



Planning for an Age Friendly Kowloon City Final Report

Age Friendly Community Plan

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Executive Summary

In view of the double ageing trend as well as the ample development opportunities in Kowloon City, IC Planning Consultant was commissioned by the Department of Urban Planning and Design, University of Hong Kong in September 2020 to provide consultancy services regarding the study titled “**Planning for an Age Friendly Kowloon City**”.

The study aims to develop an Age Friendly Community Plan (AFCP) with reference to the 8 domains proposed by the WHO Age-friendly City model. Throughout the 2 stages of baseline review and plan recommendation, 6 study tasks were covered with an emphasis on soliciting community needs and aspirations through (1) Questionnaire and Roadshow Survey, (2) Interview with relevant Stakeholders and (3) Community Workshop.

With baseline findings and community inputs incorporated, this Age Friendly Community Plan put forward the planning vision “**to build an age friendly, sustainable, smart and liveable community that enables Kowloon City dwellers to live with autonomy, health and well-being, social connectedness, sense of security and resilience as they age**”. A total of 8 overarching planning and design principles were developed to guide each of the proposals. The plan also features the “**4I Strategies**”, namely **Interconnected Web**, **Integrative Environment**, **Intergenerational Cohesion** and **Independent Wellness** in which 12 proposals are recommended as follows:

4I Strategies	Proposals
Interconnected Web 龍城脈絡	Connected Waterfront
	Circular Feeder Service
	Universal Access & Design Improvement
Integrative Environment 綠在社區	Green Corridor
	Smart Environmental Monitoring App
Intergenerational Cohesion 跨代共融	Intergenerational Co-Living Units
	Shared Spaces in GIC Facilities
	5 Streets Cultural and Creative Incubator
Independent Wellness 健康無界	Multi-Level Healthcare Composite Building
	Institution-led Specialist Healthcare Building
	Private-led Wellness Services
	Dementia-friendly Park

While the plan provides both quick-win and long-term solutions towards an age-friendly Kowloon City, all proposals are expected to be completed **by 2031**. With the Preliminary Impact Assessment and Sustainability Impact Assessment conducted, the **positive impact** of this AFCP is solidly proven.

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List of Abbreviations and Acronyms

AFCP	Age Friendly Community Plan
ArchSD	Architectural Services Department
AMO	Antiquities and Monuments Office
AQHI	Air Quality Health Index
BFA	Barrier Free Access
CASET	Computer Aided Sustainability Evaluation Tool
CDA	Comprehensive Development Area
CE	Community Engagement
DECC	District Elderly Community Centre
DoH	Department of Health
DURF	District Urban Renewal Forum
EDB	Education Bureau
EPD	Environmental Protection Department
GIC	Government, Institution or Community
GOPC	General Outpatient Clinic
GPA	Government Property Agency
HA	Hospital Authority
HAB	Home Affairs Bureau
HAD	Home Affairs Department
HK Government	The Government of the Hong Kong Special Administrative Region
HKPSG	Hong Kong Planning Standard and Guidelines
H.O.M.E	Housing Opportunities and Maintenance for the Elderly
Home-based CCS Team	Integrated Home Care Services (Frail Cases) and Enhanced Home and Community Care Services
HKHS	Hong Kong Housing Society
HyD	Highways Department
ITB	Innovation and Technology Bureau
JC DISI	Jockey Club Design Institute for Social Innovation
KCDC	Kowloon City District Council

KTD	Kai Tak Development
LandsD	Lands Department
LCSD	Leisure and Cultural Services Department
LGV	Light Goods Vehicles
LegCo	Legislative Council of Hong Kong
MTR	Hong Kong Mass Transit Railway Corporation
N.A.	Not Applicable
NGOs	Non-government Organisations
OGCIO	Office of the Government Chief Information Officer
OZP	Outline Zoning Plan
PlanD	Planning Department
PolyU	The Hong Kong Polytechnic University
POIs	Points of Interest
PPP	Public-private partnership
PRH	Public Rental Housing
RCHE	Residential Care Home for the Elderly
SCC	Smart City Consortium
SCL	Shatin-Central Link
SusIA	Sustainability Impact Assessment
SIV(s)	Sustainability Impact Variables
SWD	Social Welfare Department
SWOT	Strengths, Weaknesses, Opportunities and Threats
TD	Transport Department
TWGHs	Tung Wah Group of Hospitals
URA	Urban Renewal Authority

1. Introduction

1.1. Study Background

- 1.1.1. Ageing population is one of the upcoming key issues in Hong Kong. Currently, the elderly population, which is of age 65 or above, accounts for about 17% of the total population (Census and Statistical Department, 2020). As the trend of ageing population persists, the elderly will grow rapidly to almost 31% of the total population in 2036. The median age of Hong Kong residents will increase to 54.5 in 40 years. Ageing population has presented the city with unprecedented challenges.
- 1.1.2. Sharing the trend globally, international scholars and agencies have promoted the concept of “age friendly community”. According to the World Health Organization (WHO), the concept is defined as an inclusive living environment that welcomes people of all ages to actively participate in community activities (2007). Meanwhile, the study of gerontology takes into account the needs of the elderly users on multiple aspects, which ensures that the physical, social and environmental provisions are adaptable to the changing demographics. Instead of associating ageing with dependency, the notions such as “Ageing-in-place” and “Active ageing” have been advocated to proactively maintain the living quality of the elderly. In the local context, the HKSAR (Hong Kong Special Administrative Region) government has promulgated a number of policies, blueprints and standards to drive the city towards an age friendly vision.
- 1.1.3. Kowloon City, with a rising elderly proportion, is selected as a case study in the planning for age friendliness. In 10 years, elderly will account for one-third of the population in Kowloon City, reflecting an imminent ageing in population. Besides, the area also experiences deterioration in the physical setting, environmental nuisance and social problems. At the same time, urban redevelopment, Kai Tak Development (KTD) and the opening of the Shatin-Central Link (SCL) will impose uncertainties and opportunities to the area. Through community planning, the study would like to assemble a solid understanding of the community’s needs and aspirations, in order to synthesize an AFCP for all. A selected set of sustainability indicators will be applied to evaluate the expected outcomes, which are in relation to age-friendliness, in the long term.
- 1.1.4. In view of the above context, **IC Planning Consultant** (the study team) was commissioned by the Department of Urban Planning and Design, the University of Hong Kong in September 2020 to conduct a study titled “**Planning for an Age Friendly Kowloon City**” (the study) focusing on a study area in Kowloon City.

1.2. Study Goal and Objectives

Study Goal

- 1.2.1. Using Kowloon City as a case study, the study aims to develop an AFCP for the study area, taking into consideration the understanding of the trends and concepts of environmental gerontology, the best practice for age friendly urban planning, and the inputs from various stakeholders.

Study Objectives

1.2.2. A total of 5 study objectives are outlined in the Project Brief as below:

The team is commissioned to

- Undertake desktop research of relevant theories, concepts and case studies of best practice for community planning, aging in place, age friendly community etc;
- Undertake a comprehensive review of the planning and development context of the study area through the lens of age friendly urban planning including land use, planning, demographic, social, cultural, economic, environmental, transportation, infrastructure, institutional etc. through various methodologies including desk top research, field work and stakeholders engagement such as surveys, interviews etc.;
- Undertake a SWOT analysis of the study area in respect of age friendliness;
- Generate and evaluate planning strategy options for the study area with consideration of the overall planning context and inputs from the community and relevant stakeholders as well as a sustainability impact assessment; and,
- Recommend an age friendly planning strategy for the study area including an AFCP and implementation proposals.

1.3. Study Area

1.3.1. The study area comprises the core area of the Kowloon City District as shown in **Figure 1.3.1**. The total study area is 5.396 km² (539.6 ha) in size, which includes Kowloon City (G11), Ma Tau Wai/Ma Tau Kok (G01-05), To Kwa Wan (G15-G23) and Kai Tak (G12-G14). It falls wholly or partly under the Outline Zoning Plan (OZP) of Ho Man Tin OZP (S/K7/24), Hung Hom OZP (S/K9/26), Ma Tau Kok OZP (S/K10/25), Kowloon Tong OZP (S/K18/21), and Kai Tak OZP (S/K22/6).

1.3.2. As stipulated by the OZPs, currently 22% of the study area is dominantly zoned as “open space” (“O”), 16% is zoned “Residential (Group A)” (“R(A)”) and 11% is zoned as “Other Specified Uses” (“OU”) accounts for 11%. The OZP zones could be found in **Appendix 1**.



Figure 1.3.1: Study Area (Source: Study Team)

1.4. Study Process and Methodology

Study Process

- 1.4.1. The study is phased into 2 stages, covering 6 study tasks in total (**Figure 1.4.1**). *Stage 1 Baseline Review* commenced with Task 1 Reconnaissance of the study area, which the team would gain basic understanding of the area. It is followed by Task 2 Baseline Review and Evaluation Report. With the inputs from questionnaire and roadshow survey, the baseline conditions on spatial, social and environmental aspects in respect of Age Friendliness would be assessed together with the SWOT analysis and the proposed SIV. The presentation on 08/10/2020 and the Baseline Review and Evaluation Report submitted on 19/10/2020 were the deliverables of Stage 1.
- 1.4.2. *Stage 2 Plan Recommendations* carried on with Task 3 Draft AFCP, which the draft plan was delivered in a presentation on 12/11/2020. The draft AFCP was presented to the public and discussed in Task 4 Community Workshop. Amendments were made to the draft AFCP according to the public comments in Task 5 Evaluation and Synthesis of Input and Opinions. Lastly in Task 6 Final Presentation and Final Planning Report, the final planning principles, AFCP proposals and implementation proposal were consolidated together with a Sustainability Impact Assessment. A presentation was delivered on 26/11/2020 and this report would be submitted on 03/12/2020.

