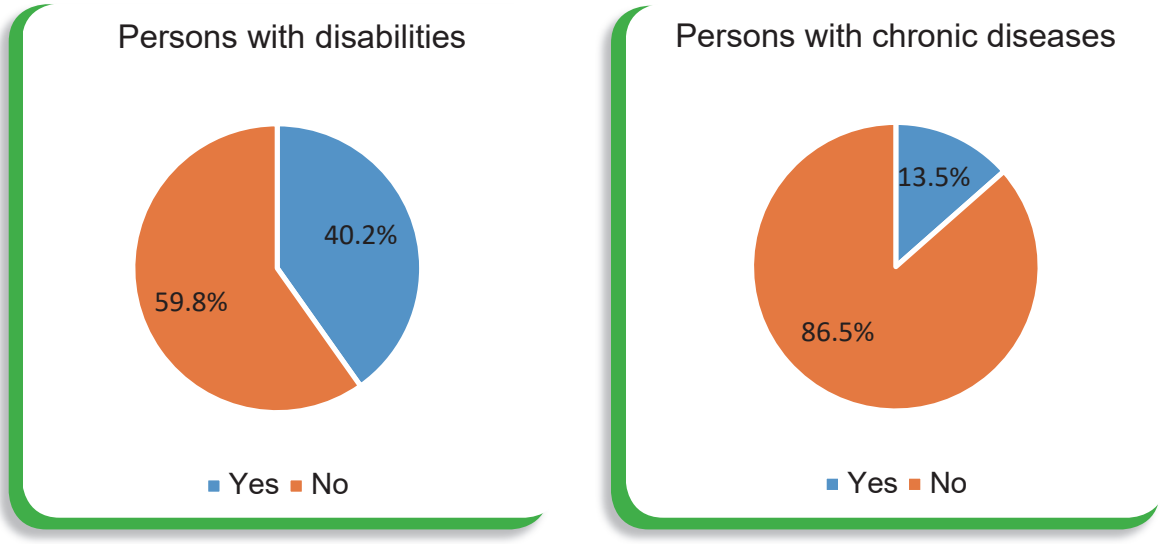


Figure 3 Persons with disabilities and chronic diseases residing in households by whether had a person to take care of them on a day-to-day basis

Source: Census and Statistics Department of HKSAR (2015)

The above findings show that older people have a higher risk of disability and chronic disease. Different types of disabilities and chronic diseases have varying degrees of impact on mobility. In particular, the restriction in body movement may significantly affect their mobility, including walking and the use of public transportation in their daily activities. Moreover, since most of them were economically inactive and retired, they needed more mobility support.

2.3 WHO framework on healthy ageing and AFC

The World Health Organization (2020) published the Baseline Report for the Decade of Healthy Ageing 2021−2030 to introduce the concept and actions of achieving healthy ageing by 2030. Healthy ageing is "the process of developing and maintaining the functional ability that enables well-being in older age". It aims to foster the functional ability that enables older people to do what they value in life. Functional ability means being able to (1) meet one's basic needs; (2) learn, grow and make a decision; (3) mobilize; (4) build and maintain relationships; and 5) contribute.

Based on the WHO, there are three components of healthy ageing: (1) Intrinsic capacity: all physical and mental capacities that a person can draw on such as locomotor and psychological capacity.; (2) Environments: a range of resources or barriers provided shaping what older people with a given level of intrinsic capacity can be and do, such as the natural and built environment; and (3) Functional capacity: a combination of the intrinsic capacity and environment in which a person lives and how people interact. The optimization of all domains needs input from multiple sectors with multiple stakeholders.

To enhance the quality of life as people age, under the rapid growth of the ageing population worldwide, the WHO initiated the concept of age-friendly cities (AFC) in 2005 to encourage active ageing by optimizing opportunities for health and security. The WHO conducted a focus group research project with the participation of 33 cities from 22 countries. Based on the determinants of active ageing, the WHO suggested a framework for AFC, consisting of eight key domains covering the features of a city's structure, environment, services, and policies. The eight key domains include (1) Outdoor spaces and buildings; (2) Transportation; (3) Housing; (4) Social participation; (5) Respect and social inclusion; (6) Civic participation and employment; (7) Communication and information; and (8) Community support and health services.

Figure 4 Domains of an age-friendly city

Chapter 3 Transportation as a domain of AFC

3.1 The importance of transportation

Mobility is indispensable to active ageing. As one of the eight domains of AFC, Transportation plays an essential role in older people's mobility. It serves a greater purpose than merely moving people from A to B; it is inextricably linked to different aspects of life. Research has shown that transport mobility is conducive to one's independence, autonomy and quality of life, such as social and emotional well-being (Green, Jones, & Roberts, 2014; OECD, 2001; Stanley, Hensher, Stanley, & Vella-Brodrick, 2011).

Older people who have difficulty accessing public transport can be easily neglected in the community and lose access to physical and social activities more quickly. The direct and indirect association between transport mobility benefits and quality of life has significantly drawn attention from researchers and policymakers (Mackett, 2015; Spinney, Scott, & Newbold, 2009; Stanley et al., 2011).

According to Glass, De Leon, Bassuk, and Berkman (2006), social engagement outside the home is associated with depressive symptoms of older people in the community. More specifically, social engagement has been shown to significantly improve self-reported health and reduce the mental distress of older adults through health behaviour change and access to health resources (Liu et al., 2019). Jakobsson Bergstad et al. (2011) interviewed 1,330 Swedish citizens and found that daily travel directly affected the extent of the subject well-being.

In addition, it also affected older people's physical and psychological welling. Minkyoung et al. (2013) studied 1,926 female older people over seven years and found that constant physical activity, including walking and cycling, helped prevent the deterioration of health. He, Thøgersen, Cheung, and Yu (2020) interviewed 271 older people from 18 districts in Hong Kong and found that the transport system was strongly related to older people's sense of community and satisfaction with their neighbourhood. Tsunoda et al. (2015) studied 629 community-dwelling older people in Japan. They found that cycling and motor vehicle travelling via household vehicle, bus, train or taxi were positively associated with older people's physical activity, social networks and mental status. The association was positive after controlling social-economic status factors such as age, education and living arrangements.

Being mobile is also crucial to retaining one's independence. A study conducted by Gabriel and Bowling (2004) found that walking and maintaining good mobility helped older people stay independent, which was regarded as an essential element to have a good quality of life. Therefore, transport plays a vital role in mental health in late life. In short, transport mobility is not only moving a person from one point to another one, but it also influences different aspects of quality of life.

The hierarchy of older people's mobility needs (Musselwhite, 2016) summarised the importance of transport mobility. As shown in the hierarchy, the primary mobility needs most commonly discussed, are concerned with enabling people to get from one place to another for the things people need and want in a safe, accessible, and comfortable way. At the secondary level, mobility facilitates psychological well-being; it enables people to be mobile; stay independent and feel normal. It is a higher level that is linked to one's status, role and identity. At the highest level, mobility is vital for its own sake, for people to enjoy mobility and relaxation, sense the kinesis of movement, and see the world changing around them. In short, it is not enough that public transport focuses on the basic utilitarian level; it should pay more recognition to the higher levels (psychosocial and aesthetic needs) of the mobility needs in policymaking (Alsnih & Hensher, 2003).

3.2 The features of age-friendly transportation

As suggested by the WHO (2007), 15 features of transportation are mentioned in the framework of an age-friendly city. They are (1) affordability: public transport is affordable for all older people; (2) reliability and frequency: routes should be well-connected and cover all areas so that older people can reach critical destinations such as hospitals and public parks via public transport; (3) age-friendly vehicle: accessible vehicles with lower and low-steps and floor and wide seats; (4) specialised services: adequate for people with disabilities; (5) priority seating; (6) transport drivers should wait for passengers to be seated; (7) safety and comfort; (8) accessibility to transport stops and stations with short walking distance, seats, shelters, ramps, escalators toilets and signage; (9) information about transport options should be obtained quickly and clearly; (10) community transport services such as volunteer drivers and shuttle services should be available; (11) taxis should be affordable, accessible and comfortable with space provided for wheelchairs; (12) good road conditions such as traffic calming devices, covered drains and clearly marked intersections; (13) driving courses provided to improve driving competence; (14) affordable and priority parking should be available especially for the disabled and (15) safe pedestrian transport.

Chapter 4 Public transport in Hong Kong

4.1 Public transport modes

Unlike western countries, driving is not the primary means of transport in Hong Kong. Most Hong Kong residents, especially older people, are highly dependent on public transport for their everyday travel (Census and Statistics Department, 2021; Wong, Szeto, Yang, Li, & Wong, 2018). The railway system is the backbone of the public transport system while other transport modes are the supporting role. The following introduces the existing public transport modes in Hong Kong with reference to the Information Services Department (2020)

Photo from Wallpaper Flare

Rail transport is positioned as the backbone of the public transport system in Hong Kong; it provides high capacity and convenient transport services. It is operated and managed by the MTR Corporation Limited (MTRCL). MTRCL is a publicly listed company in which the government is the majority shareholder. As of 2020, it has a total length of 263 km and consists of 10 rail lines covering Hong Kong Island, Kowloon and the New Territories; and there are the Airport Express and the Hong Kong Section of Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL). The network currently has 96 stations.

The Light Rail provides feeder service for the West Rail Line and rail-based public transport mode in Tuen Mun and Yuen Long District. Currently, its route length is 36.2 kilometres and provides 68 stops. The MTRCL also offers three types of cross-boundary train services connecting to Mainland China.

Photo from Kenneth Wong

Franchised buses are the largest road-based carriers of public transport in Hong Kong. They are the mass carrier providing direct travel access and feeder service linking the railway network and inter-district service.

Photo from Wikipedia

As of 2019, the Kowloon Motor Bus Company (1933) (KMB) has operated 354 bus routes in Kowloon and the New Territories and 64 cross-harbour routes, 51 of which were run jointly with another operator. In total, 4,065 buses have been licenced, and they were all wheelchair-accessible low-floor vehicles.

The New World First Bus Services (NWFB) and City bus (CTB) operated bus services on Hong Kong Island. As of 2019, NWFB ran 47 bus routes on Hong Kong Island, 13 in Kowloon and Tseung Kwan O and 33 cross-harbour routes. As of 2019, NWFB had a licensed fleet of 685 buses that were all wheelchair-accessible low-floor vehicles.

The CTB ran 52 bus routes on Hong Kong Island, two in Kowloon, one in the New Territories and 34 cross-harbour routes. It also provided 28 routes linking the urban areas with North Lantau, the airport, and the West Kowloon Station. As of 2019, CTB had a licensed fleet of 992 buses, and all of them were wheelchair-accessible low-floor.

Photo from SCMP

Long Win Bus Company operated most bus routes connecting the New Territories with North Lantau and the airport. It had a licensed fleet of 279 wheelchair-accessible low-floor buses at the end of 2019. The New Lantao Bus Company (1973) operated 26 routes on Lantau Island and one for Shenzhen Bay Port. It had a licensed fleet of 156, of which 63% were wheelchair-accessible low-floor vehicles.

The public light buses play an essential role in providing supplementary feeder service to areas with comparatively lower passenger demand or where the high-capacity transport modes are not suitable. The number of public light buses (PLBs) has been capped at 4,350 since 1976. There are two types of PLBs: green minibus (GMBs) and red minibuses (RMBs). GMBs provide scheduled services with fixed routes, fares, vehicle allocation and timetables. In contrast, RMBs have their own fares without fixed routes or timetables. As of 2019, there were 3,306 GMBs operating 355 routes and 1,044 RMBs.

Photo from Wikipedia

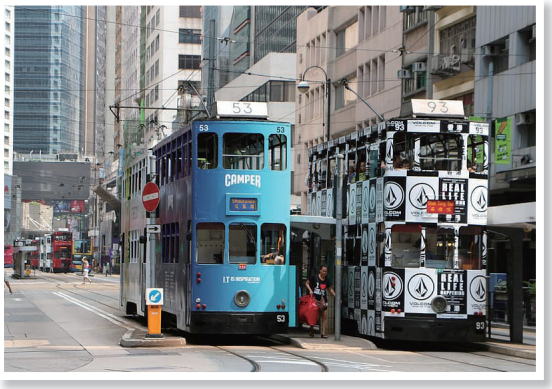


Photo from Wallpaper Flare

Hong Kong runs the largest fleet of double-decker **trams** in the world. Trams serve the supplementary role by providing emission-free and affordable public transport services along the northern side of Hong Kong Island. There are seven routes of double tracks running between Kennedy Town and Shau Kei Wan and Happy Valley.

Taxis provide personalised point-to-point public transport service at a higher fare. As of 2019, there were 15,250 red urban taxis operating throughout Hong Kong, except for on Tung Chung Road and roads in south Lantau, 2,838 green New Territories taxis operating in the north-eastern (i.e. north of Sha Tin) and north-western (i.e. north of Tsuen Wan) part of the New Territories and 75 blue Lantau taxis operating only on Lantau Island and Chek Lap Kok.

Photo from SCMP

Non-franchised buses in Hong Kong fulfil transport needs that cannot be met by public transport. They serve tourists, estate residents, students and employees. At the end of 2019, there were 7,187 registered non-franchised public buses. **Ferries** are also essential services for passengers to cross the harbour.

Photo from HK01

4.2 Travel characteristics

When developing age-friendly transportation, it is crucial to map the travel needs and patterns of older people. Overall, most of Hong Kong's daily commuters rely on the public transport system. About 90% of the total passenger trips are made through public transport services in Hong Kong, the highest globally (Transport and Housing Bureau, 2017). As demonstrated in table 1, the public transport average daily patronage increased steadily from 2010 to 2018 until the outbreak of COVID-19. On average, 10 to 13 million passengers took public transport every day (Census and Statistics Department, 2021). Railways and franchised buses are the two primary modes of public transportation in Hong Kong. In 2020, railways and franchised buses carried 3.6 million and 3.0 million passenger journeys per day.

(Thousands)

Year	Railways	Franchised buses	Public light buses	Taxis	Residents' services (buses)	Ferries	MTR buses (Northwest New Territories)	Total
2010	4 521.5	3 776.5	1 881.1	981.5	222.0	135.5	112.0	11 630.0
2011	4 729.6	3 788.0	1 895.0	996.5	233.3	135.6	120.4	11 898.4
2012	4 914.6	3 833.2	1 880.1	956.1	233.9	134.9	125.7	12 078.6
2013	5 062.8	3 908.0	1 864.1	1 010.5	238.4	135.6	130.8	12 350.2
2014	5 261.6	3 914.0	1 859.9	972.6	237.4	135.4	138.1	12 519.0
2015	5 349.3	3 915.4	1 860.3	966.4	236.7	134.0	138.5	12 600.6
2016	5 363.8	3 957.4	1 834.6	933.1	234.1	130.8	137.7	12 591.5
2017	5 512.5	3 966.5	1 814.8	898.0	231.6	128.2	139.0	12 690.8
2018	5 626.3	4 054.3	1 806.1	889.0	225.4	127.3	139.8	12 868.2
2019	5 253.0	4 093.9	1 761.1	854.6	213.7	122.2	141.1	12 439.6
2020	3 579.6	3 036.3	1 293.8#	659.5#	157.6#	85.9	115.0	8 927.7

Provisional figures.