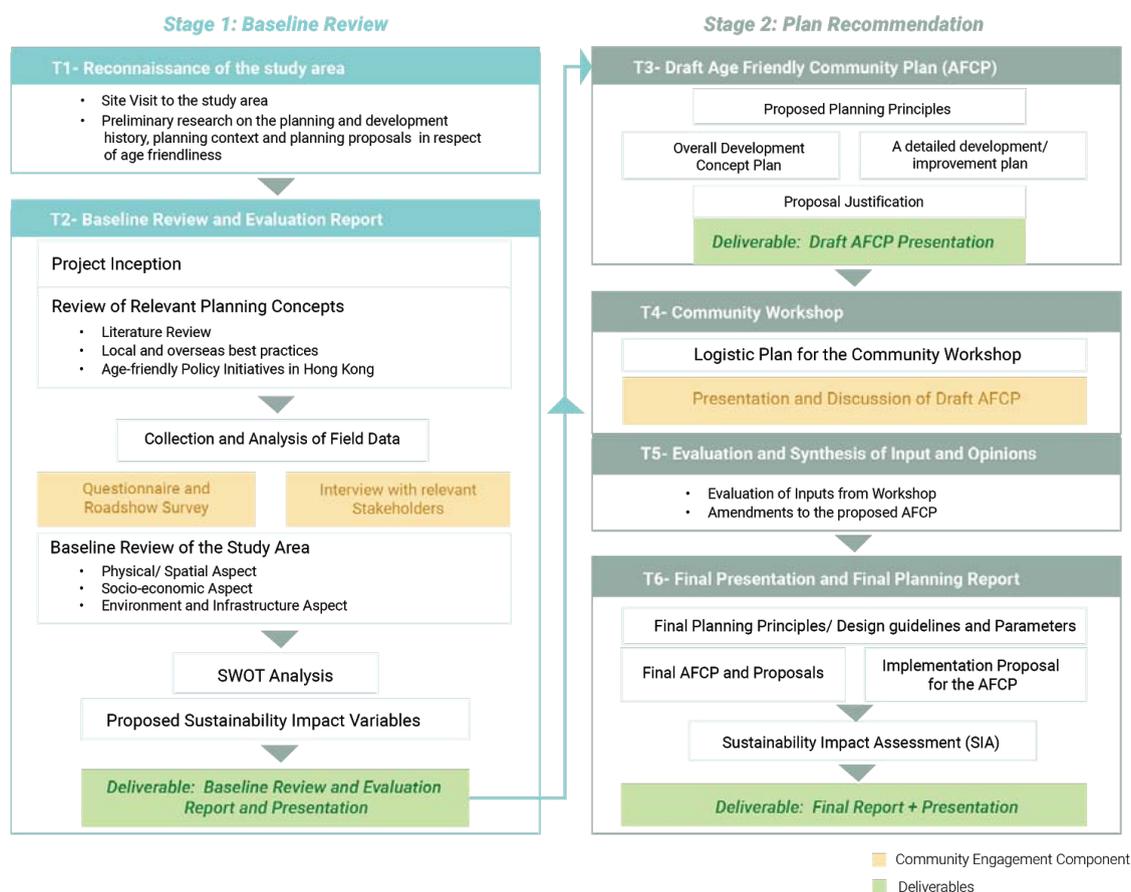


Figure 1.4.1: Illustration of Study Process (Source: Study Team)

Study Methodology

- 1.4.3. To gather information and analysis comprehensively, the following methods were used in the study:
- 1.4.4. **Literature review and Case studies:** Institutional frameworks including government reports and papers were reviewed to understand the local planning context and the study area. Relevant planning concepts from academic literature and international best practices were reviewed to set out evaluation standards for the baseline and AFCP.
- 1.4.5. **Site Visit, Data collection and Analysis:** On-site measurements and observations were carried out to obtain primary data. The study also made use of secondary spatial data as provided by the Hong Kong GeoData Store and GeoInfo Map provided by the HKSAR Government. Tools such as Esri ArcGIS Pro and IBM SPSS were utilized for spatial analysis and data analysis.
- 1.4.6. **Roadshow and Questionnaire surveys:** A questionnaire survey is jointly designed by the team and the two other sub-consultants, which covers questions on the spatial/physical, socio economic, as well as environmental and infrastructure (Extract of results are in **Appendix 2**). A total of 328 responses were collected from on-site and online surveys, in which 202 respondents are of age 65 or above. The respondents' profiles are provided at **Appendix 3**. The

Roadshow was organized from 29/09/2020 to 04/10/2020 at 10 strategic locations within the study area. The general views of the residents were collected.

- 1.4.7. **Focus Group and Interviews:** A total of 9 Interviews with the key stakeholders, including the academics, professionals and local stakeholders were conducted by the study team and other sub-consultants. The list of interviewee is at **Appendix 4**. The interviews have provided the baseline with in-depth opinions regarding the baseline situation, as well as insights for the AFCP. After drafting the AFCP, a Community Planning Workshop was jointly organized by the team and the two other sub-consultants on 21/11/2020. Focus group discussions were facilitated to consult residents' views on the draft AFCP.

1.5. Study Management

Work Programme

- 1.5.1. The two-stage study was conducted from 03/09/2020 to 03/12/2020 upon the submission of the Final AFCP Report. The work programme is provided at **Appendix 5**.

Team Structure

- 1.5.2. The team comprises 8 members from multidisciplinary backgrounds such as urban planning, urban design, building surveying and community engagement (CE). In addition to their extensive experiences in CE, all members are knowledgeable in the elderly planning initiatives and the related policies. The detailed team structure and profiles are provided at **Appendix 6**.

1.6. Structure of this Report

- 1.6.1. The report is structured into 7 chapters, in addition to this introductory chapter:
- **Chapter 2** reviews the key planning concepts and relevant case studies related to age friendliness;
 - **Chapter 3** highlights the key findings from baseline studies and presents the SWOT Analysis;
 - **Chapter 4** reports the 2 stages of CE activities, and summarizes the key public comments and the team's responses;
 - **Chapter 5** presents the final AFCP which include the strategies, proposals and implementation programmes and preliminary impact assessment;
 - **Chapter 6** provides the results of the Sustainability Impact Assessment on the final AFCP and presents the possible implications; and
 - **Chapter 7** concludes the study and presents the way forward.

2. Key Planning Concepts and Case Studies

2.1. Age Friendly Cities and Communities

2.1.1. “Age friendly City” framework was advocated by WHO in 2007, encouraging different cities to formulate policies adapting to the ageing population in 8 domains (**Figure 2.1.1**): (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 (WHO, 2007). While the framework developed based on the concept of active ageing, understanding of age friendliness should not be confined to elderly but all ages. With the community planning that provides integrated support for elderly’ social and physical needs, it is anticipated that the framework could contribute to a more inclusive society (Belfast Office of First Minister & Deputy First Minister UK, 2005).



Figure 2.1.1: The Age friendly City Model
(Source: WHO, 2007)

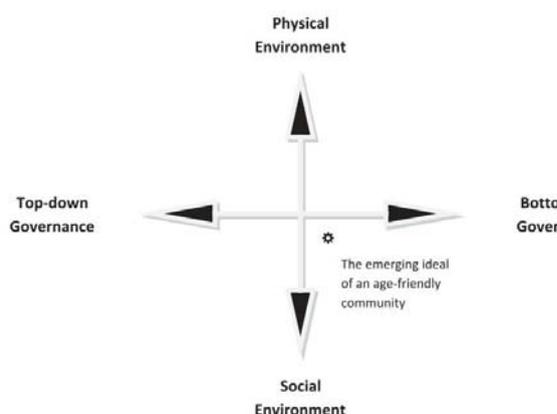


Figure 2.1.2: Dimensions of the Age-friendly community
(Source: Lui et al., 2009)

2.1.2. Different cities and communities localize the WHO framework and adapt it into the local contexts. According to Lui et al. (2009), these local frameworks usually consist of a two-dimensional continuum with varying focuses on the physical/social environment and types of governance (**Figure 2.1.2**). The emerging ideal of an age friendly community should provide an integrated physical and social environment that adopts a model of participatory and collaborative governance.

Case Study: Age friendly City Initiative in Ottawa, Canada

2.1.3. As the capital city of Canada, Ottawa is a multicultural city with its elderly population approaching 22% by 2031 (WHO, n.d.). Due to its dispersed urban form, elderly-specific strategic plans are promulgated since 2012 to recommend actions across urban, suburban and rural areas, in both physical and social dimensions working towards its age friendly vision. While CE among elderly is the essence for the plan to better align with their needs, the “Old Adult Plan” (**Figure 2.1.3**) is a prioritized strategic plan in Ottawa with a \$500,000 annual budget set aside for its implementation (WHO, n.d.). Apart from renewing the plan every 2-4 years, regular evaluations (**Figure 2.1.4**) are conducted based on a result-accountability approach to measure

the progress towards achieving an age friendly city. For instance, Seniors Roundabout is a group of elderly representatives meeting every quarter to express opinions on the realisation and development of the plan.

CITY OF OTTAWA – OLDER ADULT ACTION PLAN 2020-2022

Vision: Ottawa is an age-friendly and caring community that values the contributions of older adults, offers a broad range of opportunities for active living, and provides supports that are responsive to the diverse needs and choices of older adults.

1. Transportation and Mobility
Goal: Older adults travel in Ottawa and navigate the natural and built environments safely and with ease.

#	Action	Timing	Responsibility		OAP Funding Required	Reporting Indicators
			Lead Dept(s)	Assist Dept(s)		
Public Transportation						
1.1	Make improvements at on-street bus stops and public transit stations to improve accessibility for older adults and persons with disabilities	2020-2022	TS	-	-	<ul style="list-style-type: none"> Number/location of stops and stations improve Types/details of improvements Process to identify improvements and locations documented
1.2	Facilitate access to Para Transpo by implementing online booking	2020-2022	TS	-	-	<ul style="list-style-type: none"> Number of customers engaged in the development of the online booking system Booking system implemented Number of trips booked online
1.3	Enhance information for older adults through the publication of a new Ride Guide for Seniors	2020	TS	-	-	<ul style="list-style-type: none"> New Ride Guide published Number of copies distributed

City of Ottawa
Older Adult Plan - Action Plan 2020-2022

Figure 2.1.3: The Old Adult Plan (Source: The Council on Ageing of Ottawa, 2020)

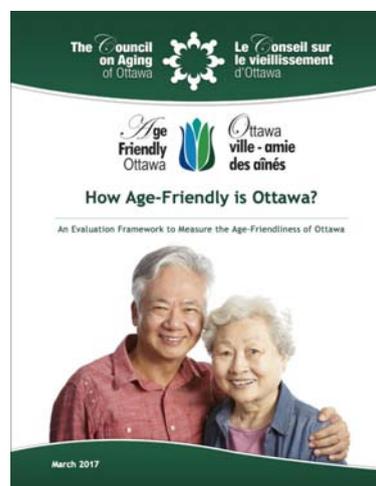


Figure 2.1.4: Evaluation Framework “How Age-friendly is Ottawa?” (Source: The Council on Ageing of Ottawa, 2020)

2.1.4. The “Old Adult Plan” targets to achieve measurable progress across the 8 dimensions proposed by the WHO, examples of actions are showcased as follow (The Council on Ageing of Ottawa, 2020):

- **Outdoor spaces and buildings:** With a new accessibility rating tool, city facilities have been upgraded with automatic door openers, ramps and grab bars. 241 benches were selectively added to popular locations among elderly and transit stations. Sidewalk quality has been improved to prevent tripping.
- **Transportation:** To cope with the lower mobility of elderly, crossing times at 72 busy intersections have been adjusted, count-down timers were added to 48 intersections. 350 bus stops have been improved to cater the need of wheel-chair users.
- **Respect and social inclusion:** Introduce a Techno-buddies programme to enhance intergenerational communication through one-on-one technology assistance provided by young volunteers.
- **Community support and health services:** Dental programme for low-income elderly, introduce fall prevention knowledges to caregivers through workshops.

2.2. Sustainable Community

2.2.1. There are different models of a sustainable community, with the majority of the academia acknowledging the needs of individuals, social, economic and environmental considerations (Roseland, 2000; Bridger, 1999). Social reform and policy analysis are two important dimensions in planning theory other than physical interventions, which emphasise that planning should

intrinsically work towards the goal of sustainability (Roseland, 2000). According to the Egan Review (2004), sustainable communities should meet the diverse needs of existing and future residents, contribute to a high-quality life and offer a wide range of choices through effective use of natural resources, enhancement of environment and promotion of social cohesion while economic prosperity is strengthened. **Figure 2.2.1** illustrates the key concerns of sustainable communities.

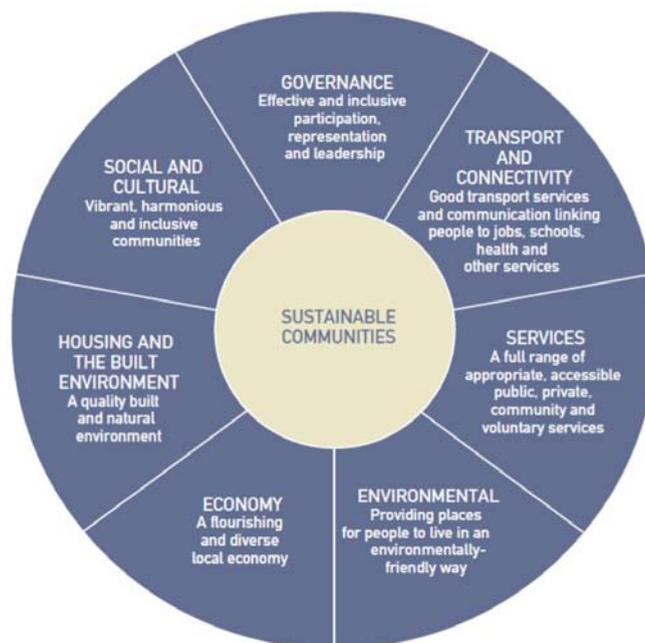


Figure 2.2.1: Edan Wheel for Sustainable Communities (Source: Egan, 2004)

Case Study: Intergenerational Co-living Project in Chicago, USA

- 2.2.2. The concept of sustainable community can be illustrated by the advocacy of co-living. Co-living can be defined as “a form of housing that combines private living spaces with shared communal facilities, and it encourages social interaction and closer bonds of the community” (Shafieque, 2018). The concept promotes the provision of a quality living environment that is shared by an inclusive community. Apart from pooling resources, which is more environmentally friendly, co-living also champions mutual respect and building of relationships among the residents. Community support and services could be strengthened as well to reinforce social sustainability.
- 2.2.3. In light of the ageing population, co-living innovations have emerged in many cities. According to Garland (2017), there are several major types of intergenerational co-living in the US. One of the most representative examples was the project by Housing Opportunities and Maintenance for the Elderly (H.O.M.E) in Chicago. It was a non-profit project that aims to help the elderly to be independent and part of the community.
- 2.2.4. Nathalie Salmon House was a case built under H.O.M.E. The demographic composition of the housing included the elderly, resident assistants and families, with yearly income caps applied on the elderly. Young people, acting as the resident assistants, were required to take care and had interaction with the elderly for 20 hours per week. In return, they could live rent-free.

Furthermore, families were also invited to live in Nathalie Salmon House. However, the families generally should have at least one child and the working parents should have lower incomes (Garland, 2017). The ground floor of the housing was designed as a multi-functional area, including kitchen, community room, fitness area and garden room with library (Figure 2.2.2). Intergenerational interaction was actively promoted in H.O.M.E as there were always community-run activities, which were suitable for different age groups. The ‘One big family’ philosophy had been adopted. Even if the older residents had moved to a nursing home, the other residents would continue to keep in touch with them regularly (Garland, 2017).



Figure 2.2.2: Living Room in Nathalie Salmon House (Source: DNA Info, 2017)

2.3. Active Ageing

2.3.1. Active Ageing is a concept developed by WHO that evokes the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age (WHO, 2002). While some of the key components within the policy framework includes autonomy, independence, quality of life and healthy life expectancy among the elderly, they are influenced by the determinants as shown in Figure 2.3.1.

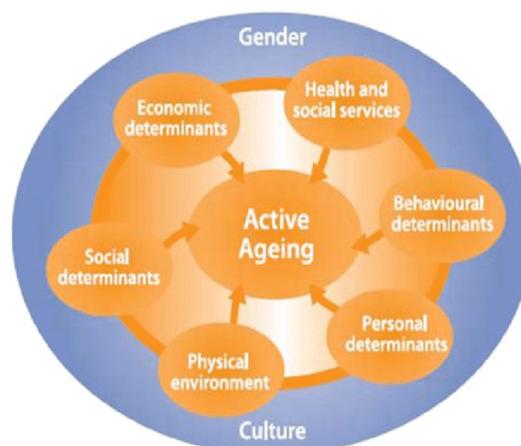


Figure 2.3.1: The Determinants of Active Ageing (Source: WHO, 2002)

Case Study: Dementia-Friendly Navigation Application, Hong Kong

2.3.2. Apart from the physical health, mental health of the elderly also plays an important role in determining whether one could age actively or not. Tung Wah Group of Hospitals (TWGHs) of Hong Kong has launched the first dementia-friendly application aiming at strengthening the connection between the dementia patients and their caregivers in an all-round manner in order to alleviate the pressure for both (TWGHs, 2016). A novel feature in the application is the “This is Me” section that encourages the elderly users to key in their personal particulars and interests for the understanding of the caregivers (Figure 2.3.2). Other features include medication reminder, cognitive exercises, daily tips, GPS tracking and speed contact services.



Figure 2.3.2: TWGH Navigation Application (Source: TWGH, 2020)

Case Study: Tripartite Guideline on Re-employment of Older Employees, Singapore

2.3.3. Elderly Singaporeans are considered to be ageing happily and actively compared to their cohorts around the globe. They live a healthy lifestyle with financial stability, autonomy and are psychologically supported and attached, thus are greatly satisfied with their lives. In order to age happily and actively, the Singaporean government has an extensive support system towards elderly, on policy and programme level.

2.3.4. It is recognized by the Government that silver employment is crucial in contributing to active ageing as it gives not only the financial support to the silver generation but also strengthens their self esteem and thus satisfaction and aspiration of their lives. Hence, not only has the Government actively provided learning and training programmes for the retirees, the Tripartite Guideline on Re-employment on Older Employees was passed in 2011 to encourage the healthy retirees in returning back to the market while the employers hold the responsibility to re-employ them until they reach 67 years old (Ministry of Manpower, 2020).



Figure 2.3.3: Silver Employment at Chatters Cafe (Source: Silver Spring)

2.3.5. Moreover, the Singaporean Government subsidizes the salary wages of the re-employed elderly as an economic incentive to the employers in complying with such social responsibility. The subsidy differs from 3%, 5% and 11% if the employers are committed to re-employ those who are aged 50-59 y/o, 60-64 y/o and 65+y/o, respectively (Special Employment Credit, 2020).

2.4. Ageing-in-Place

2.4.1. The rationale of ageing-in-place is to allow older people to remain living in their familiar homes and neighbourhoods as long as they wish (Fisk, 1986) instead of moving to unfamiliar institutions. The concept intends to prevent elderly from losing their sense of security due to the changing physical and social environment. It also enables them to live independently with dignity and security. Housing, location and community support are complementary to support ageing-in-place (Boldy et al., 2011).

2.4.2. Looking into the context of Hong Kong, displacement of elderly due to urban redevelopment, poverty, insufficient medical and community care services, and the decline of traditional Chinese normative family orders are the stumbling blocks for elderly to age-in-place (Chui, 2008; Lam & Fong, 2020). Moreover, Lam & Fong (2020) suggested that ageing-in-place programmes are still in their infancy in Hong Kong. More time is required to develop its housing and community support.

Case Study: All-in-one Elderly Medical and Community Care Building, Taiwan

2.4.3. Facing a similar trend of ageing population as Hong Kong, Camillian Saint Mary's Hospital Luodong in Taiwan acknowledged their ageing population issue and the importance of ageing-in-place concept towards the elderly. An all-in-one elderly medical and community care building named Dr. Janež's Memorial Building was built in 2017 (Figures 2.4.1 & 2.4.2), specializing in Geriatrics and the provisions of elderly-related medical treatments and community care services. The aim of the new building is to provide elderly preventive and rehabilitative healthcare services with the integration of community care services.

2.4.4. The all-in-one elderly medical and community care building consists of a dementia care centre, elderly day care centres, elderly clinics, a physiotherapy clinic and an age friendly sky garden having community farm and observation deck. This shows the comprehensiveness of the

building in tackling the all-rounded needs of the elderly, from physical and medical needs to social and leisure needs.

- 2.4.5. Adopting the concept of ageing-in-place, the building is located in the proximity to the town centre of Luodong and Luodong train station, which can provide services to the majority of elderly population and reduce the medical trip generations for the elderly and their caregivers.



Figure 2.4.1: Dr. Janež's Memorial Building
(Source: Camillian Saint Mary's Hospital Luodong)



Figure 2.4.2: Opening Ceremony for the All-in-one Elderly Medical and Community Care Building (Source: Camillian Saint Mary's Hospital Luodong)

2.5. Universal Design

- 2.5.1. Universal design aims to guarantee the equal accessibility of the built environment to all people regardless of their age, disability or other factors (Crews & Zvotka, 2006). It stresses on people's perception and experience while providing convenience for every citizen. One widely adopted universal design framework by Ronald Mace consists of seven Principles, including (1) Equitable Use, (2) Flexibility in Use, (3) Simple and Intuitive Use, (4) Perceptible Information, (5) Tolerance for Error, (6) Low Physical Effort and (7) Size and Space for Approach and Use.

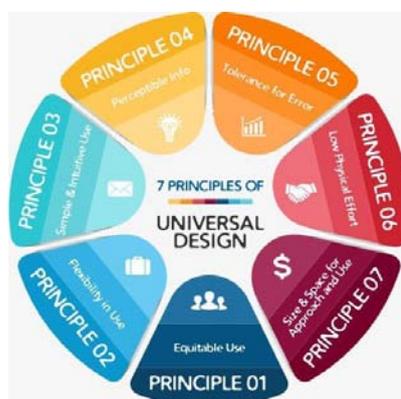


Figure 2.5.1: The 7 Principles of Universal Design (Source: bijoumind, 2017)

2.5.2. Many studies have demonstrated the importance of universal design in promoting safety and accessibility, especially for the elderly (Reis *et al.*, 2012; Mustaquim, 2015; Tam *et al.*, 2018). Due to the declining abilities such as unstable gait or poor sight of the elderly, it is identified that they are more likely to get injured in the built environment (BD, 2008). It is in great need for adopting universal design on the street, in open spaces and buildings, to diminish barriers in the elderly's daily lives and promote physical health and wellness.