Table 1 Public transport average daily patronage by mode, 2010 to 2020

Source: Census and Statistics Department (2021)

In 2020, railways and franchised buses accounted for 40.1% and 34.0% of public transport patronage, respectively. Public light buses and taxis were the next two most frequently used transport modes; they occupied 14.5% and 7.4% of the total public transport patronage, respectively (table 2).

Year	Railways	Franchised buses	Public light buses	Taxis	Residents' services (buses)	Ferries	MTR buses (Northwest New Territories)	Total
2010	38.9%	32.5%	16.2%	8.4%	1.9%	1.2%	1.0%	100%
2011	39.7%	31.8%	15.9%	8.4%	2.0%	1.1%	1.0%	100%
2012	40.7%	31.7%	15.6%	7.9%	1.9%	1.1%	1.0%	100%
2013	41.0%	31.6%	15.1%	8.2%	1.9%	1.1%	1.1%	100%
2014	42.0%	31.3%	14.9%	7.8%	1.9%	1.1%	1.1%	100%
2015	42.5%	31.1%	14.8%	7.7%	1.9%	1.1%	1.1%	100%
2016	42.6%	31.4%	14.6%	7.4%	1.9%	1.0%	1.1%	100%
2017	43.4%	31.3%	14.3%	7.1%	1.8%	1.0%	1.1%	100%
2018	43.7%	31.5%	14.0%	6.9%	1.8%	1.0%	1.1%	100%
2019	42.2%	32.9%	14.2%	6.9%	1.7%	1.0%	1.1%	100%
2020	40.1%	34.0%	14.5%	7.4%	1.8%	1.0%	1.3%	100%

Table 2 Percentage share of public transport patronage by mode, 2010 to 2020

Source: Census and Statistics Department (2021)

It is anticipated that the rail share in the public transport patronage will further increase to between 45% and 50% in 2031. Other public transport services will account for the remaining in which franchised buses will continue to be the road-based mass carrier (Transport and Housing Bureau, 2014).

Understanding the travel patterns and behaviour of Hong Kong older people is critical to developing an age-friendly transport system that can meet their mobility needs. In 2011, the Transport Department conducted the Travel Characteristics Survey (TCS 2011) and asked 101,385 local respondents in 35,401 households to record every journey on a mechanised form of transport made within the previous 24 hours (a typical weekday). For a more comprehensive profile of travel characteristics of older people in Hong Kong, Wong et al. (2018) extracted the data of TCS 2011 and presented the findings by age group. They also interviewed older people about their satisfaction with public transport services. These findings provided more insight into older people's travel needs and helped policymakers build a more age-friendly transportation system in Hong Kong.

According to the study (Wong et al., 2018), the most public frequently used public transport, accounted for more than 92% of the total ridership. The mechanised trip rate of people on a typical weekday **declined significantly as people aged.** The mechanised trip rates for 18-59, 60-69, 70-79 and 80 or above were 1.48, 1.00, 0.53 and 0.29, respectively. For the journey time, most older people travelled for **less than 30 minutes;** the percentage of the older people's trips dropped rapidly from around 35% to 10% when the journey time exceeded 30 minutes. Moreover older respondents aged 80 or above usually made short trips, with a journey time of less than 10 minutes.

Franchised bus was the most popular transport mode for older people. The MTR and public light buses were the second and third most popular. Based on figure 5, 37%, 46% and 43% of the older people aged 60-69, 70-79, and 80 or above used franchised buses during their daily travel. They preferred public transport modes with fewer interchanges and shorter walking distances. The franchised buses were the most popular because of the shorter walking distances, point-to-point direct services with fewer interchanges, more frequent stops on streets, seat availability (the MTR was always crowded, with a limited provision of seats, such that the elderly had a greater chance of finding a seat on a bus), cumbersome MTR interchange experiences where they had to walk to the next platform inside train stations to transfer, and the necessity of walking downstairs to underground MTR stations.

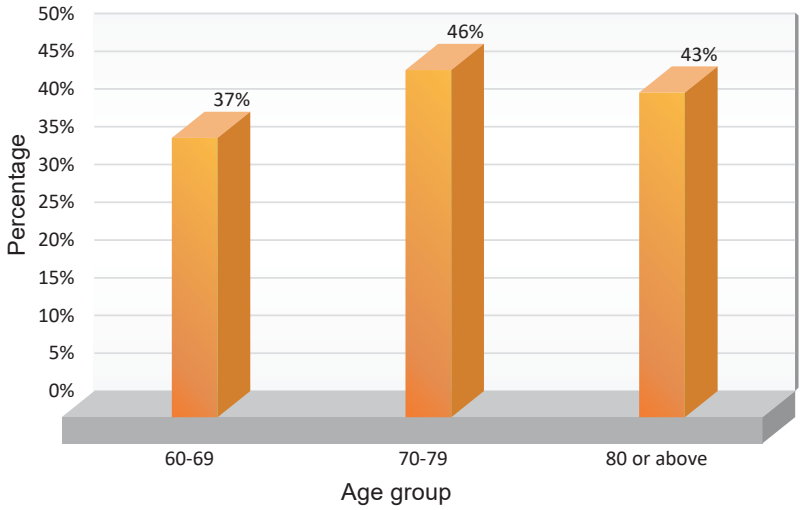


Figure 5 Trip distribution by franchised buses for older people

Source: Wong et al. (2018)

The study also found that the primary purpose of travelling for older people was shopping (27%, 36% and 34% for 60-69, 70-79 and 80 or above). And the second primary purpose was eating at a restaurant.

Also, most older people **preferred travelling between 10 am to 5 pm**, which are the noon off-peak hours. They avoided travelling during peak hours in the morning (7 am to 10 am) and the evening (5 pm to 8 pm). More specifically, older people aged 60-69 were more active in travelling than their older counterparts because some might still work full-time or part-time. For those aged 70-79, most of them started their trips during the noon off-peak hours. For those aged 80 or above tended to travel from 10 am to 11 am. Kwun Tong and the Eastern district had the most significant number of residents. Older residents had **a higher frequency of making intra-zonal trips near the place they lived**.

In short, it was observed that older people in Hong Kong spent less time travelling as they aged. They preferred short trips (less than 30 minutes). Those aged 80 or above usually made trips lasting less than 10 minutes. They frequently travelled by franchised bus. They preferred public transport modes with fewer interchanges and a shorter walking distance. They avoided travelling during peak hours. In addition, most of them made frequent intra-zonal trips close to where they lived. Most older people were satisfied with the public

transport services; they were most satisfied with travel time and stability while least satisfied with the seat availability.

4.3 Findings of the cross-district assessment

Apart from the travel patterns of older people in Hong Kong, it is also crucial to understand how older people perceive the age-friendliness of transportation. Four gerontology research institutes in Hong Kong conducted baseline and final assessments in all 18 districts under the Jockey Club Age-friendly City Project to obtain views from older people to measure the age-friendliness and identify areas of improvement.

The assessments conducted both quantitative and qualitative studies. A questionnaire survey was first delivered to participants to rate 53 items about the eight AFC domains on a 6-point Likert Scale, ranging from 1 (strongly disagree) to 6 (strongly agree). In the domain of Transportation, participants were asked to rate items about (1) "road safety and maintenance"; (2) "availability of specialised services"; (3) "comfort of using public transport"; and (4) "accessibility of public transport". Focus group interviews were then utilized to gauge more in-depth views based on the WHO Age-friendly Cities Project Methodology – Vancouver Protocol (CUHK Jockey Club Institute of Ageing et al., 2019).

The baseline assessments collected views from 9,785 questionnaire respondents and conducted 91 focus group interviews from 2015 to 2017. The quantitative findings show that transportation was the second most age-friendly for the public among the eight domains (mean score= 4.27). In specific, the public was most satisfied with the “road safety and maintenance” (mean score= 4.39) and the “accessibility of public transport” (mean score= 4.38). They were also satisfied with the “comfort of using public transport” (mean score= 4.29). However, they were less satisfied with the “availability of specialized services” (mean score= 3.84).

Concerning the strength of the age-friendliness of transport, the focus group interviewees mentioned the excellent transport network providing diverse transport choices and the affordable transportation due to the subsidy from the Government Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities. They also indicated that wheelchair areas were user-friendly for older people and persons with disabilities.

However, the interviewees also pointed out the: (1) inadequate lifts at MTR stations; (2) long walk to exits; (3) poorly designed signage at MTR stations; (4) insufficient shelters and seats at bus stops; (5) inconvenient barrier-free facilities, etc. Also, transport connections for some regions, such as uphill areas are complicated and insufficient. The interviewees suggested reviewing existing routings and stops, providing more transport routes or options. They also proposed installing more lifts at MTR stations and adding shelters and seats at bus and minibus stops; lowering the eligible age for the $2 Scheme to 60. And they recommended increasing law enforcement to reduce high-speed driving and illegal parking and increasing the number of zebra crossings.

During 2018 to 2021, the final assessments collected views from 10,107 questionnaire respondents and conducted 90 focus group interviews. Transportation continued to be the

second most age-friendly element of the eight domains (mean score= 4.28). Compared to the baseline assessments, respondents were more satisfied with the “accessibility and of public transport” (mean score= 4.40, ranked first) and the “availability of specialized services” with a significant increase of 0.12 (mean score= 3.96, ranked 14th). However, they had a lower rating to the “road safety and maintenance” with a significant decrease of 0.1 (mean score= 4.30, ranked third). And they had a similar rating to the “Comfort of using public transport” (mean score= 4.29). The score comparison of all items about Transportation is presented in Table 3.

The higher rating of accessibility and availability of specialized services was further explained by interviewees from focus groups that there are more new MTR and bus routes such as the Tuen Ma Line. And there were increased rehabus services such as the Southern District Rehab Access for those in need. They were also happy to see more low-floor ramps installed in the Lantau buses, seats and shelters in bus stops, benches and public toilets in MTR stations. They also praised the improved attitude of drivers toward older people and disabled people.

However, they pointed out the long walking distance between residential areas and the MTR exits and the inadequate connecting lifts. And the Light Rail services were also overloaded. They also mentioned that some bus terminals were hot, polluted and inaccessible to wheelchair users. And there were not enough seats and shelters in some stops. The bus arrival information app was also inaccurate sometimes. And it was difficult for older people and wheelchair users to get on minibuses. The expensive fare and refusal of service of the taxi were also concerned. And the transport connections linking remote areas and rehabilitation services were still insufficient.

The interviewees suggested providing more regular route linking residential areas to hospitals; installing more lifts at MTR stations; shortening the walking distance between residential areas and stations; more shelter and fans at the bus and tram stops and introducing elderly-designated stop bells to remind drivers of more alighting time for older people. They also proposed installing timers to indicate waiting time for the traffic light and educating the public transport drivers to stop close to road kerbs.

Domains and questionnaire items	Baseline assessment score	Final assessment score	Score difference	Sig.
Transportation	4.27	4.28	+0.01	
Road safety and maintenance				
1. Road traffic is orderly.	4.34	4.21	-0.13	**
2. Roads are well-maintained with sufficient lighting.	4.45	4.38	-0.06	**
Availability of specialised services				
1. Specialised transport services are available for disabled people.	3.94	4.08	+0.14	**
2. Other transport services are available for places without sufficient public transport.	3.67	3.81	+0.14	**
Comfort to use public transport				
1. Public transport vehicles are clean, well-maintained, easy for getting on and off, uncrowded, and with priority seats provided. Passengers would offer the priority seats to needy persons on public transport.	4.49	4.47	-0.03	
2. Transport stops are conveniently located and easily accessible, with safe and clean environment, sufficient lighting, clear signage, shelter, and sufficient seating.	4.36	4.36	Less than 0.01	
3. Drivers would stop the vehicles at designated stops and close to pedestrian roadside to facilitate passengers to get on and off, and wait for passengers to sit down before driving off.	4.39	4.34	-0.05	**
4. Taxis have spaces for wheelchairs and walking aids, and the cost is affordable. Taxi drivers are polite and helpful.	3.89	3.98	+0.09	**
Accessibility of public transport				
1. Transport network is good, and people can go to all places and service locations in the city through public transport.	4.62	4.61	-0.01	
2. Public transport is affordable with clear price information. Transport fares are consistent regardless of bad weather, busy hours or holidays.	4.65	4.64	-0.01	
3. Public transport services are reliable and frequent at all times, including at nights and during weekends and holidays.	4.17	4.22	+0.05	**
4. Public transport services provide complete information on routes and timetable, including the service timetable for disabled people.	4.06	4.14	+0.07	**

Table 3 Age-friendly scores of Transportation in Hong Kong

Remarks: ** means statistically significant change at p<0.01; scores are rounded to two decimal places

Chapter 5 Directions of transportation policy in Hong Kong

Since 1976, the Transport Department of HKSAR has conducted three comprehensive transport studies ("CTS") to map out the strategic transport planning in Hong Kong. Table 4 summarizes the main strategies of the CTS of Hong Kong. It shows that Hong Kong transportation policy has emphasized improving the accessibility and reliability of the public transport system for all, regardless of age. The transport needs and the impact of the ageing population on the transport system (as suggested in chapter 4) have not been scrutinized.

The key strategies of the first and second CTS focused on improving the road system and public transport infrastructure. The third CTS in 1999 outlined a clear hierarchy of different public transport modes regarding their efficiency and function. It emphasized the railway system as the backbone of the public transport system in Hong Kong, followed by franchised buses, the light rail, the public light buses, non-franchised buses, taxis, trams and ferries. In 2014, the government announced the Railway Development Strategy (RDS) 2014 and reaffirmed the role and position of railways as the backbone of the public transport system.

CTS	Year	Name	Strategy
First	1976	Keeping Hong Kong Moving	1. Improve the road system; 2. Expand and enhance public transport
Second	1989	Moving into the 21st Century	1. Improve the transport infrastructure; 2. Expand and improve public transport; and 3. Manage road use
Third	1999	Hong Kong Moving Ahead: A Transport Strategy for the Future	1. Better use of railways as the backbone of our passenger transport system; 2. Better public transport services and facilities; 3. Better use of advanced technologies in transport management; 4. Better environment protection; and 5. Better integration of transport and land-use planning

Table 4 Three comprehensive transport studies of Hong Kong since 1976

Source: Transport Department (1976, 1989,1999)

In 2017, the government finished the Public Transport Strategy Study ("PTSS 2017"). The study's primary objectives were to balance different transport modes and enhance their complementarity in tandem with the further development of the rail system. The study re-examined the role and positioning of various public transport services and suggested strategic arrangements for each service. The general focus of strategy included improving the efficiency, frequency, reliability, capacity, quantity, fare concession and the operating environment of the services for all the public, regardless of age. However, it suggested **further enhancing the ancillary facilities to improve the waiting environment and service of franchised buses**. Furthermore, the PTSS 2017 also suggested further improvement of the barrier-free facilities. A summary of the PTSS 2017 is presented in **Appendix 1**.