Case Study: The Portland Memory Garden

2.5.3. Universal design concepts go hand in hand with dementia friendly planning, which universally designed places should also offer equal accessibility towards people with dementia. The Portland Memory Garden is designed with the consideration of dementia friendliness. Being constructed in 2002, the Portland Memory Garden was one of the eight memory gardens in the US at that time (Portland Gov, 2020).

2.5.4. The memory garden is designed with special features, adopting universal design with dementia friendly focus (Centre of Design, 2020). The entrance of the garden is slightly raised, providing visitors for a preview of the layout of the garden before enjoyment. The covered structure at the entrance also functions as a landmark in the garden. The pavement and pathway designs allow equitable access for all while minimising the confusion for users during navigation, providing a simple and intuitive use. Benches are arranged circulating the central planter offering opportunities for social interaction. There is a rich collection of different plant species to create a botanical garden to stimulate the different senses of users, especially elderly and people with dementia.



Figure 2.5.2: The Portland Memory Garden (Left: Entrance, Right: Diverse landscape)
(Source: Pacific Horticulture Society, 2020)

2.6. Implications on Planning for an Age Friendly Kowloon City

2.6.1. **Table 2.6.1** summarizes the key implications of key planning concepts and the case studies on planning the AFCP for Kowloon City.

Table 2.6.1: Implications of Key Planning Concepts and Case Studies (Source: Study Team)

Key Planning Concept	Implications	Case Studies
Age Friendly Cities and Communities	<ul style="list-style-type: none"> • Provide integrated physical and social environment • Collaborative governance with public engagement to formulate plans that better suit community needs 	Age-friendly City Initiative in Ottawa, Canada: <ul style="list-style-type: none"> • A mix of physical and social programmes are essential to fulfil different dimensions of needs • Targets of plans should be measurable with regular evaluations conducted
Sustainable Community	<ul style="list-style-type: none"> • Meet the diverse needs of existing and future residents • Contribute to a high-quality life • Promote social cohesion 	Intergenerational Co-living Project in Chicago, USA: <ul style="list-style-type: none"> • Demographic composition included the elderly, young resident assistants and families • Lower storeys were designed as multi-functional areas
Active Ageing	<ul style="list-style-type: none"> • Public sector takes lead to encourage silver employment eg. policy support/monetary subsidy • Simple and manageable digital application aiding the elderly and their caregivers 	Dementia-friendly App from TWGHs: <ul style="list-style-type: none"> • Simple and easy design for the elderly • GPS tracking and “This is ME” section Tripartite Guideline on Reemployment of Older Employee, Singapore: <ul style="list-style-type: none"> • Proactive and robust support from the public sector in safeguarding rights of older employees • Effective subsidy scheme as economic incentive for employer
Ageing-in-place	<ul style="list-style-type: none"> • Ageing in familiar homes and neighbourhoods • Accessible medical and community care services • Decrease in medical trip generation 	All-in-one Elderly Medical and Community Care Building, Taiwan: <ul style="list-style-type: none"> • Provision of elderly preventive and rehabilitative healthcare services • One-stop community care and medical services • Ageing-in-place concept
Universal Design	<ul style="list-style-type: none"> • Equal accessibility of the built environment • Significance for shaping both perceptions and experience towards universal design • Importance of universal design in promoting safety and accessibility 	The Portland Memory Garden <ul style="list-style-type: none"> • Elevated entrance to provide perceptive informations to users when entering • Circular pathway with quality to offer equitable use and intuitive experience • Sensory stimulations through plantings and landscaping

3. Baseline Findings and SWOT Analysis

3.1. Reconnaissance of the Study Area

3.1.1. Situated in the eastern side of the Kowloon Peninsula, Kowloon City is a district transitioning from the old to the new. In view of the double ageing issues with an increasing number of elderly population and ageing building stock, due respect should be paid to the historical and cultural legacies while grasping the opportunities brought by KTD and Urban Renewal in developing a liveable and age friendly community.

Existing Land Use

3.1.2. **Table 3.1.1** and **Figure 3.1.1** shows the existing uses of Kowloon City, which is modified from the Land Utilization in Hong Kong surveyed by PlanD. Besides roads and transport facilities, 35% of Kowloon City is vacant land or work in progress. The high percentage is due to the ongoing construction work in KTD.

Table 3.1.1: Existing Uses of Kowloon City (Source: Study Team)

Existing Uses	Area m ²	%
Private Residential	921,035	17.1%
Public Residential	217,184	4.0%
Commercial/Business and Office	921,035	3.5%
Industrial Land	136,938	2.5%
Warehouse and Open Storage	34,434	0.6%
Government, Institutional and Community (GIC) Facilities	275,971	5.1%
Open Space and Recreation	372,586	6.9%
Roads and Transport Facilities	1,258,887	23.3%
Utilities	57,490	1.1%
Vacant Land/Construction in Progress	1,891,475	35.1%
Others	7,685	0.1%
Woodlands/Shrublands/Grasslands	350,329	0.6%
Total:	5,396,058	100%

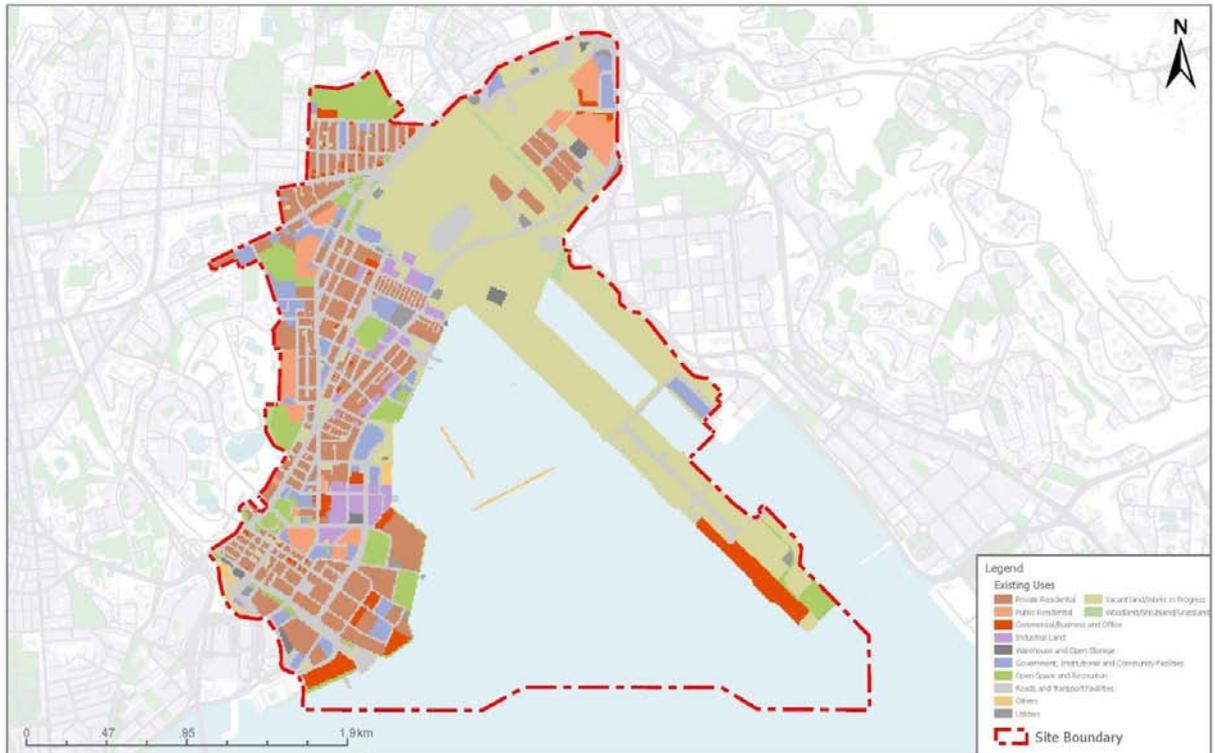


Figure 3.1.1: Existing Uses of Kowloon City (Source: Study Team)

Demographics of Kowloon City

- 3.1.3. According to the Census and Statistics Department (2019), elderly population (65+) shares 16.5% of the total population within the study area (**Figure 3.1.2**). Although it is lower than the territorial share of 18.4%, it is important to note the percentage of elderly-to-be (55+). In 10 years time, over 30% of the population will be elderly.
- 3.1.4. It is also important to note that some sub-areas within the study area have a significantly larger share of elderly and elderly-to-be population, including Ma Tau Kok, Ka Wai, Ma Tau Wai and Lok Man (**Figure 3.1.3**). Special attention should be paid to these areas with a significant trend of ageing population.

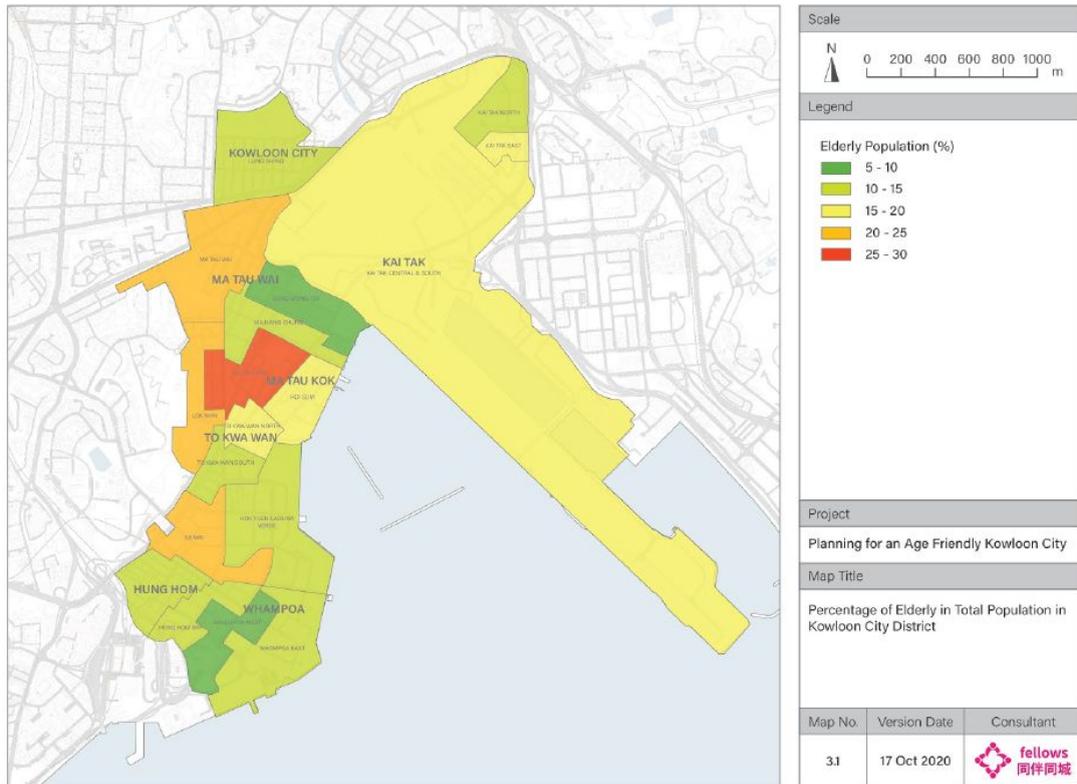


Figure 3.1.2: Percentage of Elderly in the Study Area (Source: Fellows, 2020)

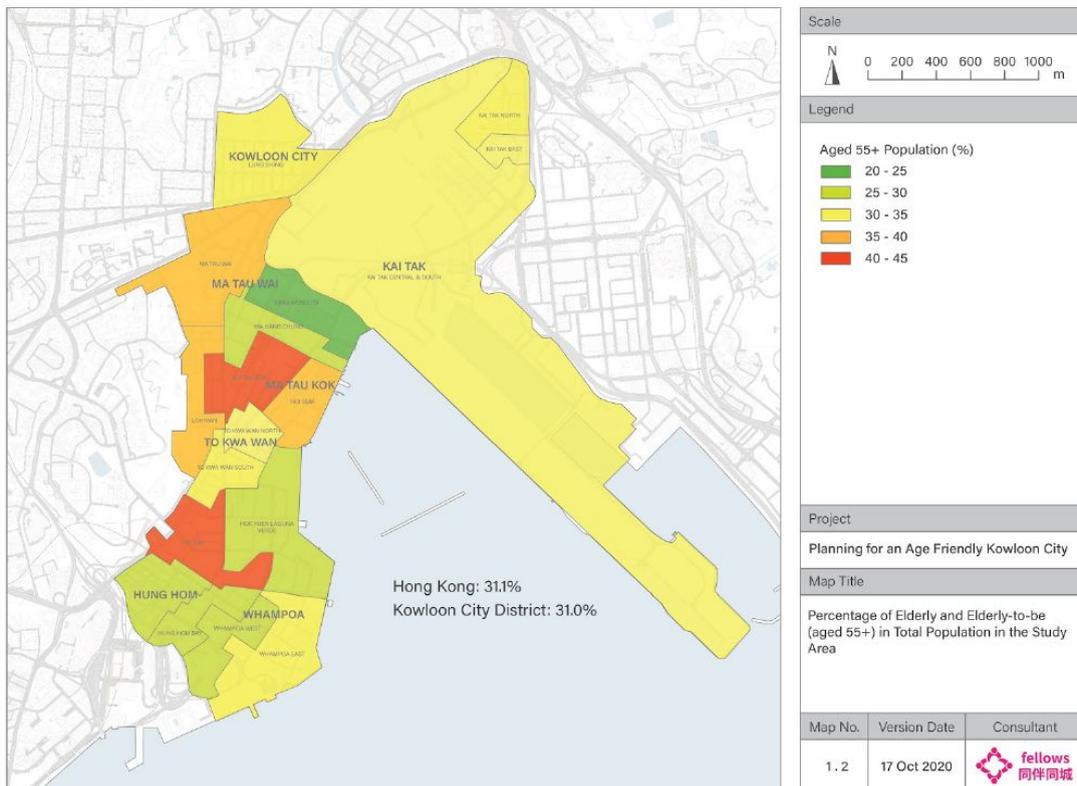


Figure 3.1.3: Percentage of Elderly and Elderly-to-be (55+) in the Study Area (Source: Fellows, 2020)

Overview of Kai Tak Development

3.1.5. Following the relocation of the old Kai Tak Airport, KTD is a comprehensive development project covering 320 hectares of land adjacent to the Victoria Harbour (**Figure 3.1.3**). Upon completion in 2025, the district will not only house its 86,000 residents, but also provide an extensive network of open spaces, GIC facilities, commercial belts for new office developments and regional medical facilities. Moreover, regional icons such as Kai Tak Sports Park and Kai Tak Cruise Terminal Tourism Hub are positioned to fulfill territorial needs through the provision of world class facilities.



Figure 3.1.4: Kai Tak OZP (Source: PlanD, 2006)

Overview of Urban Renewal in Kowloon City

3.1.6. Being one of the oldest districts in Hong Kong, Kowloon City was the first pilot area for District Urban Renewal Forum (DURF) in 2011. The Urban Renewal Plan for Kowloon City was released in 2014 after rounds of planning studies, social impact assessment and public engagement activities in DURF. The vision of the plan is to “conserve history and culture, synergize with surrounding development; optimise land resources and create quality living environment” (DURF, 2014, p.13).

3.1.7. While redevelopment projects have been initiated by the Urban Renewal Authority (URA) and private developers, these projects are not without controversies. Not only will redevelopment reduce affordable housing options, the removal of local shops and iconic architectures could also lead to the fading of community identity. Gentrification is also an emerging issue in many districts undergoing redevelopment.

3.2. Physical Aspects

Unsatisfactory Pedestrian Environment

- 3.2.1. A pedestrian network with good connectivity and walkability can provide an encouraging walking environment and promote physical health and wellbeing, especially for the elderly. Nevertheless, the overall pedestrian environment in the study area is unsatisfactory due to the narrow sidewalks, unclear signages, lack of greenery and shading, as well as lack of street furniture.
- 3.2.2. Narrow sidewalks are found commonly in the study area, which inhibits pedestrian's safety and comfortability. It is observed that in old areas like Ma Tau Kok, To Kwa Wan and Hung Hom, the sidewalks' width fail to meet the 2m minimum requirement suggested by Elderly-friendly Design Guidelines (**Figure 3.2.1**). Moreover, the extension of car repairing shops and 'street market' shopfront reduce the effective width and pose severe risks to the elderly in Ma Tau Kok Road and To Kwa Wan Market (**Figure 3.2.2**). To ensure barrier-free access for wheelchair users and promote willingness to walk among the elderly, a sidewalk width of 3.5m should be provided according to Hong Kong Planning Standard and Guidelines (HKPSG).

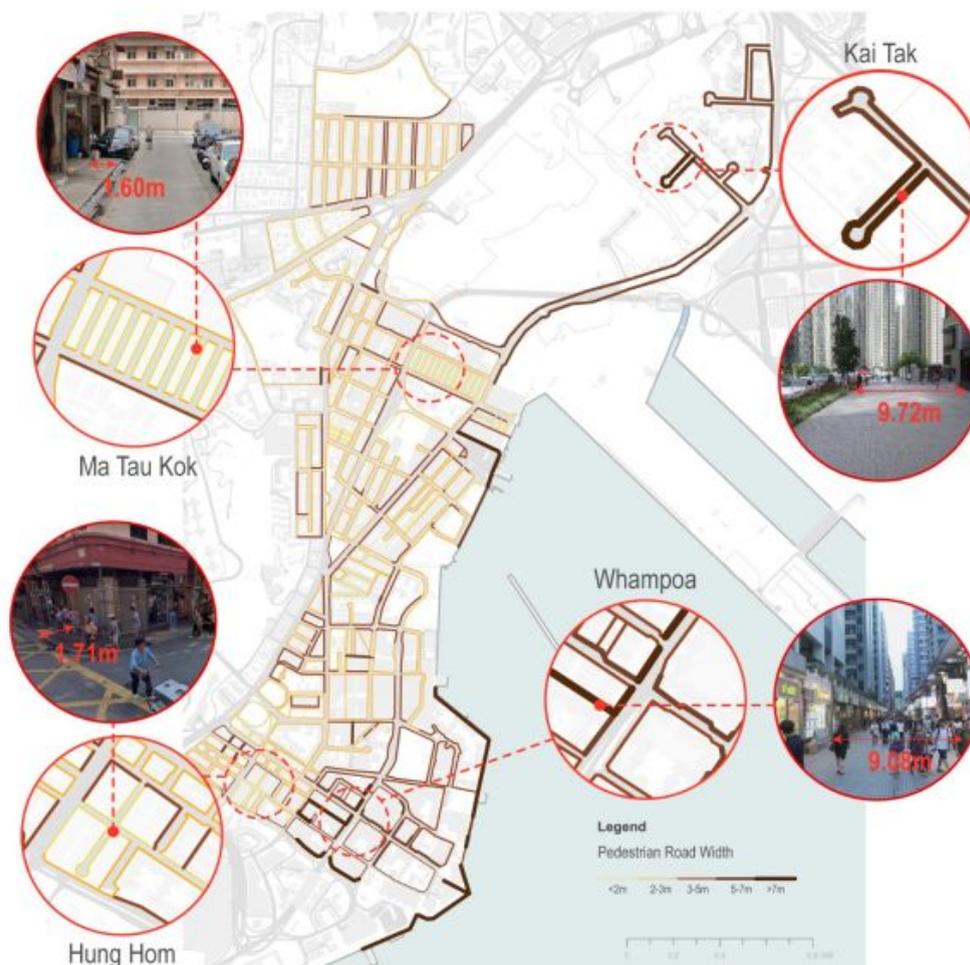


Figure 3.2.1: Uneven Width of Sidewalks
(Sources: Geoinfo Map, 2020; Google Map, 2020; modified from Age 0+, 2020)



Figure 3.2.2: Shop Frontage Typologies in the Study Area (Source: Study Team)

3.2.3. Unclear signages on the street have also added to the poor walking and wayfinding experience in the study area. Different types of signages are shown in **Figure 3.2.3**. Except for the good use

of signages in Whampoa Garden, most signages in the study area mainly display information for tourists and commercial activities instead of catering the needs of the elderly. Signages that use clear symbols and contrasting colour can contribute to delivering understandable information, which is important to enhance the level of independence among the elderly.



Figure 3.2.3: Common Signages in the Study Area (Source: Study Team)

3.2.4. It is also observed that there is a lack of continuous and sufficient shading along the streets, either from greenery or buildings canopies in the study area (Figure 3.2.4). Shading at the street is merely provided from the canopies of old tenement buildings as well as some redevelopment projects at present. Besides, due to the constraints of narrow sidewalks, most spotted greenery at street level are planter boxes instead of trees, hardly contributing to providing shading and enhancing the thermal comfort for pedestrians.