However, the Hong Kong government has paid special attention to delivering a barrier-free transport system to meet the transport needs of the PwDs. Unfortunately, the needs of the older people differ from the PwDs despite the fact that they may overlap (Wong et al., 2018) (As suggested in chapter 4).

As shown in table 5, the government has released four primary policy papers promoting the mobility of PwDs. Since the 1970s, the government has conducted several Rehabilitation Programme Plans (RPP) to review and set out the strategic directions and measures to address the service needs of the PwDs. The first and second RPP were conducted in 1976 and 1998 to promote equal and inclusive opportunities and create a barrier-free environment for the PwDs, such as facilitating the PwDs to attend day rehabilitation services, particularly those which were outside their residential districts. The white paper on rehabilitation "Equal Opportunities and Full Integration: A Better Tomorrow for All", released in 1995, also maintained the importance of providing a barrier-free environment.

Following that, a new vision, “Transport for All”, was adopted in 2002 to promote the disability rights for accessibility to public transport facilities and services. The critical policy objectives were to provide better accessible transport services (including accessible franchised bus, railway, ferry and rehabus services as well as wheelchair accessible taxi services); better public transport infrastructure and facilities (such as accessible public transport interchanges, bus termini, taxi stands, ferry piers and railway stations and other ancillary facilities); and better streets and pedestrian areas for all (such as electronic audible traffic signals, tactile guide paths, more lifts at footbridges and more extensive pedestrian areas). It also called for better planning standards and partnerships with different stakeholders. Under this vision, the government ultimately aimed to create a barrier-free physical environment so that the transport system can be more accessible (Labour and Welfare Bureau, 2007, 2020).

The third and fourth RPP conducted in 2005 and 2020 reiterated building a barrier-free environment for the PwDs. The third RPP aimed to “create a barrier-free physical environment for persons with disabilities, which permits their free access to all buildings and use of public transport”. The fourth RPP has focused on enhancing the capacity, efficiency and service management of the Rehabus services for the PwDs.

Year	Name of Paper	Policy directions
1995	Equal Opportunities and Full Integration: A Better Tomorrow for All	1. Provide a barrier-free physical environment 2. Develop a transport system that meets the needs of the disabled people
2002	Transport for All	1. Better accessible transport services for all; 2. Better public transport infrastructure and facilities for all; 3. Better streets and pedestrian areas for all; 4. Better planning standards, guidelines and procedures; 5. Better partnership for actions and results
2005	Hong Kong Rehabilitation Programme Plan (RPP) 2005-2007	1. Create a barrier-free physical environment for persons with disabilities to access to all buildings and public transport
2020	Hong Kong Rehabilitation Programme Plan (RPP) 2020	1. Enhance service management, efficiency and capacity of Rehabus services; and 2. Enhance the accessibility of the public transport services to facilitate the travelling of the PwDs

Table 5 Key policy papers promoting the mobility of residents

Source: Labour and Welfare Bureau (1995), Transport Department (2002), Rehabilitation Advisory Committee (2005, 2020)

Chapter 6 Age-friendliness of transportation in Hong Kong

6.1 Affordability

Although there is no comprehensive overall planning for an age-friendly transport system for older people in Hong Kong, many measures have been taken to improve the mobility of older people. This chapter reviews relevant age-friendly transport measures and identifies the key issues encountered in Hong Kong.

Regarding the affordability, the government launched the Public Transport Fare Concession Scheme in phases in June 2012. The scheme enables older people and eligible persons with disabilities to travel on designated public transport modes and services at a concessionary fare of $2 per trip. The target beneficiaries are 1) elderly people aged 65 or above, 2) recipients under the Comprehensive Social Security Assistance (CSSA) Scheme aged below 65 with 100 % disabilities, and 3) Recipients of Disability Allowance (DA) aged below 65. The main purpose is to help build a caring and inclusive society by encouraging these groups to participate more in community activities. The covered transport modes were the MTR, franchised buses, ferries and all green minibus routes.

After evaluation in 2021, the eligible age was lowered to 60 with effect from February 2022, and the scheme also extended the coverage to red minibuses, Kaitos (街渡) and tramways, with certain conditions. The users must use the tailor-made JoyYou card with a photo and age eligibility. It is estimated that the scheme will benefit more than 600,000 older people aged 60 to 64. The response from the community suggests that the Scheme is generally very successful and is welcomed by its beneficiaries (Labour and Welfare Bureau of HKSAR, 2020).

Photo from Labour Welfare Department

The current Scheme has received comments from the community about abuse and misuse by unintended beneficiaries. **"Short rides on long bus routes"** is one of the observed phenomena. The Transport Department (TD) commissioned a survey in 2019 to collect operational information on the travelling pattern of the beneficiaries on long-haul bus routes. The survey covered 109,371 passengers on 1,634 long haul bus trips with an adult fare of $8 or above. Overall, about 13% of the Elderly/Persons with Disabilities passengers on these

bus routes were found taking short journeys. This percentage, when compared with only 3.2% for other passengers, suggests that the practice is probably more common among these beneficiaries. Further analysis indicates that of the Elderly/Persons with Disabilities who took short trips on long-haul routes, about 23% involved routes without convenient alternatives. In comparison, 77% took routes that operated at comparably more frequent services, and hence, more convenient for the passengers. This practice is worrying, partly because of the inherent waste of public funds based on the current reimbursement arrangement and the competition for seats on the cross-harbour and other long-haul routes during peak periods. Some general education delivering an appropriate message on the buses to alert the elderly may remedy this issue.

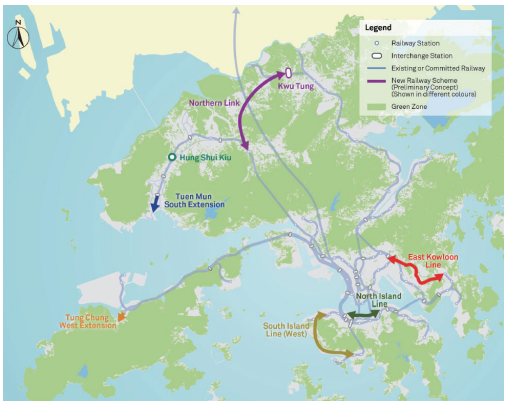
Overseas experience

Public transport concessions for older people and persons with disabilities are common in developed cities. The forms of concessions are different, ranging from free passage to reduced fare based on a fixed amount or a percentage discount. Concessions on other transport modes can also be various. In Sydney, a maximum fare payable per day is capped, beyond which seniors travel free. There is a free allowance for 60 bus trips a month in Taipei, beyond which a 50% concession fare is payable. There may be time restrictions applicable to the concessions, and discounts vary with different day periods in Singapore.

6.2 Accessibility

Accessibility is commonly defined as the ease of reaching a destination (Levine & Garb, 2002). The transport network in Hong Kong has been regarded as being highly accessible for its multiple public transport choices. As shown in the previous chapter, the accessibility of public transport was ranked the second most age-friendly in the survey conducted by the four gerontology research institutes.

Proposed railway network in 2031



The expanding railway network contributes to the high accessibility of public transport in Hong Kong. As mapped out by the Railway Development Strategy 2014 (RDS-2014), five new railway lines had been opened by 2021[1]. Moreover, the expanded railway network in 2021 will cover areas inhabited by more than 70% of the local population (Transport and Housing Bureau, 2014). Moreover, several new railway schemes will be developed on Hong Kong Island, Kowloon and the New Territories by 2031.The total length of the railways will increase to over 300 km. Upon completion of the railway schemes, 75% of the local population in the inhabited areas will be served. Apart from railway, franchised buses, the primary mass carrier, serves areas without direct railway

[1] New railway lines include the West Island Line, the South Island Line (East), the Kwun Tong Line Extension, the Guangzhou-Shenzhen-Hong Kong Express Rail Link (Hong Kong Section), and the Shatin to Central Link

access and provide feeder service connecting the railway network and inter-district service (Transport and Housing Bureau, 2017). It is easy to find bus stops nearby in Hong Kong.

Despite the expanding railway system, some areas where the rails cannot reach are of great demand for feeder services such as buses and minibuses. For example, the three public housing estates (namely Choi Fook Estate, Choi Tak Estate and Choi Ying Estate) in Kowloon Bay, accounting for more than 20 blocks, rely on a limited number of minibuses and buses for the transport connection. The services have been judged as inadequate by the residents.

Also, older people's transport choices may be limited. In recent years, the number of bus routes was reduced or cancelled under the bus rationalization plan because of the overlapping routes provided by the new railway routes. Therefore, the local community was worried about the limited choices, and they believed that it is particularly disadvantageous to the older people who use buses more frequently.

For example, the Transport Department cancelled some bus routes (e.g. GMB 212) due to decreased patronage following the opening of the Kwun Tong line extension, extending the existing rail service of Kwun Tong line to Ho Man Tin and Whampoa stations. However, as the District Council members suggested, this bus route was a popular route for Nam Cheung residents to travel to and from the Kwong Wah Hospital and Queen Elizabeth Hospital. The cancellation caused inconvenience for residents, especially older people.

Another example is the new Tuen Ma Line fully opened in 2021, passing through many New Territories and Kowloon areas. The TD suggested cancelling some bus routes due to decreased patronage after the opening. The KMB predicted that more than 40 bus routes would be affected. The Sha Tin District Council members questioned the fact that the Department had ignored other contributing factors of decreased patronage during the assessment period. They also believed that some cancelled bus routes were still in demand since residents always complained that the buses were full (Sha Tin District Council, 2020). They urged the Department to consider the travel patterns of the older people who relied heavily on the bus services.

As observed from the examples of route cancellation, it seems that the Transport Department only consider patronage in bus rationalization. However, according to the Guideline, TD should also consider other factors such as the availability of reasonable alternatives and hardship **experienced by passengers** (Transport and Housing Bureau, 2017). Since **most older people generally prefer buses to other transport modes for convenience and less walking,** the department should consider their needs besides patronage in bus rationalization.

Despite multiple public transport choices, the **convenience and comfort of reaching transport nodes** essential for those with walking difficulties, including older people, are questioned (Loo & Lam, 2012; Somenahalli & Shipton, 2013). Given that rugged uplands and steep slopes characterise the topography of Hong Kong, it is not easy for older people to walk.

Even though it is a requirement of the Planning Standards and Guidelines (Planning Department, 2019), not all areas are within a 500m walking distance of the rail stations/public transport interchanges. In addition, travellators or moving walkways assisting pedestrian movement between places and stations are uncommon. For example, Loo and Lam (2012) found that the Kwong Wah Hospital (one of the most frequently visited hospitals for older people) lacks a continuity of walking paths to and from public transit stations. Older people needed to cross the road often to reach the hospital. Some walkways connecting stations less than 1000m and without escalators can also be difficult for older people to walk on.

Apart from the road conditions, the journey inside the MTR stations is another concern. The absence of escalators in exits of MTR stations may hinder the mobility of older people and other persons with mobility difficulties. For example, there is a three-storey flight of stairs at exit B of Tin Hau station. In addition, there are only one-way escalators at Choi Hung station. Furthermore, some newly opened stations in recent years are large and deep with more storeys. Therefore, older people may be exhausted from walking to the stations and easily feel confused in the large station. For example, the Ho Man Tin station has eight storeys with a total area of 58,000 square metres. It took almost 15 minutes for a young adult to walk from Ho Man Tin Estate to the platform, not to mention the older people (Wong, 2016). The HKU station also has eight storeys, and it takes 5 minutes from the entrance to the platform.

Photo from HK01

Nevertheless, more seats can be found in MTR stations for resting now. Regrettably, they are more available in some large stations with long walkaways. The corporates should assess the needs of older people in every station and provide more seats for them in more stations, especially in those new and large stations, to rest during their trips.

Photo from Top!ck

Since walkability assessment studies vary in different areas, a more comprehensive review of the connectivity to major transport facilities should be conducted in every district. The review will help to improve the understanding of the potential barriers older people may encounter in their daily access to public transport facilities.

Overseas experience – "Take a seat" campaign in Nottingham

The "Take a seat" campaign was initiated by the Age-friendly city of Nottingham in 2015 to encourage local shops and business to offer a seat and a friendly welcome to anyone who needs it. This measure encourages older people to get out and about in the community to maintain their independence. Older people can "catch their breath" when walking around the neighbourhood. It is beneficial for those older people living in hilly areas in Nottingham. As of 2020, over 300 premises across 28 local sites in Nottingham have signed up for the campaign.

Photo from Nottinghamshire County Council

6.3 Safety and comfort

Hong Kong is regarded as one of the safest nations or cities in the world for its low crime rate (only 1.4% to 2.3% of crimes happened in vehicles from 2010 to 2020). However, it faces the same worldwide problem of road traffic injuries, in that a **higher proportion of older people are involved in traffic fatalities**. Road traffic injuries are particularly severe for older people since they have a higher risk of fatality due to age-related physical and mental health decline (Yee, Cameron, & Bailey, 2006).

As presented in figure 6, the total number of traffic casualties (including slight, severe injury and fatal casualties) increased from 18,138 in 2009 to 20,218 in 2019 (Hong Kong Police Force, 2019). Among the casualties, slight injuries were the majority over time. For example, in 2019, slight injuries comprised nearly 90% of the traffic casualties.

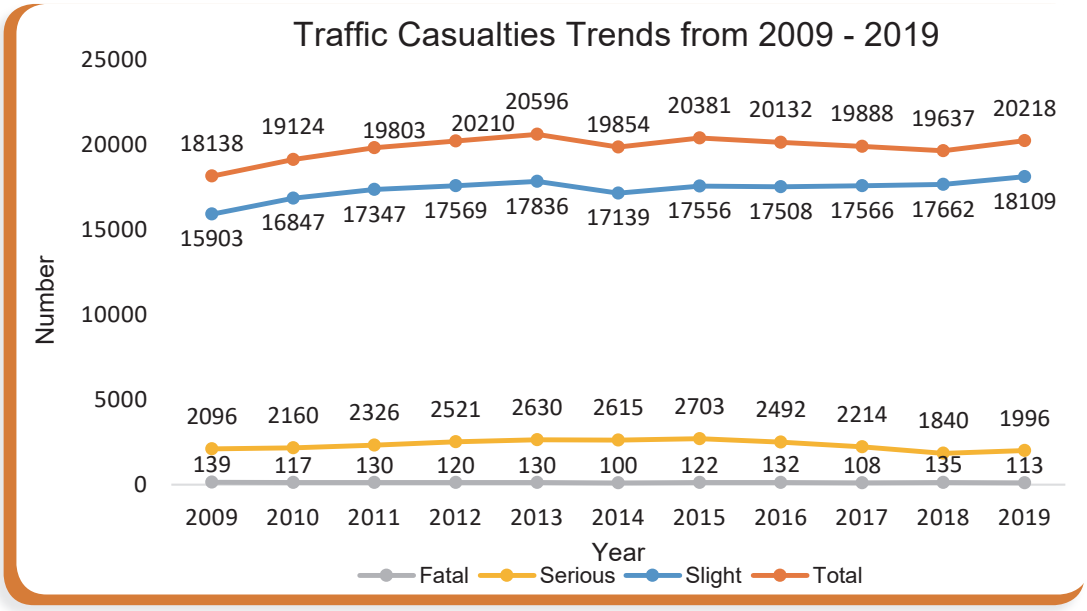


Figure 6 Traffic casualties from 2009-2019

Source: Hong Kong Police Force (2009-2019)

Noticeably, there was a steady increase in traffic casualties of older people[2] in Hong Kong, as demonstrated in figure 7. The total number of casualties for older people increased from 2,353 in 2009 to 4,079 in 2019, which increased by 73.4% during the decade. The number of slight, severe injuries and fatal casualties raised consistently.