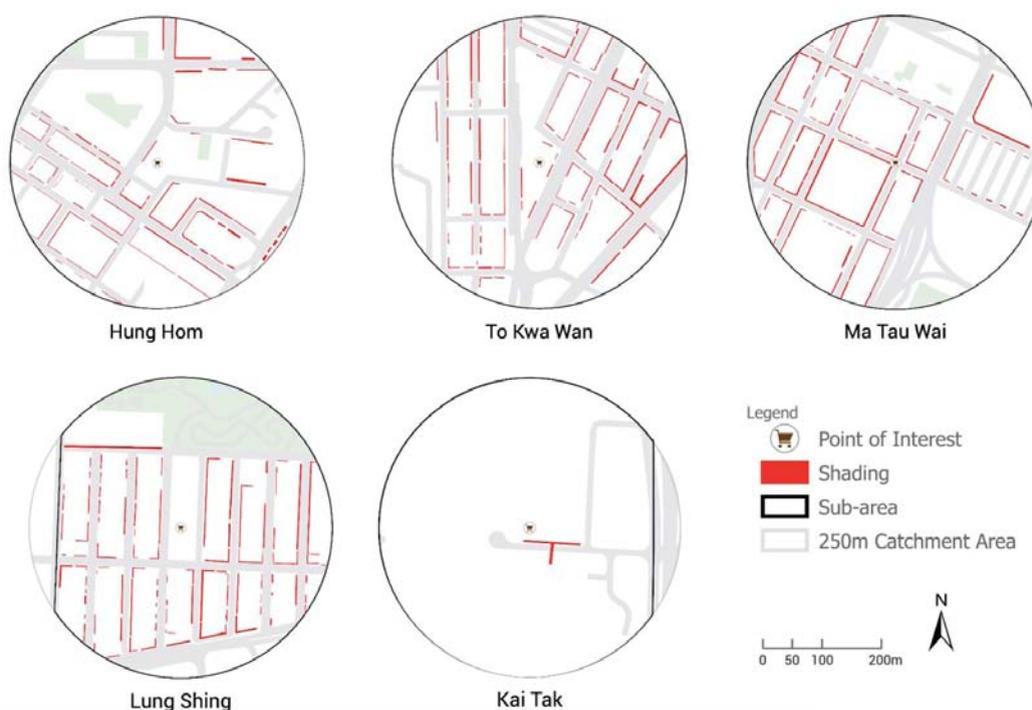


Figure 3.2.4: Shading on Streets of the Five Sub-Areas in the Study Area (Source: Study Team)

3.2.5. Provision of well-designed street furniture as a rest place is crucial for guaranteeing the comfortability of pedestrians while providing socializing opportunities to the elderly. It is observed that the study area is lacking sufficient urban furniture in general. Compared with other sub-areas, street furniture is more commonly found in Hung Hom and To Kwa Wan (Figure 3.2.5). The second type of seating with shelters is more desirable with shading to enhance comfortability.

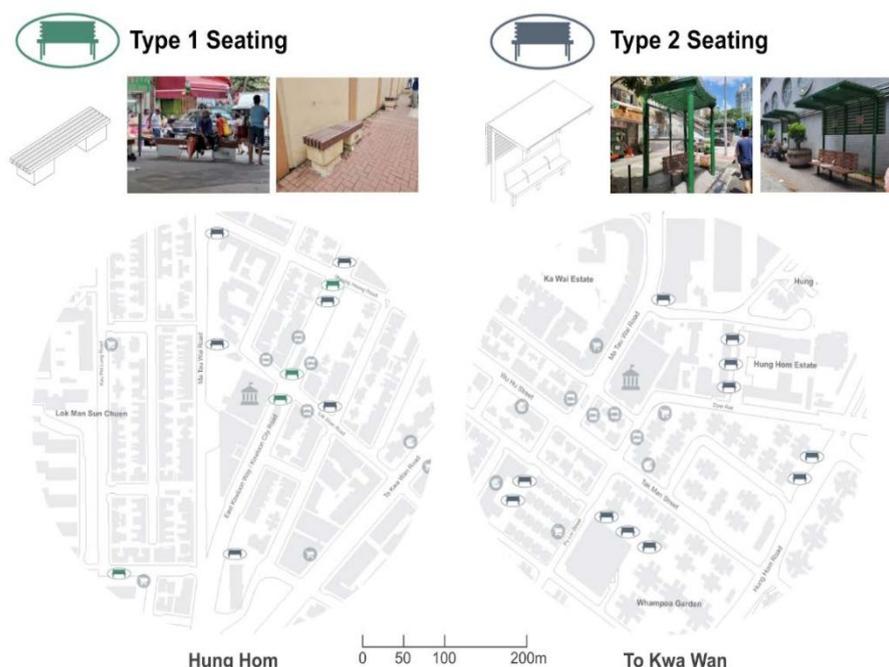


Figure 3.2.5: Two Types of Street Furnitures in Hung Hom and To Kwa Wan (Source: Study Team)

Inadequate Universal Design and Access

3.2.6. Inadequate provision of universal access on streets, in open spaces as well as in buildings is generally observed in the study area, diminishing accessibility of all ages while exposing the elderly to higher risks to injuries. While kerbs on streets could pose challenges on wheel-chair users and families with trolleys, topographic constraints could also limit accessibility of open spaces. Some open spaces in the study area failed to provide universal access and created barriers for people with reduced mobility at the entrances, such as the long and steep stairs observed at Hutchison Park and Tin Kwong Road Playground (Figure 3.2.6).



Figure 3.2.6: Examples of Inaccessible Entrances and Facilities at Tin Kwong Road Playground and Hutchison Park (Source: Study Team)

3.2.7. Insufficient and poor universal access facilities is also a common issue observed in residential buildings, failing to guarantee safety and accessibility for the elderly and people with reduced mobility. Lacking lift provision is the most observed challenge for residents due to the significant proportion of buildings aged 50 years or above in the study area. 42% of tenement buildings over 50 years are more than eight storeys yet fail to provide lift for residents (**Figure 3.2.7**). Moreover, improper railings, narrow doorways and staircases in old tenement buildings are obstacles to residents with reduced mobility (**Figure 3.2.8**). Ramps provision is also inadequate at the entrances of residential buildings except for newer public rental housing (PRH) and private development (**Figure 3.2.9**).



Figure 3.2.7: Tenement Buildings Over 50 Years Without Lift Provision
(Source: Study Team)

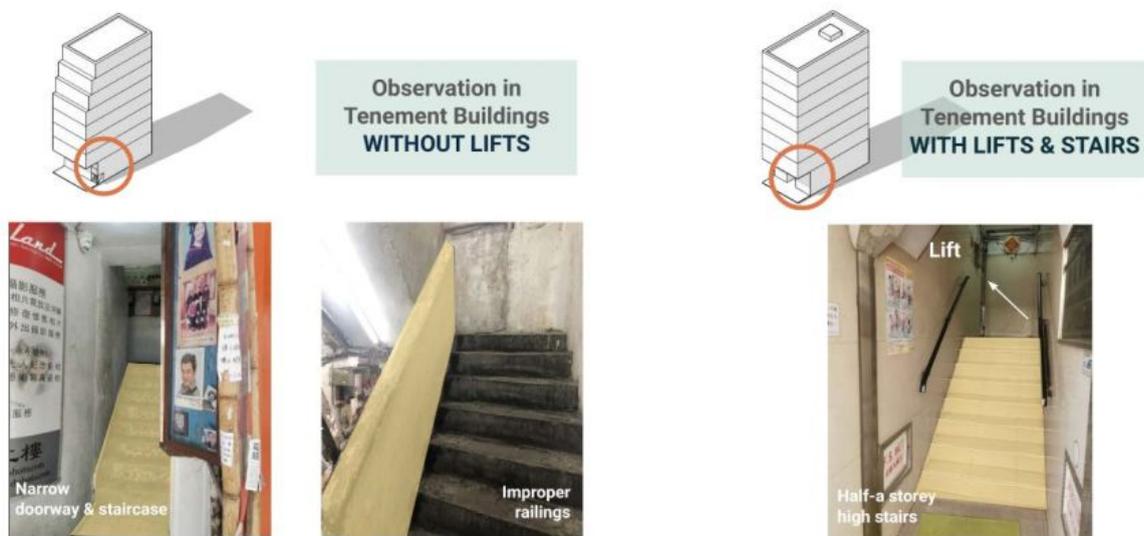


Figure 3.2.8: Poor Conditions Observed in Tenement Buildings
(Source: Study Team)

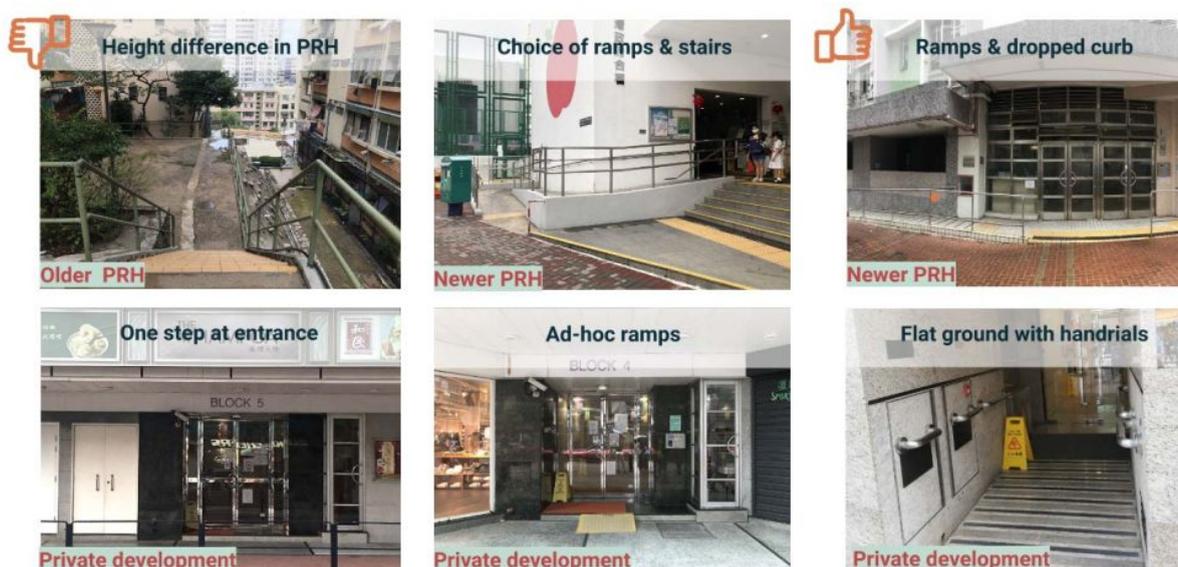


Figure 3.2.9: Observation of Entrance in PRH, GIC facilities and Private Development
(Source: Study Team)

Double Ageing

3.2.8. Lastly, it is identified that the study area is facing the serious threat of double ageing, arising from intensified ageing population and building stocks. Taking into account both the buildings over 40 years old and percentage of elderly population (65+), **Figure 3.2.10** highlights the overall double ageing situation of all building blocks in the study area. Six key strategic areas of the most severe double ageing situation are further identified as shown in **Figure 3.2.11**. Among the six areas, double ageing in old PRH clusters including Lok Man Sun Chuen and Chun Sin Mei Chuen and Ma Tau Wai Estate clusters are discovered to be the most significant. Future improvement in the built environment of these areas should be made to adapt to the changing needs of the ageing population.