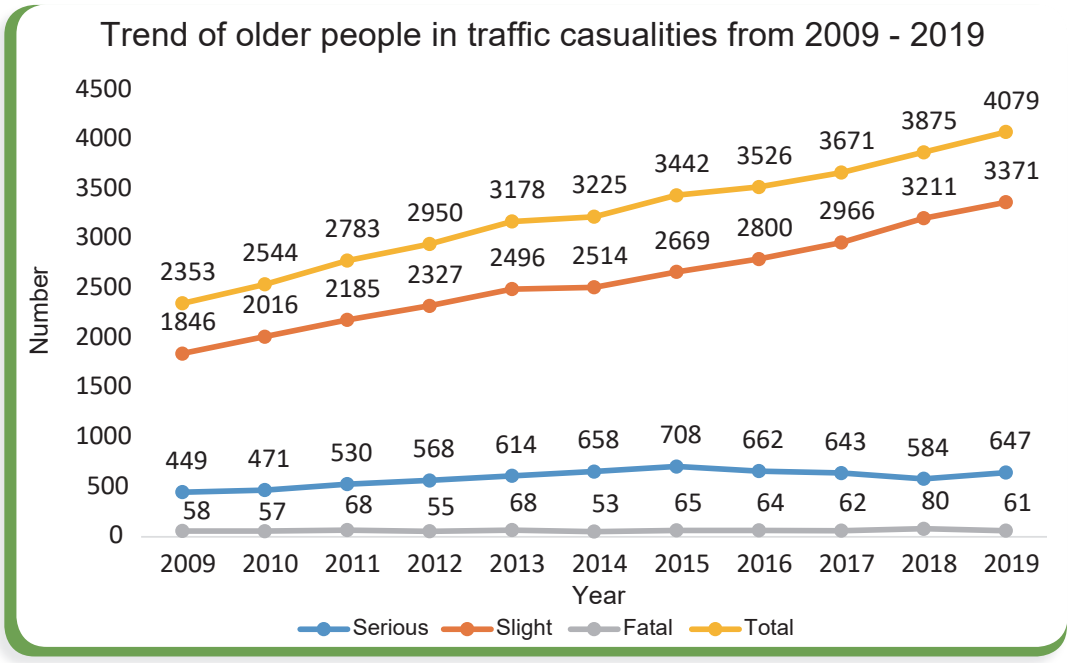


Figure 7 Trend of older people in traffic casualties 2009-2019

Source: Hong Kong Police Force (2009-2019)

In particular, older people made up a large proportion of fatal casualties from 2009 to 2019; 57%, 59% and 54% of the fatal casualties were the older people in 2017, 2018 and 2019, respectively (figure 8).

Figure 8 Percentage of elderly fatal casualties 2009-2019

Source: Hong Kong Police Force (2009-2019)

[2] Older people aged 60 and above

Among the fatal casualties, elderly pedestrians remained the most vulnerable group. As shown in figure 9, the proportion of elderly pedestrian fatalities were the majority from 2010 to 2019 (Around 70%). It even rose to more than 70% from 2017 to 2019 (nearly 80% in 2018) (Hong Kong Police Force, 2019).

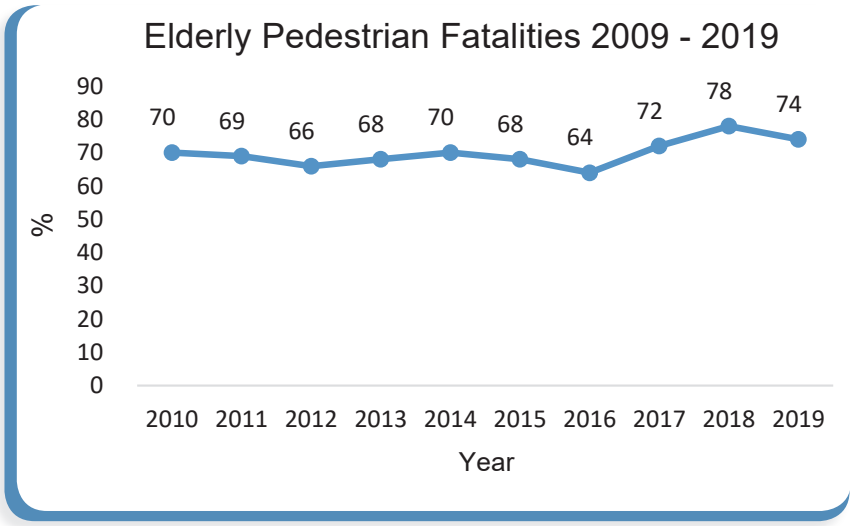


Figure 9 Percentage of elderly pedestrian fatalities 2009-2019

Source: Hong Kong Police Force (2009-2019)

The most promising strategy in many major cities to reduce traffic accidents and provide a more pedestrian-friendly environment is the low-speed limit zone. These cities have introduced low-speed limit zones (20km/h to 40km/h) on a vast scale. More than 60% of the roads in London have implemented a 30km/h limit, and the limit of 20km/h was further introduced in Central London in 2020. The “Shanghai Street Design Guidelines” launched in 2016 indicated that side streets should be planned based on the 30 km/h design speed. The United Nations has also designated the theme “Streets for Life #Love30” (where 30=30km/h speed limit) for the 6th Global Road Safety Week in 2021 to advocate the low-speed limit zones over the world.

Studies about the relationship between speed and injury severity found that the lower the speed, the higher the survival possibility in a crash. The study conducted by Taylor, Lynam, and Baruya (2000) showed that a lower speed could reduce the likelihood of traffic accidents by 5% when every 1 mile slower in an average vehicle. A study also found that pedestrians have been shown to have a 90% chance of survival when hit by a car travelling at 30 km/h or below (World Health Organization, 2004).

Many cities in the UK have achieved considerable results after implementing the low-speed limit zones. London has implemented 20km/h low-speed limit zones since 1990, and there were 399 road sections implemented. Grundy, Steinbach, Edwards, Wilkinson, and Green (2008) found that casualties were reduced by 42% within the 20 mph zones, compared with other roads outside the zones. It was also estimated that the 20 mph zones in Bristol avoided 4 fatal, 11 serious and 159 slight accidents every year (Pilkington, Bornioli, Bray, & Bird, 2018).

Photo from the United Nations

In Hong Kong, the low-speed limit zones were first introduced by the Transport Department in the “Walk in HK” initiative under an announcement in the 2017 Policy Address. The government recognised the benefits of low-speed limit zones. According to the Transport Department (2019) study, the low-speed limit can encourage drivers to drive at a constant speed and help raise drivers' awareness of the surrounding environment and therefore, react promptly. As a result, traffic/pedestrian accidents and the severity of pedestrian's injuries can be reduced.

TD introduced the trial scheme of 30km/h low-speed limit zones in Sham Shui Po in 2019. The proposed trial area covered several streets in Sham Shui Po (such as Un Chau Street, Fuk Wing Street and Fuk Wah Street). However, only the Wai Chi Street implemented the zoning in 2020 despite full support from the district council members.

The Southern District Council also suggested that some busy areas implement 30km/h speed limit zones where traffic impact is minimal. At the same time, pedestrian crossing movements are heavy along the main road. The suggested areas included Repulse Bay, Stanley, Chung Hom Kok, Aberdeen Town centre and Ap Lei Chau Main Street. Figure 10 shows the proposed 30km/h zones in shows Stanley and Aberdeen Town centre (Southern District Council Traffic and Transport Committee, 2021). Unfortunately, these proposals are still pending as of December 2021.

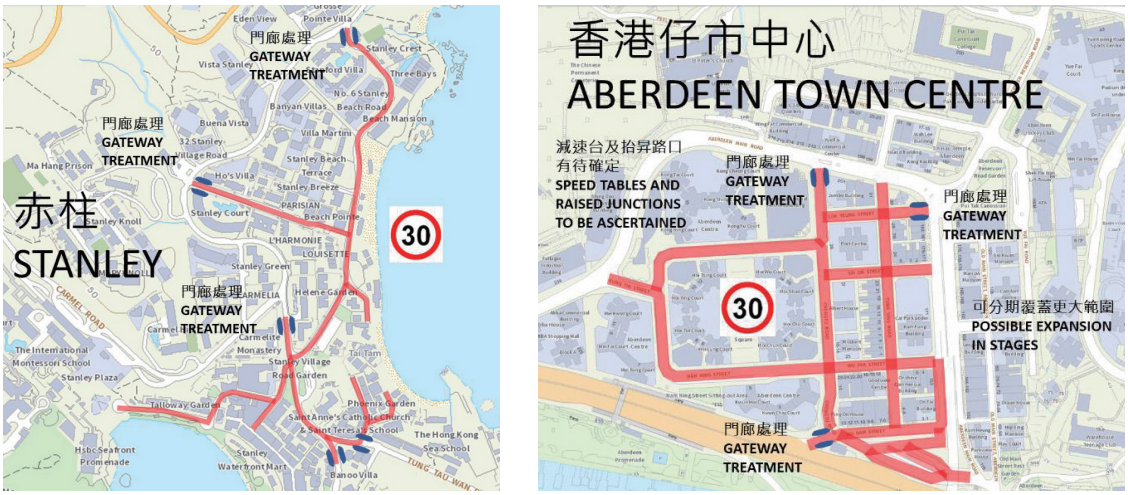


Figure 10 Proposed 30km/h zones in Southern District

Source: Southern District (2021)

Apart from low-speed limit zones, a more in-depth investigation should be conducted to understand the diverse factors contributing to elderly traffic fatalities for more targeted measures for older people. There are many factors such as the design of vehicles, the walking pace of older people, jaywalking and the waiting time for crossing roads. For example, the slower walking pace of older people may result in a higher risk of being involved in a pedestrian-vehicle collision (Oxley, Fildes, Ihsen, Charlton, & Day, 1997). Additionally, the long waiting time of road crossings may increase their incentive to jaywalk (Loo & Lam, 2012).

Overseas experience - The Silver Zone Scheme in Singapore

Singapore shares the same issue of a high proportion of elderly pedestrians involved in traffic accidents. There were 27 elderly pedestrians killed in 2019 (Singapore Police Force, 2019). To enhance road safety for elderly pedestrians, the Singapore government initiated the Silver Zone Scheme in 2014. The Scheme implemented a series of traffic-calming measures and senior-friendly road safety features at areas with a high proportion of senior residents and where there have been past accidents involving seniors. The zones are located close to basic amenities such as food courts and medical centres so that older people can access those facilities more efficiently and safely.

Currently, 17 Silver zones have been completed; 18 more will be completed by 2021, and 15 more will be implemented progressively from 2021. Therefore, 50 Silver zones are expected to exist by 2023, owing to the Singapore government. According to the Land Transport Authority (2020), the number of accidents involving elderly pedestrians has dropped significantly by about 80%.

In the Silver zones, speed limits are reduced to 40km/h, roads are narrow, and pedestrians are guided to marked crossing points. Setback crossings which are widely spread, are implemented to reduce crossing distances and to enable drivers to see pedestrians more readily. Straight roads are replaced by Chicanes which are curvy roads to slow down the drivers. Two-stage crossings are applied so that older people can rest while crossing. There are also Pinch Points, which make the road narrower and eye-land, a resting area in the middle of the crossing, are included in the two-stage crossing. Also, bus-friendly humps are installed along bus routes to reduce vehicle speeds (figure 11).

Setback crossings

Two-stage crossings

Silver zone gateway

Bus-friendly humps

Chicanes

Figure 11 Measures in the Silver Zone of Singapore

Source: CARRO Blog (2021)

Apart from safety, **comfort is another crucial element for age-friendly transportation.** The comfort of transport does not only refer to comfort in vehicles but the environment in which the trip is made and the extent to which a trip may be enjoyed or not (International Transport Forum, 2014). There are many determinants of comfort, such as the shelter level of lighting, the level of crowding in vehicles and air-conditioning (İmre & Çelebi, 2017). The shelter is a commonly recognized determinant because it provides a comfortable waiting area for passengers with protection from the weather and a feeling of safety and security. An ideal shelter should provide a place for passengers to sit and rest.

Although the importance of shelter was also well recognised by the Planning Department (2019), shelters and seats are generally not provided at transport stations or stops in Hong Kong due to the slow progress of retrofitting. As demonstrated in figure 12, passengers at non-sheltered stops tend to suffer from weather conditions such as hot and rainy weather and air pollution. It is a particular hardship for older people because they are relatively more vulnerable to extreme weather (Shi et al., 2019).

Figure 12 Bus stop with and without shelter

Source: Fandom (2021)

As of 2020, 3,161 out of 8,753 bus stops were sheltered, comprising 36.1% of Hong Kong bus stops (HKSAR Government Press Releases, 2019a). In other words, more than 60% of bus stops were not sheltered. In particular, about 80% of bus stops were not sheltered on Hong Kong Island and in Yau Tsim Mong.

Area	District Council district	Number of sheltered bus stops	Total number of bus stops	% of non-sheltered bus stops
Hong Kong Island	Central and Western	101	517	80.5%
	Wan Chai	105	435	75.9%
	Eastern	109	540	79.8%
	Southern	138	566	75.6%
Kowloon	Yau Tsim Mong	119	602	80.2%
	Sham Shui Po	139	430	67.7%
	Kowloon City	186	477	61.0%
	Wong Tai Sin	168	358	53.1%
	Kwun Tong	293	609	51.9%
New Territories	Kwai Tsing	203	453	55.2%
	Tsuen Wan	98	366	73.2%
	Tuen Mun	164	490	66.5%
	Yuen Long	224	601	62.7%
	North	172	312	44.9%
	Tai Po	193	354	45.5%
	Sha Tin	362	761	52.4%
	Sai Kung	213	450	52.7%
	Islands	174	432	59.7%
Total		3161	8753	63.9%

Table 6 Number of sheltered bus stops, as of 2019 by District Council district

Source: HKSAR Government Press Releases (2019a)

The public transport operators are the one who proposes retrofitting shelters in bus stops to the Transport Department. The TD will then study the impacts of proposals such as pedestrian flow, the sight of other road users and the merchants nearby. After consulting the relevant government departments and local communities, the TD will make the final decision. The franchised operators are responsible for the construction and maintenance of shelters. The most significant incentive for the operators is the profits from advertising light boxes on the shelters. As a result, the proposal of retrofitting shelters is primarily affected by the potential earnings from the perspective of the franchised operators.