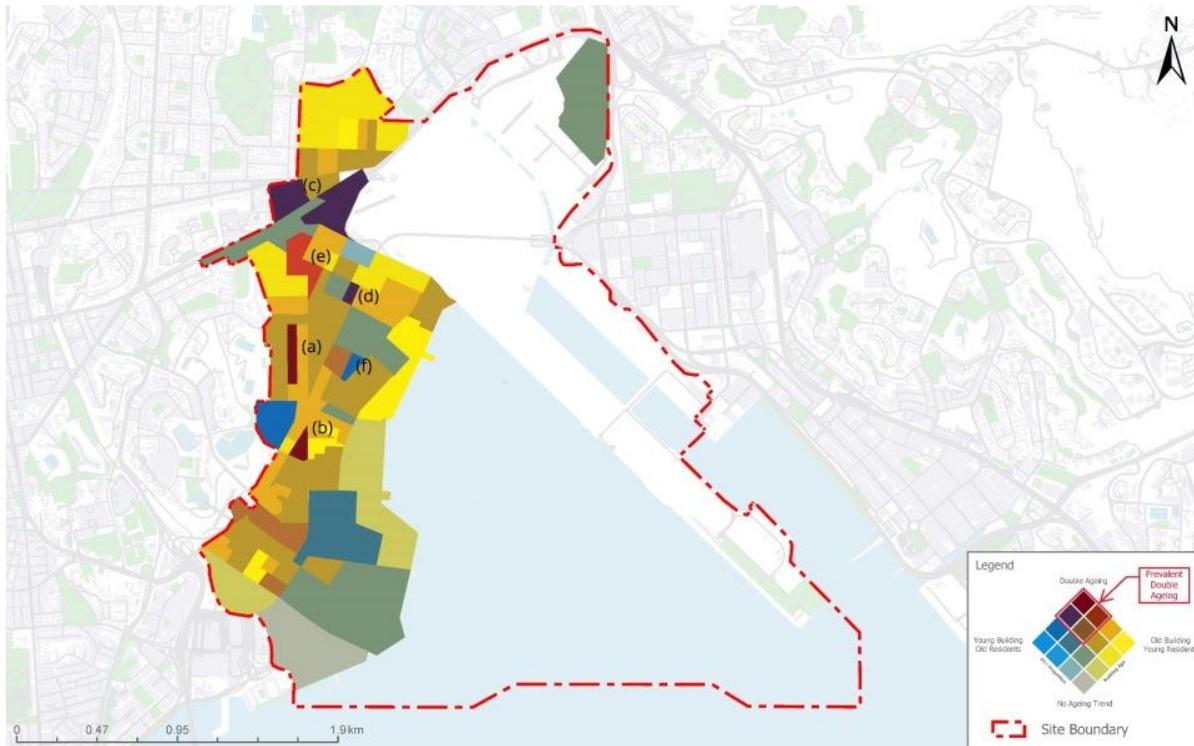


Figure 3.2.10: Double Ageing in the Study Area (Source: Study Team)

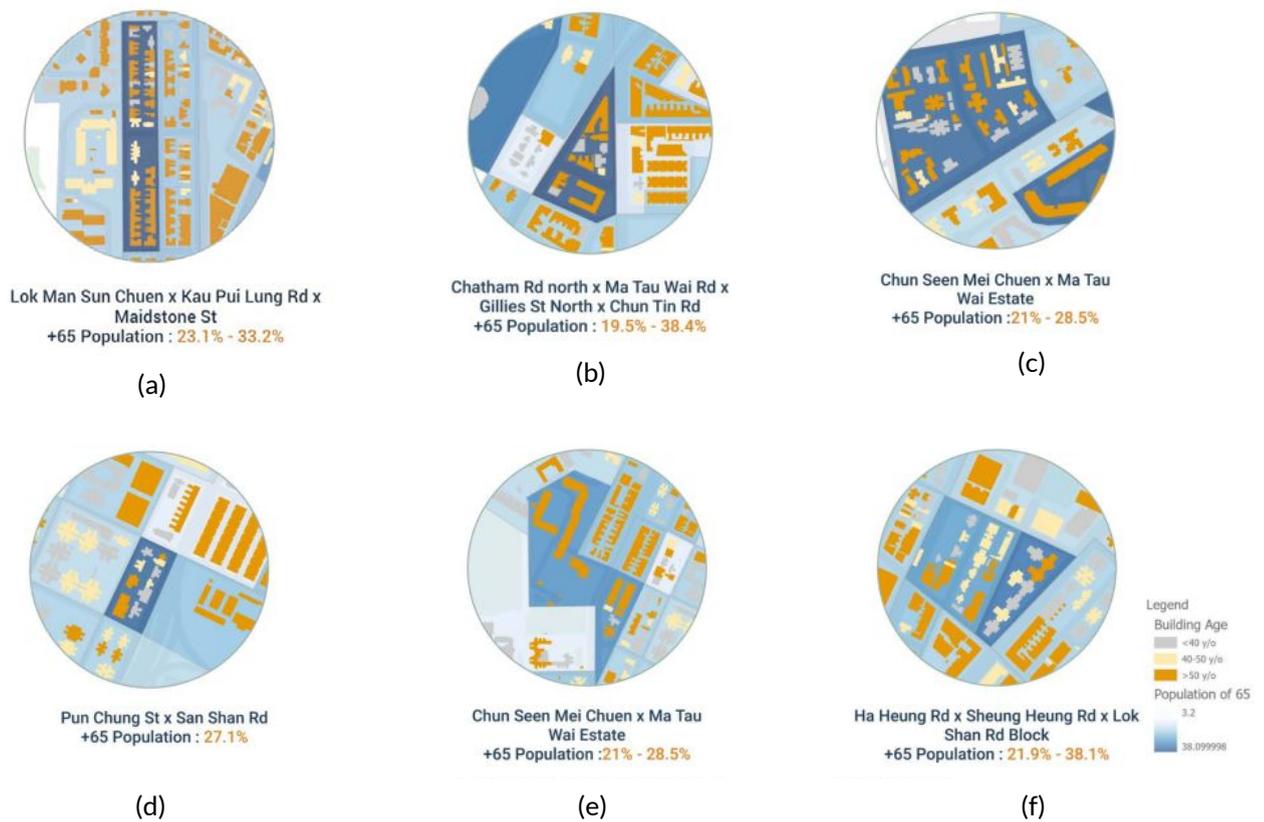


Figure 3.2.11: Six Strategic Double Ageing Areas (Source: Study Team)

3.3. Environmental and Infrastructural Aspects

Highly Accessible Open Spaces at Multiple Levels

3.3.1. Open space accounts for 7% of existing uses in Kowloon City, serving an important component to encourage elderly’s recreational uses. **Figure 3.3.1** shows the distribution of existing open spaces. A variety of open spaces are provided as shown in **Figure 3.3.2**. In terms of adequacy, it is observed that there is an overall deficit of open spaces at present (**Table 3.3.1**). Upon the completion of KTD, an abundance of regional open spaces will be supplied, contributing to nearly 60% of the planned open space. It is noted that there will be a deficit of LO to cater the needs at neighborhood level, yet the total planned provision will be able to meet the overall future needs of the population.



Figure 3.3.1: Distribution of Existing Open Spaces
(Source: Age 0+, 2020)

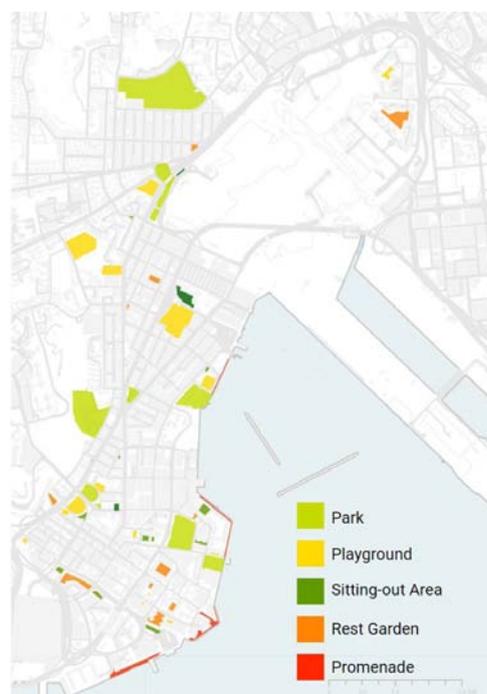


Figure 3.3.2: Types of Existing Open Space
(Source: Study Team)

Table 3.3.1: Adequacy of Open Space Provision (Source: Study Team)

	HKPSG Standard	Existing Open Spaces (ha.)			Existing plus Planned Open Spaces (ha.)		
		HKPSG Requirement	Provision	Surplus/Deficit	HKPSG Requirement	Provision	Surplus/Deficit
RO	No standard	N/A	3.33	N/A	N/A	78.74	N/A
DO	10 ha per 100 000 persons	30.65	28.76	-1.88	42.35	74.6*	32.34

LO	10 ha per 100 000 persons	30.65	10.90	-19.74	42.35	21.37	-20.98
Total		61.3	39.66	-21.4	84.7	174.79	90.09

*Half of RO are counted towards DO according to HKPSG Ch.3

3.3.2. In terms of accessibility, 400m is adopted as a recommended accessibility by the HKPSG. Concerning the lower mobility of the elderly, 250m walking distance is adopted, which is equivalent to 5-minute walking distance for elderly (Cerin et al., 2013; Kim, 2020). **Figure 3.3.3** shows that 78% of the elderly could access an open space within 5-minute (Age 0+, 2020). **Figure 3.3.4** shows that generally most of the existing open spaces are accessible within 400m from any residential location. Yet, residents in 13 streets, Kau Pui Lung Road and Hok Yuen have a lower accessibility to open spaces at present.