Although it is not feasible to provide shelters and seats at all transport stops, policy makers should take the initiative to study and prioritize the locations of retrofitting shelters for the benefit of the public, especially those who are more in need, such as older people and PwDs. Examples of locations that should be prioritized are hospitals, elderly community centres and social centres. There should also be more discussion and communication with the franchised operators to set clear criteria for retrofitting shelters so that profits will not be the main concern.

Regarding the **seats at bus stops**, the HKSAR government has earmarked $88.27 million in the 2016 Policy Address to subsidize franchised bus operators in installing seats and real-time arrival information display panels at covered bus stops. As of August 2021, seats were installed in 2,200 sheltered bus stops (25.1 % of the total bus stops in 2019).

Photo from HK01

The public has criticized the design of seats at bus stops. Since the seat is facing away from the road, it is difficult for passengers to check the vehicle's arrival if they are seated. Also, since the seat is not positioned at the front of the bus stop, some passengers said it would be confusing if they were at the front of the queue but sitting. Therefore, they might not sit down while being in a queue. Some passengers also pointed out that they could not see the information box that the sitting passengers block because the box is above the seat. Another practical issue is that most bus stops have two or more bus routes; the bus stops might be crowded already. Passengers sitting may occupy more space in the queue, thus making the area more crowded. These reasons thus lead to infrequent use of the seats at the bus stop. Although the seat design is constrained due to geographical and technical conditions, a more user-friendly design should meet their needs and lead to a better use of resources.

Photo from HK01

Photo from HK01

Despite being not funded by the government, HK Tramways also conducted a trial scheme to install seats at stops in 2019. There were two types of design: the first type was with a 45-degree tilt, and the second type was not tilted. The tilted seats were not suitable for sitting on but passengers were able to lean on them. HK tramways has not yet published any evaluation about the trial scheme but has encouraged the public to give feedback.

Photo from HK01

In order to provide passengers with a more convenient and comfortable waiting environment for buses, the government has been striving to develop a **smart public transport interchange ("PTI")** to improve the exterior design and facilities of existing covered PTIs. The re-designed interchanges will provide seats, air-conditioning, Wi-Fi services, mobile phone charging stations and payment facilities. A pilot project was initiated in Ma On Shan Town Centre Public Transport Terminus in June 2021. The redesigned PTI is not only more comfortable but also safer for older people. It is encouraging that the government is becoming more active in building a more passenger-friendly environment. The public hopes that additional smart PTIs will be provided after the trial scheme.

6.4 Design of vehicles

Designs of vehicles are essential for delivering a safe as well as a comfortable environment for passengers. In public transport, **priority seats** have been provided in most public transport facilities for the safety and comfort of older people. The MTR first introduced priority seats in 2009 under the "Priority Seats Campaign", which encourages people to offer their seats to those in need. Today, all primary forms of public transport, including the MTR, light rail, franchised buses, trams and certain ferries, provide priority seats for people in need, such as older people, the disabled and pregnant women.

Photo from KMB

On franchised buses, the cushions and headrests of priority seats are of an easily recognized colour. These priority seats are placed close to the doors for the convenience of those in need. Stickers that read "Please offer your seat to anyone in need" are displayed, and announcements are broadcast to remind passengers to give up their seats too.

Photo from Fandom

In the MTR, priority seats can be found in carriages, and there are announcements about offering seats in many different places. On ferry services, priority seats are located close to the boarding and disembarkation area for the convenience of those in need. Trams place priority seats for disabled passengers in their lower decks, close to the driver's compartment. There are generally no priority seats in public light buses (both green and red minibuses) because standing is generally not allowed on board. However, only a small number of green minibuses (about 50) have a priority seat. It is at the first single seat next to the entrance/exit door, where it is easier for those in need to get on and off the vehicle.

There are also some other age-friendly features on buses for older people. For example, buttons to press before alighting can be easily found; continuous railing is installed to reduce the chance of elderly passengers falling; handrails at the exit doors at a lower position for easy alighting; widened gangway to facilitate elderly passengers on crutches and wheelchair users; and a buzzer before the doors close and a warning lamp at exits to enhance the safety of the elderly when alighting from the bus.

Although the priority seats have been implemented for more than a decade, the dispute continues. A study conducted by the Centre of Social Policy Studies (2015) revealed that passengers neglected to offer seats to those in need because they were using mobile phones or tablets. On the other hand, it is commonly argued that priority seats have been regarded as applicable only to older people, neglecting other passengers' needs. Therefore, the government should put more effort into promoting the culture of offering seats to older people and all people in need. In addition, apart from providing seats, it is more about caring for older people and other people in need when they are on board. The government should also consider other measures such as the Priority Seat card or badge introduced in London in 2012. People who find it difficult to stand when using public transport can apply for the 'Please offer me a seat' badge and card launched by the Transport for London.

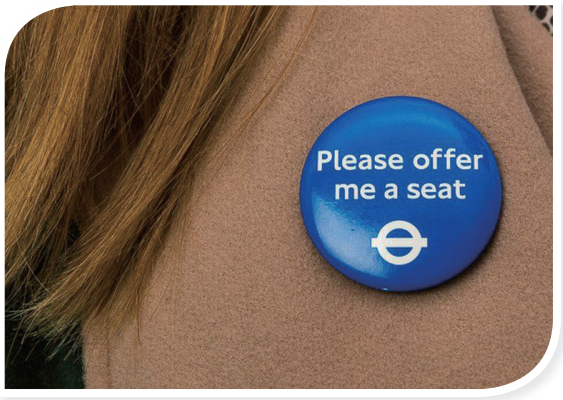


Photo from BBC News

Previous research has shown that elderly pedestrians were the most vulnerable group in the case of fatal casualties. The Police Force studied 33 elderly fatal cases in 2020, and it found that heavy goods vehicles (HGVs) and public transport vehicles were most commonly involved. The blind spots resulting from the design of HGVs were found to be one of the main reasons for the elderly fatal casualties (figure 13) (Magramo, 2020). HGVs drivers are not able to see pedestrians if they stand near the vehicle's blind spots. The government forensic scientist explained that HGVs drivers could not see pedestrians from the windscreen when they stand two metres or less near the HGVs and can barely see pedestrians' heads when they are 2-3 metres from the HGVs.

Figure 13 Blind spots of HGVs

Source: HK01 (2020)

Currently, the Transport Department only requires the HGVs to install a reversing video device, a closed-circuit television system with a camera being mounted at the vehicle rear to capture its rear view (figure on the left).

International societies have been strengthening the safety requirements of HGVs. For example, the European Union will mandate that all HGVs install side guard systems such as side-facing radar from 2022. It is estimated that the side guard systems can reduce pedestrian and pedal cyclist fatalities by 50 to 74 per cent and 17 to 27 per cent, respectively (Badgley, 2020). However, Hong Kong has no such laws in the pipeline.

Overseas experience - Direct Vision Standard (DVS) and Heavy Goods Vehicles (HGV) Safety Permit in London

In order to eliminate deaths and severe injuries from road collisions by 2041, London launched the Vision Zero Plan. The DVS is part of the plan requiring all HGVs with more than 12 tonnes Gross Vehicle Weight entering or operating in Greater London to hold a valid safety permit. The DVS objectively measures a driver's direct view through the windows of an HGV cab. It is communicated as a star rating from zero (poor) to five (excellent), indicating the risk level to people walking and cycling near the vehicle. It is expected that all HGVs will have a minimum of three stars in 2024. Figure 14 shows the new design of HGVs. The enlarged windscreen and door significantly increase the directness of vision of the driver. It is anticipated that the HGV collisions will be substantially decreased.

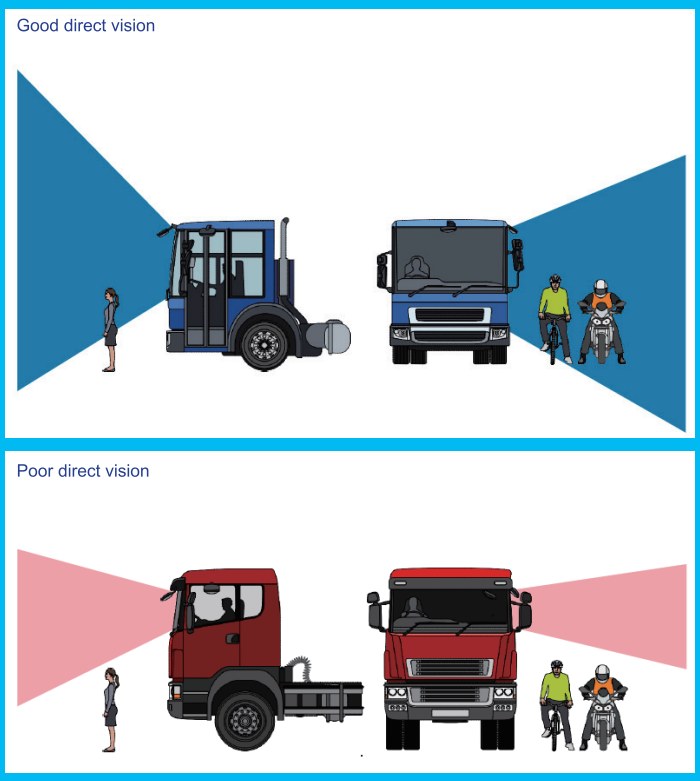


Photo from Transport for London

Figure 14 New design of HGVs under the Direct Vision Standard (DVS) and Heavy Good Vehicles (HGV) Safety Permit

Source: Transport for London (2016)

Those zero-star rated vehicles have to fulfill a series of safe system requirements as demonstrated in figure 15 before gaining a higher rate. For example, a class V mirror must be fitted to the nearside of the vehicle; external pictorial stickers and markings must be displayed on vehicles to warn vulnerable road users of the hazards around the car, and a sensor system that alerts the driver to the presence of a vulnerable road user must be fitted to the nearside of the vehicle.

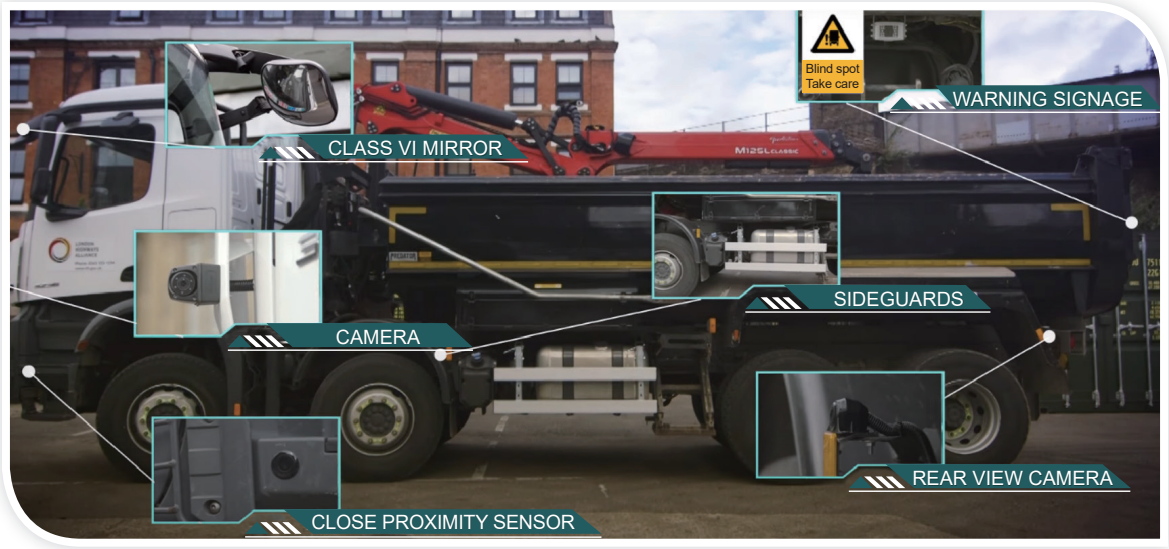


Figure 15 Safe system requirements for zero-star rated vehicles

Source: Transport for London (2016)

6.5 Availability of specialised transport services

6.5.1. Barrier-free public transport facilities

Photo from KMB

Many improvements for greater disabled accessibility are already in place for buses in Hong Kong. According to the Transport and Housing Bureau (2017), more than 90% of the franchised buses are wheelchair-accessible low-floor buses so they can accommodate the needs of wheelchair users. The bus access ramp can slide out to allow wheelchairs to be manoeuvred on or off the bus. However, a small number of bus routes from The New Lantao Bus Company (1973) Limited (NLB) do not provide low-floor buses in South Lantau because of steep gradients and sharp bends.

It is a promising sign that almost all buses are wheelchair-accessible because buses are popular transport facilities for older people and the PwDs. However, there are some concerns about the design of the ramps. Due to the different heights of the road and pavement, the wheelchair ramp may be too steep when it is placed. As a result, the wheelchair users might find it difficult to control the wheelchair and may roll off the ramp easily. For example, the gradient of the ramp shown in the right figure was 1:3.27, which exceeded the standard 1:10 according to the Building Department (2008).

Photo from On.cc

Apart from the low-floor design, a wheelchair parking space is also provided on each bus. However, the wheelchair parking space sometimes is occupied by other passengers who may put luggage or baby carriage there, creating an obstruction for wheelchair users and disputes between passengers. A clear message should be delivered to the drivers and general public that the wheelchair parking space is prioritised for wheelchair users. Bus companies should give training to drivers to remove the obstacles wheelchair users face when using buses.

Since most buses only provide one wheelchair parking space, wheelchair users sometimes have to wait for several buses to find a vacant space. Therefore, the government and bus operators have been exploring ways to increase the number of wheelchair spaces from one to two since 2017. As of 2019, 242 buses provided two wheelchair parking spaces (196 from the KMB and 46 from the NWFB and CTB) (figure 16).

Although it is encouraging to see an increasing number of dual wheelchair parking spaces, wheelchair-bound passengers reported that the signage of dual wheelchair parking spaces on the buses is insufficient and unclear (figure 16). Therefore, it is suggested that they are clearly marked to indicate the availability of dual wheelchair parking spaces by providing signage on the buses. Some associations for the disabled also recommended mentioning the availability of dual wheelchair parking spaces in the franchised buses smartphone applications.

Figure 16 Location and signage of dual wheelchair parking spaces

Source: HK01 (2019)

Regarding the green minibus services, the government launched the "low-floor wheelchair-accessible light bus trial scheme" in January 2018, where two-floor wheel-chair accessible green minibuses were introduced to operate on two hospital routes. They are Hong Kong Island GMB route no. 54M (Kennedy Town Station – Queen Mary Hospital) and New Territories GMB route no. 808 (Kam Ying Court – Prince of Wales Hospital). The third low-floor public light bus, GMB Route no. 413 (Tsing Yi Ferry Pier – Princess Margaret Hospital), started service in 2021. To use the services, passengers would have to call the operator to reserve the wheelchair space up to 14 days before use and at least one working day before using the service. One accompanying person is allowed for the wheelchair passenger when using the service.

Photo from Fandom

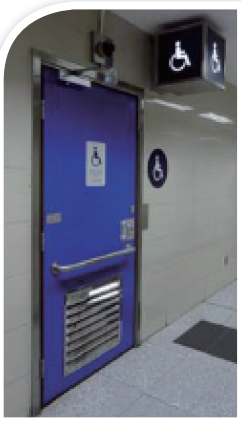
Route	Year	Timetable
GMB route no. 54M (Kennedy Town Station – Queen Mary Hospital)	2018	Monday – Saturday: 07:10-21:00 (12-15mins) Sunday and Public Holiday: 07:10-20:00 (15-20mins)
GMB route no. 808 (Kam Ying Court – Prince of Wales Hospital)	2018	Monday – Sunday and Public Holiday: 05:40-23:10 (6-8mins)
GMB Route no. 413 (Tsing Yi Ferry Pier – Princess Margaret Hospital)	2021	Monday – Saturday: 07:00-20:00 (20-30mins) Sunday and Public Holiday: 07:00-19:00 (40mins), 19:30, 20:00

Table 7 Timetable of the three low-floor wheelchair-accessible green minibuses

The government promised to review the operational effectiveness of these vehicles in 2018, such as the feasibility of technical operation, maintenance, actual operation on roads and passengers' feedback, upon commencement of the trial scheme. However, no official evaluation reports have been released so far. The media reported some feedback about the scheme from different stakeholders in 2019. The Green Minibus Associations reflected that the efficiency of the low-floor wheelchair-accessible green minibuses was low due to the high cost of the vehicle and low patronage. The franchised operator of GMB route no. 808 stated that no reservation had been made as of September 2019. Moreover, the operator of 54M also indicated that the cost of the low-floor wheelchair-accessible green minibuses was 30% higher than traditional minibuses, and that it had a deficit. Representatives from Associations for The Disabled also suggested that insufficient promotion and lack of flexibility were the main reasons for low patronage. They urged the government to advertise more of the services and to provide more details about the operation of the services to attract more franchised operators.

The **MTR** Corporation has also been increasing its barrier-free facilities. Currently, 80 out of 87 MTR stations (more than 90%) have external lifts connecting the station concourse and street level. There is also a wheelchair aid that enables wheelchair users to transfer vertically between street level and concourse level when no vertical lift or stairlift is available. Stairlifts are also available in some stations, such as Shek Kip Mei and Yuen Long.

Accessible toilets can also be found in most of the stations. Multi-purpose spaces are provided inside train compartments on all trains.



Wide gates are provided at all MTR stations allowing passengers in a wheelchair to enter or exit gates freely. Portable ramps are provided at all stations (except for Light Rail stops), enabling wheelchair users to board more easily.

Photo from MTR

As suggested by the MTR Corporation, there is at least one barrier-free access in every station, such as passenger lifts, ramps, stairlifts and wheelchair aids. Barrier-free facilities are not provided at every exit of the station. Persons with mobility difficulties might take longer and require more effort to reach and exit a station, especially in the case of the larger stations. For example, exit C2 of the HKU station does not provide wheelchair user access. Wheelchair users, therefore, need to access the station via other exits where C1 is the closest while still being distant from C2.

Photo from MTR

Moreover, the procedure for requesting assistance from portable ramps is time-consuming and not always guaranteed. According to the user guidelines, wheelchair users need to first tell the staff their destination and then wait until their availability to assist is confirmed. Following that, the wheelchair users must reach the front of the train, which is the designated location for assistance. Next, the wheelchair user might have to wait while several trains pass because only one wheelchair user can board with assistance per train. This process can be cumbersome depending on the ease of reaching the front of the train, the availability of assistance staff and wheelchair space (Yu, 2016). As a result, some wheelchair users may risk getting on and off without staff assistance. Allocating more workers to assist the wheelchair users would aid in shortening their travel time.

Photo from HKFP

The MTR Corporation should also consider providing better wheelchair access in stations, especially those whose exits are far apart. In addition, escalators should be provided at all exits with a long distance to the street level.

There is at least one barrier-free access ramp at every Light Rail platform (except for Tuen Mun Stop, where a passenger lift is provided). Three multi-purpose spaces are provided inside all Light Rail Vehicles.

Photo from MTR

However, the light rails have been blamed for the significant platform gaps and the lack of portable ramps, which are unfriendly for wheelchair users. For example, the platform gap at the Hung Shui Kiu station was around 5cm, which is a considerable gap when a wheelchair is accessing the train. Additionally, without the assistance of portable ramps, wheelchair users need to risk crossing the gap by themselves.

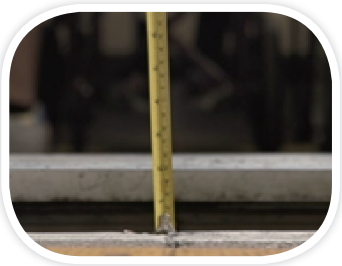


Photo from HK01

Photo from HK01

To address the issue, the MTR Corporation initiated a trial of installing ramps to fill the gap in 2018. Although the ramp does not totally fill the gap, it is smaller and thus makes it easier for wheelchair users to get on the train. Wheelchair users were very impressed with the installation of the ramp. However, only the Goodview Garden Stop has installed the ramps so far. The local community urges the MTR Corporation to speed up the installation process so that more wheelchair users can get on the train safely in different stations of the light rail network (Chan & Wong, 2019).

6.5.2. Specialised transport services ("ST services")

Although barrier-free facilities have been available in public transport facilities, the provision of special transport services ("ST services") is still crucial for older people and other persons with mobility difficulties who cannot use public transport. In Hong Kong, there are multiple provisions for ST services. However, the undersupply of subvented services, especially point-to-point services, has been observed over the past few years. On the other hand, private corporates and the local community level have been providing more services.

Currently, there are mainly six ST services in Hong Kong, and they can be grouped into four categories in terms of the sources of funds (table 8). Firstly, there are two services funded by the HKSAR government: 1) Rehabuses operated by the Hong Kong Society for Rehabilitation (HKSR rehabuses) and 2) Transport services provided by non-governmental organisations (NGOs rehabuses). The Hospital Authority also funded the 3) Easy Access Bus. The Hong Kong Jockey Club sponsored the 4) Accessible Hire Cars. And the private corporates also provide 5) Barrier-free taxis and 6) Kwoon Chung Inclusive and Accessible Transport

Services (KCIS Rehabuses). Appendix 2 shows the examples of the ST services in Hong Kong.

Sources of Funds	Launch Year	Service
HKSAR government	1978	1) HKSR rehabuses
	1992	2) NGOs rehabuses
Hospital Authority	2001	3) Easy Access Buses
The Hong Kong Jockey Club	2008	4) Accessible Hire Cars
Private corporates	2011	5) Barrier-free taxis
	2019	6) KCIS Rehabuses

Table 8 Special transport services in Hong Kong

HKSR rehabuses provide several types of transport services for persons with mobility difficulties who have difficulty in using public transport. They offer a Scheduled Route Service that is a regular commuting service operating during weekday peak hours. They also offer a Dial-a-Ride Service, a pre-booked (within three months before the date of use) and point-to-point transport service, and a Pooled Dial-a-Ride Service, a shared-ride return trip service weekly taking users to and from schools, workshops and care homes.

A serious undersupply of HKSR rehabus services, especially the Dial-a-Ride Service, was observed according to the investigation conducted by The Office of the Ombudsman (2017). There were 156 rehabuses with more than 800,000 user trips annually in 2017. Between 2011 and 2014, there were more than 10,000 unsuccessful requests for the scheduled route and dial-a-ride services every year. In addition, there were over 20,000 withdrawals of bookings for the Dial-a-Ride Service every year. In 2015, there were nearly 10,000 unsuccessful requests, and the number of withdrawals soared to more than 30,000.

More regrettably, over half of the unsuccessful bookings for Rehabus services involved patients who needed to attend follow-up consultations or receive medical treatment. The main reason for withdrawal or not even applying for the services was the exceedingly long waiting time required for booking (several months or even a year in advance, yet provision of the services requested was not guaranteed). This investigation demonstrated the undersupply of HKSR rehabus services and the unmet demand for point-to-point ST services from persons with mobility difficulties. Consequently, persons with mobility difficulties resort to unlicensed rehabilitation vehicles whose facilities and installations may fail to meet the standard requirements. Therefore, the safety of passengers cannot be assured.

In 2001, **a milestone of ST services, particularly for older people, was reached.** The Hospital Authority commissioned the HKSR to provide Easy Access Bus services for **elderly passengers aged 60 or over** who have mobility difficulties and their carers to attend medical appointments at public hospitals and clinics. There were 31 Easy Access Buses with 170,000 user trips annually. Although eight more rehabuses were added during 2017-2019 (making a total of 164 rehabuses by 2019) and more people were served, the demand is still undersupplied (The Office of the Ombudsman, 2017).

In 2019, a new milestone was reached. A new private operator Kwoon Chung Inclusive and Accessible Transport Services Company Limited, started providing a rehabus feeder service. KCIS rehabuses are similar to minibuses; the operator provided ten hospital routes to 17 hospitals, with fixed routes and schedules, serving passengers with mobility difficulties and their carers. The number of routes has been increased to 12, covering more hospitals and offering more stops. Examples of hospitals include the Hospital of Prince of Wales, Pok Oi, Princess Margaret and Queen Elizabeth. Most of the routes operate from Monday to Friday. Figure 17 is the United Christian Hospital Route, an example of the routes.

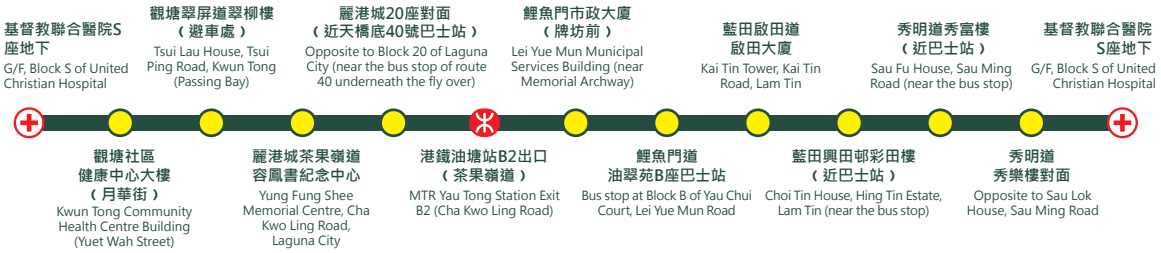


Figure 17 the United Christian Hospital Route

Source: Kwoon Chung Inclusive and Accessible Transport Services Company Limited (2020)

Differing from the HKSR rehabuses, KCIS Rehabuses have more flexibility. The rehabuses can stop at any point along the routes, and no booking is required. Also, the fare per trip is $2 per passenger, which is cheaper than the HKSR rehabuses and the same as the government's concessionary fare. It is anticipated that a more significant number of persons with mobility difficulties will be served.

Also, the KCIS Rehabuses further consider the recreational needs of the person with mobility difficulties apart from work and training. They provide five recreational routes to/from Stanley, the Big Buddha, Tai O, the Peak and Sai Kung at weekends and on public holidays.

A representative from Kwoon Chung pointed out that urban planning, pavements and other supporting facilities should be improved to facilitate the operation of rehabuses. For example, pavements with dropped kerb allow wheelchair users and users with impaired mobility to access pavements after getting off the rehabuses. However, as suggested by the representative, not all the pavements in Hong Kong have built dropped kerb. Furthermore, this defect has limited the planning of rehabus routes.

Photo from HK01

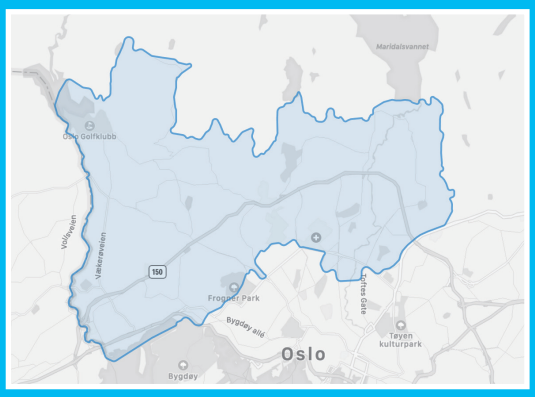
At the local community level, the Southern District initiated the "Southern District Rehab Access" in 2020, a 5-year project aiming to provide free accessible transport services to the residents with impaired mobility for travelling to and from public hospitals and medical institutions. The service is also operated by the HKSR. The service is free of charge on a "first-come-first-served" basis and is more flexible. Passengers can book or queue at the station for service (except the "Share-Ride Service"). However, the service utilisation rate was low due to

COVID-19 and lacking promotion. The District Council urged the government and HKSR to implement efficient advertising about the service.

In short, the increasing supply of subvented rehabuses is slow; persons with mobility difficulties find it difficult to book the services, especially the point-to-point services. Nevertheless, it is encouraging to see the private corporates and the local community provide more flexible, cheap and even free ST services in the community for multiple purposes, including recreational. The government and the HKSR should study and understand the overall demand for ST services.

Overseas experience - Ruter Age-friendly Transport (RAT) in Oslo

In September 2017, Oslo municipality started a pilot project called Ruter Age-friendly Transport (RAT) in Nordre Aker District in cooperation with the publicly-owned transport company Ruter (FP Analytics, 2018). RAT is a door-to-door minibus service for older people aged 67 years or above with mobility limitations. They can book the service and pay the standard discounted bus fare (generally at 50 per cent for those aged 67 and above). The drivers are specially trained and familiar with older passengers' needs, and the vehicles have been adapted to accommodate both walkers and wheelchairs. According to the study conducted by Nordbakke, Phillips, Skollerud, and Milch (2020), RAT is a cheaper alternative for older people. They pay less than for other special transport services, that may be a barrier for older people. The study also found that most respondents thought it was cheap, easy and safe to travel with RAT. As a result, they became more independent in everyday life. They were able to enjoy a more active life, have better health; and experience more security on the journey than by using ordinary public transport. The service area of RAT has been expanding in the past few years and covering a more senior population.



6.6 Taxi services

Since the rehabuses, especially the Dial-a-Ride Service, are undersupplied, persons with mobility difficulties who need door-to-door and personalised transport services have to pay more for other wheelchair-accessible Taxis/Vehicles ("WATs"). However, the number of WATs in Hong Kong has been severely inadequate and expensive.

According to the Equal Opportunities Commission (2018), only 0.5% of taxis in Hong Kong were wheelchair-accessible. The ratio of WATs-to-persons with restriction in body movement was 0.25 WATs per 1,000 persons. Since the WATs is available for both people with and without disabilities, the ratio was expected to be lower. Compared to other places, the percentage of WATs in Hong Kong is significantly lower. For example, 58% of all taxis in England were wheelchair accessible while all taxis in London were wheelchair accessible. And 12.1% and 7.5% of all taxis in Sydney and New York City were wheelchair accessible.

Currently, three taxi operators are providing a small number of WATs in Hong Kong, namely Diamond Cab (鑽的), and SynCab (星群的士) which are private operators; and the Accessible Hire Car service (易達轎車) provided by the HKSR. As summarised in table 9, there were only 101 WATs in Hong Kong, and their fares are more expensive than the regular taxis. This may become an economic burden to wheelchair users. Take a severely disabled resident as an example, he/she can get HK$1,885 (for normal disability) or HK$3,770 (for higher disability) per month. If he/ she takes the Accessible Hire Cars, the fare per trip will already spend 17% of the normal disability allowance or 8% of the higher disability allowance.

Operator	Established since	No. of WATs (as of Dec 2016)	Fare
Diamond Cab 鑽的	2011	7	Point-to-point charge: by quotation, with a minimum charge of $145; Hourly rental: $360 per hour with a minimum booking of one hour
SynCab 星群的士	2015	74	Charged according to the metre, with a $120 fee for reservation
Accessible Hire Cars 易達轎車	2008	20	Regional-Based charges: $320- $500/ single trip

Table 9 Fares of wheelchair-accessible taxi

Source: Diamond Cab, SynCab, Accessible Hire Cars (2021)

Regarding the supply of WATs, the government proposed to grant three franchises with 600 franchised taxis and required the franchises to provide at least 50% of WATs in 2017. Unfortunately, the proposal was withdrawn in 2020 due to different disputes (HKSAR Government Press Releases, 2020).

In 2018, a new wheelchair-accessible taxi, Comfort Hybrid Taxi (CHT), was introduced in Hong Kong. The price is HK$319,900, which is 23% more expensive than the old non-wheelchair-accessible taxi. It is worried that the higher price and extra time required to assist wheelchair passengers will demotivate the taxi drivers to renew their taxis. Since there is no regulation requiring renewing the old taxis in Hong Kong, it is hard to estimate the number of CHT available.

To address the financial burden of taking taxis, many international cities have implemented a taxi fare subsidy scheme. Currently, there is no such scheme in Hong Kong. The government and The Hong Kong Jockey Club launched a one-year pilot taxi voucher scheme in 1987 to encourage wheelchair users to travel with a reduced fare. The scheme was shelved due to the cumbersome and inconvenient voucher application and redemption procedures. With today's technology advances, it is believed that the application procedures can be simplified and more convenient for the users. Therefore, the government should now reconsider implementing a step-wise taxi fare subsidy scheme to enhance the mobility of the older people and other wheelchair users.

Overseas experience – incentives to purchase WATs and subsidy scheme in Sydney

The Hong Kong government can learn from other countries to increase the number of WATs. Take Sydney as an example. The government offered an interest-free loan for operators to purchase WATs and remove the licence fee for WATs. And drivers of WAT are even provided with incentive payment (around HK$86) for each passenger they carried. The government could consider adopting the incentive scheme to encourage taxi drivers in Hong Kong to use the CHT. Also, the government provides a Taxi Transport Subsidy Scheme ("TTSS"), a non-means-tested scheme, for the residents who are unable to use public transport because of a disability. It covers 50% of a taxi fare, up to a maximum subsidy of AUD60 (around HK$345).

Photo from Fandom

6.7 Pedestrian transport

The importance of pedestrian transport is sometimes overlooked. Walking is not merely a connection for transport facilities, it is also a transport mode in itself. It is particularly significant for older people because they make more trips near their living trips (more by walking). Therefore, a good walking environment is a pivotal contributor to maintaining their everyday activities. It helps them preserve personal autonomy and social integration (Cunningham, Michael, Farquhar, & Lapidus, 2005). It is hopeful to see that the government is putting more emphasis on the interests of pedestrians.

Photo from HK01

Currently, there are three regular pedestrian schemes. Full-time pedestrian streets are granting absolute priority to pedestrians, in that vehicular access is restricted to emergency services only (e.g. Paterson Street). Also, there are part-time pedestrian streets where vehicular access is only allowed in specific periods (e.g. Temple Street). Moreover, in traffic calming streets, footpaths are widened, and on-street parking spaces are reduced. Vehicles are slowed down through traffic calming measures such as speed tables.

Apart from regular schemes, the government has initiated several programmes to enhance pedestrian safety and walkability in Hong Kong. To enable older passengers to cross the road more safely, the TD started the "Smart Device for the Elderly and the Disabled to extend Flashing Green Time" scheme in 2018. When older people or PwDs waiting for crossing the road at a pedestrian crossing, they can activate the Smart Device installed at pedestrian traffic signal poles by tapping their Octopus Card. Four more seconds will be added for the flashing green time.

Photo from Highways Department

It is encouraging that the number of installed Smart Device was increased to 21 from 9 since 2018. Nevertheless, there were some concerns from the older people as reflected by news media. Some older people mentioned that the extra four seconds were still insufficient for them to cross the road because of mobility difficulties. Some of them stated that they might not bring their Octopus cards, and it took some time for them to take out the card from their bags. Also, some older people misunderstood that they would be charged after tapping Octopus cards (Yan, 2018). As a result, the TD should conduct a comprehensive evaluation of the scheme after years of implementation. Since their mobility needs are divergent, more attention should be put on the needs of different age groups of older people. Public walkways (i.e. public footbridges, elevated walkways and subways) are very common in Hong Kong, and it is more tiring for older people to go up and down. Another milestone of improving accessibility for older people is the Universal Accessibility Programme (UA Programme) launched in 2012. Under the programme, barrier-free access facilities (mostly lifts) have been retrofitted at public walkways with extra-large lift buttons in elevators. Therefore, it is more convenient for older people to walk around. In response to public demand, the number of items increased from 144 in 2012 to 375 in 2018 (table 10).

Year	Programme	Number of items
2012	Original	144
2013	Expanded	56
2016	The Second phase	44
2018	The Third phase	131
	Total	375

Table 10 Number of items under the Universal Accessibility Programme

Source: Highways Department (2021)

Nonetheless, the UA Programme only covers public estates. Given that around 63% of older people lived in non-public estates (Census and Statistics Department, 2016), the government should be more active in considering their needs and referring the received UA programme proposals to relevant organizations for consideration and follow-up. Examples of organizations include Hong Kong Housing Authority, Link REIT and the MTR Corporation.

In 2017, the government initiated the "Walk in HK" scheme to encourage people to walk more by enhancing pedestrian networks, providing a safe and quality pedestrian environment, making walking a pleasant experience and providing user-friendly information on walking routes. A series of measures were or will be implemented in the pilot areas, Central and Sham Shui Po. For example, the scheme proposed enhancing existing crossing facilities and suitably widen footpaths in business area streets such as Hiller Street and Wing Lok Street. In Sham Shui Po, apart from the 30km/h low speed zones mentioned in the previous chapter, it proposed enhancing the existing green and open space on Nam Cheong Street.

Photo from "Walk in HK"

Moreover, particularly for the residents living in hillside areas, the government has established an assessment mechanism to build hillside escalator links and elevator systems (HEL). The mechanism was revised in 2019 with an increased focus on the number of beneficiaries and targets. It is promising to see that a higher score is given to the "proportion of 65-year-old or above population and whether there is any hospital/rehabilitation centre/nursing home in the beneficial catchment" (Legislative Council Panel on Transport, 2019). 114 HEL proposals received over the last few years are being preliminarily assessed following the revised assessment mechanism. And more HEL will be built, hopefully.


Photo from Wikipedia

Nevertheless, there is still room for improving the overall walking environment. The street obstruction by shops, one of the common street concerns in Hong Kong, causes issues of pavement access, safety and environmental hygiene, and affects the quality of city life. For example, the narrow pavement occupied by miscellaneous objects may push passengers to walk on the road. There are 58 street obstruction blackspots. Yuen Long and Sham Shui Po are two districts with more blackspots (12 and 7 respectively) (HAD, 2018).


Photo from HK01

Motorised Personal Mobility Aids (“PMAs”), including electric wheelchairs and mobility scooters, are prevalent in Hong Kong and worldwide. PMAs have been regarded as medical devices instead of motor vehicles. They are allowed on footpaths with restrictions on the speed limit. However, there is no guideline from the government about safety requirements and the permission for mobility scooters to be taken on public transport. They are allowed to use the MTR while the bus operators were seeking instruction from the government. They were worried that the current safety facilities in buses might not be suitable for mobility scooters. Since there is a growing trend for using PMAs, it is imperative that the government provides clear guidelines and safety facilities requirements in buses. For example, the United States of America mandates public transit providers to accommodate 'common' wheelchairs (including some mobility scooters) on fixed-route buses and trains. In London, scooters within maximum width, length and turning radius will be issued a Mobility Aid card, which will let bus drivers know the scooter can fit into the space.

6.8 Traffic information dissemination

In Hong Kong, both the Transport Department and franchised transport operators provide traffic information through multiple channels, facilitating passengers, including older people, to plan their journeys. Under the rapid development of Intelligent Transport System (ITS), communication and information are usually digitalized and delivered with the use of technology. Therefore, more attention should be paid to the digital inclusion of older people.

The operators disseminate traffic information via information boards at stops/ stations, websites and mobile phone applications, etc. Because of ITS, real-time traffic data enables the general public to find out their waiting time and plan their trip. Real-time arrival information display panels can now be found at bus stops and MTR stations (figure 18), indicating the arrival time of the next bus or train. However, display panels are not available at all bus stops; and they are not available in trams and at minibus stops.

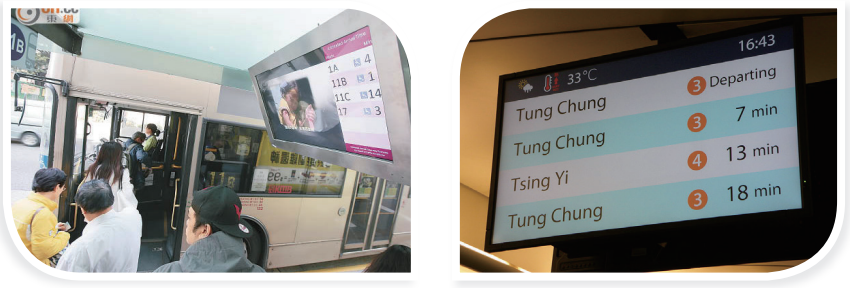


Figure 18 Real-time arrival information display panels at bus stops and MTR stations

Source: On.cc (2019)

Since the installation of display panels may exert pressure on bus fares, the HKSAR government earmarked $88.27 million in the 2016 Policy Address to subsidise the installation of seats at bus stops and real-time arrival information display panels at covered bus stops. Currently, the installation of display panels is initiated by the franchised bus operators. However, the coverage and progress of the installation are limited and slow. The government only planned to subsidise the franchised bus companies to install display panels at about 1,300 covered bus stops (only 14.9% of the total bus stops as of 2019) (HKSAR Government Press Releases, 2019b). There were 800 (9.1%) bus stops that installed the display panels as of August 2021.

The government subsidy is based on a matching basis so that if the operator installs one panel, the government will provide funding for installing another one (Legislative Council Panel on Transport, 2016). In other words, the progress of the installation is primarily driven by commercial considerations of the operators. Moreover, the extra cost of daily maintenance and repair, which the operators will absorb, may demotivate them to make proposals.

Apart from the operators, the Transport Department disseminates the latest traffic and transport information to the public through multiple channels, including electronic press releases, website (www.td.gov.hk), "HKeMobility" mobile application and various message signs on highways. In addition, designated staff are deployed to provide soundbites through radio stations as necessary, following the occurrence of incidents to convey messages relating to the incidents and call public attention to the unexpected road situation of individual districts and the latest arrangements on public transport services.

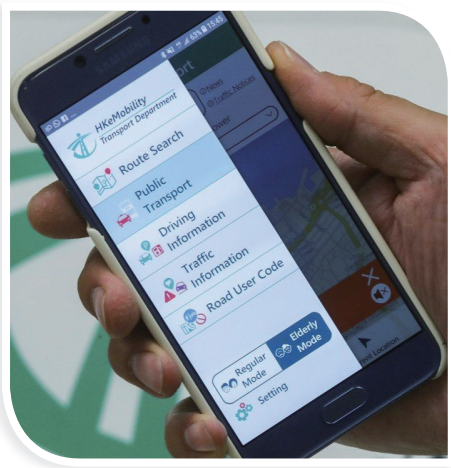


Photo from SCMP

The “HKeMobility” mobile application was launched by the TD in 2018. It provides a search function for the routes of different transportation modes, journey times and fares. It disseminates real-time traffic news to enable the users to plan the most appropriate travel arrangements. It also provides an Elderly Mode, which displays the concessionary fare, with a larger font. With more real-time arrival information being released from the franchised operators, most of the real-time arrival information is provided in the mobile application. Except for the green minibuses, real-time arrival information is only provided for 72 routes.

Since traffic information dissemination through technology has become commonplace for government bodies and private organisations, it is crucial to ensure that older people are included in this digitalized era. According to Census and Statistics Department (2021), there has been a remarkable increase in older people using smartphones in recent years. In 2020, 68.1% of persons aged 65 and over had a smartphone, higher than the penetration rate in 2018 (57.2%). Therefore, approximately 2 out of 3 older people had a smartphone.

However, merely owning a smartphone does not necessarily mean that older people can access helpful traffic information. More effort should be made to ensure that they have enough knowledge and the skills to access and use the mobile application for traffic information. In addition, they should also be willing to learn (Mason, Sinclair, & Berry, 2012). Some bus operators and non-governmental organisations have been teaching older people to use mobile applications for transport. For example, the New World First Bus Services (NWFB) and City bus (CTB) have formed a voluntary team to visit the District Elderly Community Centres and have been teaching older people to use their applications since 2018. The TD should cooperate with different organisations to teach older people to use the HKeMobility to ensure they are included in the dissemination of traffic information.

Photo from NWFB

Since many older people still do not own a smartphone or lack the skills to use one, physical traffic information dissemination is still important—for example, passenger signage such as signs, maps and information boards at stops and stations.

The design, such as the size of fonts, should also be appropriate for older passengers. The MTR has enlarged signs at exits, entrances and toilets, and it has also provided magnifying glasses and letter boards to help the elderly find their way around. Other franchised operators should also update and refurbish their information facilities with consideration of older passengers' needs. For example, some route display boards at bus stops are old and shabby, the fonts are small, and the display information is blurred.

Photo from HK01

Photo from On.cc

6.9 Drivers' behaviours and training courses

In Hong Kong, drivers' behaviours and training courses are more technically oriented. More education on raising drivers' awareness of passengers' needs should be given.

Currently, taxi, public light bus, and public bus drivers must complete the pre-service courses that aim to enhance the safety and quality of public transport services and improve drivers' attitudes (Transport Department, 2020). There is no special training for drivers or relevant staff about taking care of older passengers.

Despite the availability of courses, there are still over ten thousand complaints received from the public concerning the performance and behaviour of the public transport drivers. According to the Transport Complaint Unit Report (Transport Advisory Committee, 2019), there are 13 complaints items received from the public, of which "Conduct and performance of staff (including drivers)" and "Improper driving behaviour" have been the main complaints over the years. As demonstrated in table 11, these two complaints took up about half of the received complaints. In particular, the conduct and performance of staff, including drivers, comprised about a third of all complaints.

	2015		2016		2017		2018		2019	
	No.	%	No.	%	No.	%	No.	%	No.	%
Conduct and performance of staff (including drivers)	8,067	37.1	8,327	37.3	8,494	37.3	8,597	35.7	8,392	30.3
Improper driving behaviour	3,056	14.1	3,774	16.9	3,855	16.9	4,270	17.7	4,625	16.7
Total number of complaints	21,735	100.0	22,320	100.0	22,775	100.0	24,081	100.0	27,721	100.0

Table 11 Complaints on Public Transport Services 2015 - 2019

Source: Transportation Complaint Unit (2015-2019)

Regarding the vehicles types involved in the two complaint items, taxis were mostly complained, followed by either franchised buses or minibuses. From 2015 to 2019, the number of "Conduct and performance of staff" taxi complaints accounted for 65.3% to 53.5%; that of franchised buses were 14.1% to 24.9% and that of minibuses 18.4% to 18.4%. Regarding the "Improper driving behaviour", taxi occupied about 40%; minibuses took up about 30%, and franchised buses comprised around 20-30%.

Conduct and performance of staff (including drivers)										
	2015		2016		2017		2018		2019	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total	8067	100.0	8327	37.3	8494	37.3	8597	35.7	8392	100.0
Franchised buses	1134	14.1	1363	16.4	1418	16.7	1719	20.0	2091	24.9
Minibuses	1485	18.4	1633	19.6	1730	20.4	1685	19.6	1541	18.4
Taxi	5268	65.3	5081	61.0	5145	60.6	5072	59.0	4488	53.5

Improper driving behaviour										
	2015		2016		2017		2018		2019	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total	3056	100.0	3774	100.0	3855	100.0	4270	100.0	4625	100.0
Franchised buses	665	21.8	1113	29.5	892	23.1	1104	25.9	1308	28.3
Minibuses	941	30.8	1084	28.7	1242	32.2	1201	28.1	1208	26.1
Taxi	1323	43.3	1484	39.3	1651	42.8	1893	44.3	2053	44.4

Table 12 Complaints on Public Transport Services by vehicle types 2015 - 2019

Source: Transportation Complaint Unit (2015-2019)

In particular, there was an average annual number of 154 complaints about barrier-free facilities from 2014 to 2018; taxi drivers were complained about the most (table 13). Most complaints were about the conduct and performance of drivers. For example, a taxi driver refused to take a passenger or chose which passengers to take, were unwilling to assist wheelchair users and had a poor attitude/were impatient with PwDs. The bus drivers were reluctant to pull out the ramp for wheelchair users and complained/had a poor attitude towards PwDs. Moreover, they set off before the PwDs had fastened their seat belts and picked up/set down PwDs at a distance from the bus/minibus stop (Transport Complaints Unit, 2019).

Transport Mode	2014	2015	2016	2017	2018
Taxi	110	115	108	99	131
Franchised Bus	33	26	36	15	45
Green Minibus	4	18	12	9	13
Total	147	159	156	123	189

Table 13 Breakdown of complaints about barrier-free facilities 2014 – 2018

Source: Transportation Complaint Unit (2019)

A common issue regarding franchised buses and minibuses drivers' behaviour is that drivers may set off before passengers are seated or dropped off. This behaviour is more dangerous in minibuses because there are no handles inside minibuses. For example, a tragedy happened in early 2020 that a 78-year-old woman fell and died on the road because the minibus driver set off before she had gotten off from the vehicle.

Currently, there are regulations and rules requiring public transport drivers to ensure the safety of passengers. For example, the Cap. 374D Road Traffic (Public Service Vehicles) Regulations stipulate drivers "shall take all reasonable precautions to ensure the safety of passengers in or on or entering or alighting from the vehicle". There are also several rules for minibus drivers asking them to drive after all passengers are seated, such as the Safety Charter for Public Light Bus Drivers. However, the issue still exists due to different factors. Since the road in Hong Kong is busy, it is challenging for some drivers to stop and wait for all passengers to be seated. Also, since the public light bus drivers are understaffed, drivers may be stressed to catch up with the service.

In short, it is undoubtedly vital to enhance the safety and quality of public transport drivers. However, other long-term measures facilitating safe driving are also essential. For example,

improving the salaries and benefits of minibuses drivers to attract new blood so that drivers have more time to take care of passenger safety.

Overseas experience - Age-friendly training for bus drivers in Isle of Wight

Photo from Centre for Ageing Better

In 2016, the Age UK Isle of Wight developed training to help service providers become more age-friendly. The Isle of Wight's main bus operator, Southern Vectis, has incorporated this training into its compulsory programme for all drivers. Drivers will wear a simulation suit to board the bus, complete with vision-impairment glasses and ear defenders. They, therefore, can experience physical impairments such as reduced dexterity and vision impairment that can happen when people get older.

Since introducing the age-friendly training, incidents involving slips, trips, and falls on the bus have been significantly reduced. The company achieved a 96% overall customer satisfaction rate in the 2017 Bus Passengers Survey, one of the highest rates in the country.

Chapter 7 Conclusion and way forward

This report provides an overview and analysis of the ageing population and the age-friendliness of transportation in Hong Kong. Chapter 2 suggests that the increasingly ageing population will need more community support due to the change of family structure, living arrangement and health status, etc. In particular, age effects (disabilities and chronic diseases, etc.) will significantly affect older people's mobility needs and travel patterns. Chapter 3 then demonstrates that remaining mobile is a critical aspect of independence and other aspects of quality of life. Therefore, stakeholders in society have to rethink strategies, policies, and services to support their continued mobility needs. Chapter 4 scrutinizes older people's travel needs and patterns, providing a more comprehensive background for planning future transport policy or measures. The perceived satisfaction from older people also clarifies policymaking. Chapter 5 reviews the transport policies from the government from a historical perspective. It implies that the government should be aware of the difference in travelling characteristics between older people and the disabled. In addition, travel needs of older people should be one of the foci in transport planning. Chapter 6 analyses the age-friendliness of transportation in Hong Kong in terms of nine features. Key strengths and drawbacks of the transport system in terms of different elements of age-friendly transportation are summarised, and further recommendations based on the analysis are made below:

◎ Overall, the Public Transport Fare Concession Scheme extensively addresses the traffic financial burden of older people, and the lower age threshold will benefit more older people. More publicity should educate older people and other beneficiaries, to avoid short rides on long routes. Although monetary measures might encourage older people to travel more, other contributing factors affecting their willingness to travel should also be considered.

◎ The accessibility of the transport system is good due to the expanding railway network and the complementary support of other transport modes. However, the drawbacks of the expanding railway system should be addressed, such as the limited choice of buses. Buses are the main transport mode for older people. They might reduce the amount of travelling they do if their usual buses are cancelled. In addition, it might be difficult for them to reach other transport modes such as the MTR. Therefore, the Transport Department should include the travel characteristics of older people in their policymaking process. Also, more attention should be paid to the convenience and comfort of reaching transport facilities such as the pavement condition and the ancillary facilities on the way to stops or stations. For example, they might provide travellators, moving walkways, seats or benches for older people to rest in areas with a longer walking distance to transport facilities.

◎ Regarding the safety and comfort of transport, traffic casualties of older people have risen steadily in the past decade. Older people constantly remain the most vulnerable group for traffic fatalities. Apart from the proposal of a 30km/h low-speed limit zone, more traffic calming measures should also be adopted to prevent traffic accidents such as gateway, setback crossings, chicanes and speed humps. Also, since the proposal of retrofitting is initiated by the bus operators, it is profit-driven. The government needs to take a more active role in increasing the number of sheltered bus stops. The Transport Department should set clear guidelines suggesting determinants of retrofitting shelters for the bus operators. Take Portland, the United States, as an example; bus stops with 50 or more boardings per weekday should be sheltered. More seats should be installed in bus stops and other transport facilities such as minibus and tram stops, for a more comfortable waiting area. The design should be more people-centred with better public engagement.

◎ The design of vehicles, particularly the priority seats, provide more comfortable and age-friendly travelling journeys for older people. However, there should be more education about offering priority seats and other seats to older people and people in need. Also, to reduce the traffic casualties caused by blind spots of HGVs, there should be more safety requirements for HGVs. The government can learn from London to mandate HGVs to be installed with enlarged windscreens and doors so that drivers can see pedestrians clearly.

◎ Barrier-free public transport facilities have been developed under the government's aspiration of transport for all. It is encouraging to see that most franchised buses and the MTR provide multiple measures for wheelchair passengers. Nevertheless, for the buses, the design of the ramp (gradient) should be safe. More education and training about courteousness and helpfulness when assisting the passengers should be delivered. Also, the indication of dual-wheelchair parking spaces should be more apparent too.

◎ Regarding the barrier-free public transport facilities, the government should review the effectiveness of the three low-floor wheelchair-accessible minibuses. As the operators reflect that the public's awareness of the minibuses is low and therefore the low utilization rate, more advertisement through various channels should be made. The MTR should also make sure lifts, especially in some large stations, are sufficiently large to accommodate wheelchair passengers. They should also consider simplifying the procedure to request ramp assistance.

◎ Concerning the special transport services in Hong Kong, although there are several service providers, the supply is still seriously in demand. The Labour Welfare Bureau should work with other departments concerned to conduct a comprehensive assessment of the demand for ST services. Relevant departments should also push the HKSR to accelerate the study on Rehabus services to meet the demand better. On the other hand, it is promising to see the private operator is providing affordable rehabus services. Still, promotion about the new services should be increased. And other districts can learn from the Southern District to address the transport needs of the older people and other people in need by providing community rehabus services.

◎ For the taxi services in Hong Kong, most of them are wheelchair-inaccessible. The government should consider providing more incentives for taxi drivers to replace their vehicles with wheelchair-accessible. Also, the fare of wheelchair-accessible taxis provided by the three operators are expensive. The government should consider offering subsidies for those in need.

◎ Pedestrian transport is attracting an increasing amount of attention. Several schemes have been conducted regarding the walkability and connectivity between areas. The Transport Department should take action to review the effectiveness and gain feedback from older users of the "Smart Device for the Elderly and the Disabled to extend Flashing Green Time". Relevant departments should also assess the need for retrofitting lifts in non-public estate areas. Since mobility scooter is becoming commonplace now, the government should set clear standards to protect the safety of older people when using them on the street and transport facilities.

◎ Real-time traffic information dissemination through electronic products has become the norm. There is no doubt about its efficient instant information delivery. However, it is vital to ensure older people who are less capable of using smartphones are not left out in traffic information dissemination. Therefore, the Transport Department and transport operators should hold regular workshops to teach older people how to access traffic information with their smartphones. At the same time, physical information delivery is still essential. Therefore, the display boards at transport stops and stations should also be maintained in good condition.

◎ Complaints of public transport drivers' conducts and behaviours are numerous. At the same time, the complaints of barrier-free facilities on public transport services have also been increasing. In general, there is a need to enhance the quality of public transport drivers. Besides, since many older people frequently use public transport facilities, more training about age-friendliness such as attitudes and skills required to take care of older people on board should be provided.

In conclusion, the rapidly growing ageing population and the unique mobility needs of older people are indisputable facts in Hong Kong and worldwide. All stakeholders in society should take action to understand and address their mobility needs. And more importantly, transport is closely interlinked with different domains of an age-friendly city, such as social participation and outdoor spaces. Therefore, a more macro angle should be used when considering the importance and measures of transportation.

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Appendices

A summary of the Public Transport Strategy Study 2017 Appendix 1

Transport modes	Strategy focus	Enhancement measures
Franchised Buses	Efficiency	Bus route rationalization
	Waiting environment	Set up new bus-bus interchanges ("BBIs") or upgrade the existing BBIs
	Barrier-free facilities	To further enhance the ancillary facilities for passengers
	Frequency and reliability	Set up more bus-only lanes
		Introducing new long-haul services during peak periods on a trial basis
		Introducing mid-sized single-deck buses
	Fare	Enhance the existing "fare adjustment arrangement"
		Offer more suitable fare concessions
Light Rail	Capacity	To purchase 10 additional light rail vehicles
		To rationalize some light rail routes
		To adjust traffic lights at busy junctions
		To undertake a study on design improvements for busy junctions
		To improve the mode of operation of light rail along Yuen Long main road in the long run
		To undertake a study of the feasibility of constructing a new heavy rail system
Public Light Buses	Capacity	Increase the maximum seating capacity of PLBs from the current 16 seats to 19 seats
	Fare	MTRCL will offer interchange concessions on all GMB routes
	Operating environment	Improve the operating environment
		Revise the "Guidelines on Working Hours of GMB Drivers"

Personalised and Point-to-point Public Transport Services	Quality	Enhance the existing taxi service quality and operating environment
	Quantity	Explore introducing other new services of franchised taxis such as regulated online hailing services
		Issue 25 new Lantau taxi licences
		Facilitate new market entrants for the hire car permits
Tram	Design	Modernise the facilities of trams
	Quality	Subsidise the Hong Kong Tramways Limited to expedite the track replacement
Ferries	Operating environment	Provide Special Helping Measures for six major outlying island ferry services
		Explore the most desirable long-term operation model
	Design	Carry out renovation projects for existing ferry piers
Non-franchised Buses	Operating environment for school bus	Private school buses have been exempted from the sourcing requirement
	Operating environment for shuttle buses	The operators of the cross-boundary shuttle buses and the operators of the Hong Kong/Macao cross-boundary coaches holding Macao quota will be exempted from the sourcing requirement
	Parking space for coaches	Actively add parking spaces for coaches near tourist spots

1) HKSR* rehabuses

4) Accessible Hire Cars

2) NGOs rehabuses

5) Barrier-free taxis

3) Easy Access Bus

6) KCIS* Rehabuses

*HKSR: Hong Kong Society for Rehabilitation; KCIS: Kwoon Chung Inclusive and Accessible Transport Services


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