Figure 3.3.3: 5-min Walking Distance from Open Space for Elderly (Source: Age 0+, 2020)

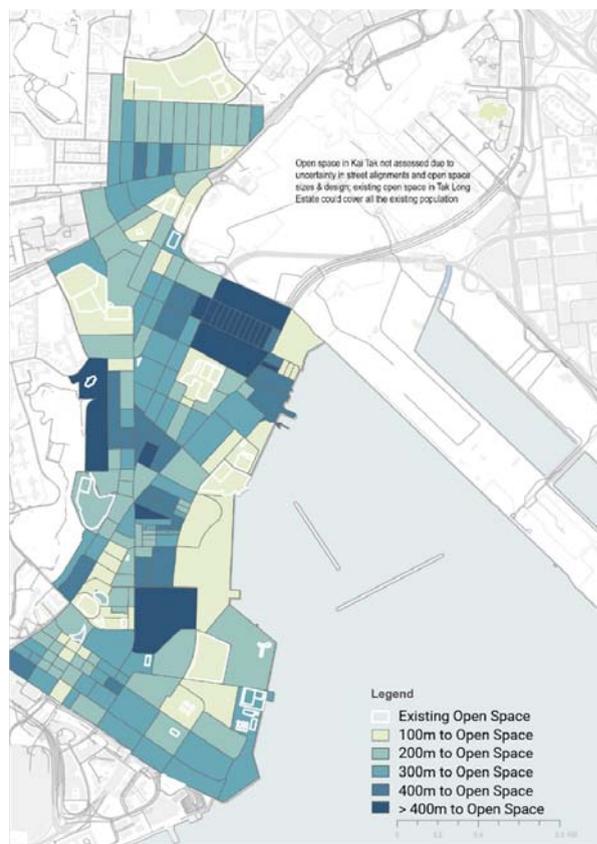


Figure 3.3.4: Distance to Closest Open Space from Street Blocks (Source: Age 0+, 2020)

Uneven Greenery and Vegetation along the Streets

3.3.3. Sufficient green coverage and landscaping is vital to the enhancement of environmental comfort. With reference to **Figure 3.3.5**, on a district level, soft landscape covers 33% of

Kowloon City (Age 0+, 2020). In particular, district parks such as Kowloon Walled City Park have a larger greenery coverage of 87%, while areas in Hung Hom and To Kwa Wan North have a lower greenery coverage of below 20%. In general, the green coverage of public open spaces also fulfills HKPSG's standard of providing 20%-70% soft landscape in open spaces (HKPSG, 2020). However, vegetation on the street level is less satisfactory as greening is discontinued and fragmented. Also, there is a lack of trees to visually guide the pedestrians towards the open spaces and promenades nearby. Greenery is generally less incorporated in the older neighborhoods.



Figure 3.3.5: Green Coverage in Kowloon City (Source: modified from Age 0+, 2020)

Large Variety and Reliability of Public Transit Services

3.3.4. Regarding transportation, a mature public transportation system has been established with a comprehensive provision of transit services (**Figure 3.3.6**). Bus and minibuses are now the major road transport options as the bus terminus and bus stops are evenly distributed to serve more than 95% of the elderly residents within 5-minute walking distance (Age 0+, 2020). Due to the wide coverage convenience, around 70% of elderly survey respondents prefer taking buses among all transportation options. Apart from the inter-district transit options as shown in **Figure 3.3.7**, currently only residents in Whampoa and Kai Tak could utilize railway services to enjoy a higher convenience in inter-district transportation. Upon the full completion of the Tuen Ma Line in 2021, all Hong Kong Mass Transit Railway Corporation (MTR) stations including the addition of Sung Wong Toi and To Kwa Wan stations is expected to cover 75% of the elderly population within 10-minute walking distance. It is concerned that the opening of the Tuen Ma Line will reduce the number of bus routes in the inner area, Recognizing elderly's preference over road transport options, thus disrupting elderly's travel patterns.

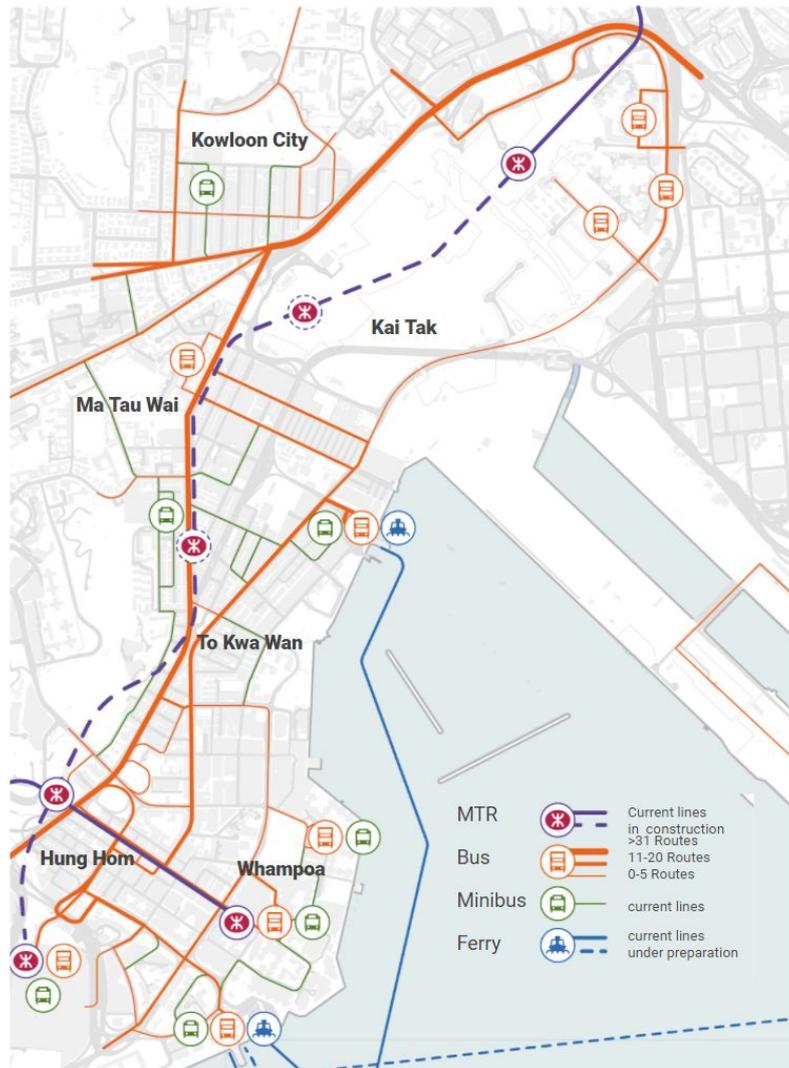


Figure 3.3.6: Transit Service in Kowloon City (Source: Age 0+, 2020)



Figure 3.3.7: Inter-district Transit from Kowloon City (Source: Age 0+, 2020)

Discontinued Waterfront at Ma Tau Kok and Hung Hom

3.3.5. The waterfront is an important blue resource in the area. Optimizing elderly accessibility and experience in the waterfront would encourage them to engage in a larger variety of active and passive recreation activities. More than 45% of the elderly could reach the waterfront within 400m, which a relatively high proximity could be enjoyed (Age 0+, 2020). Although Hoi Sham Park will be expanded in the future to coordinate with the KTD, currently the waterfront is discontinued due to the presence of 3 major blockages as shown in **Figure 3.3.8**. They include the 5 Streets & New Port Centre, To Kwa Wan Vehicle Examination Centre and the Sewage Treatment Plant and other industrial buildings. The connectivity to the future Kai Tai Promenade is still hindered in the long term. In addition, some incompatible uses against recreation such as loading and unloading activities, industrial buildings and temporary constructions are identified, lowering the tranquility and walking experience along the waterfront.

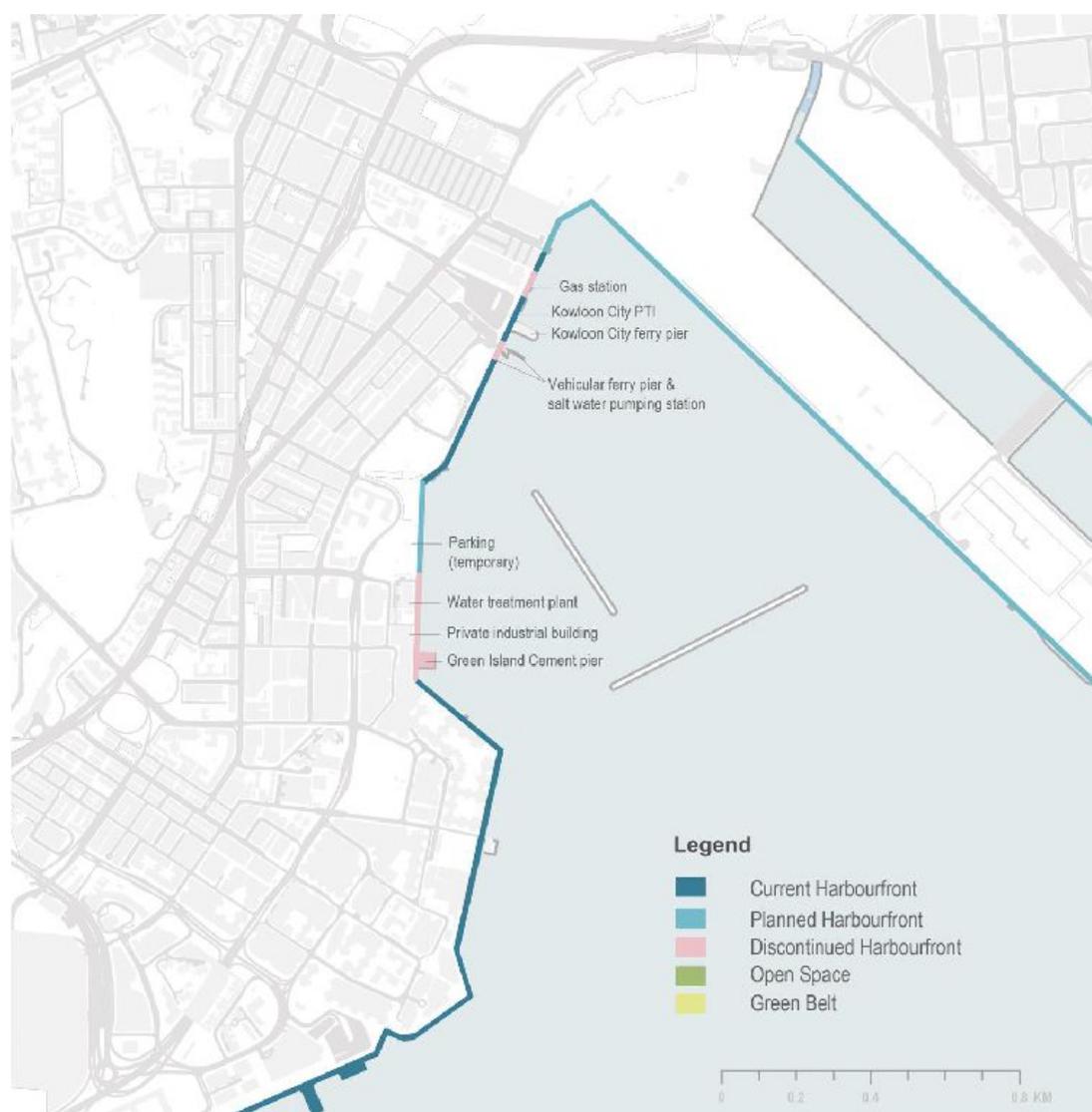


Figure 3.3.8: Disconnected Waterfront (Source: Age 0+, 2020)

3.4. Socio-Economic Aspects

Distinctive Historical and Cultural Assets

- 3.4.1. The rich historical and cultural assets, which are in both tangible and intangible forms, represent the identity and sense of belonging of the community. A total of 16 sites have been identified by the Antiquities and Monuments Office (AMO) as declared monuments, graded historic buildings, government historic sites including the Lung Tsun Stone Bridge Preservation Corridor within the study area (AMO, 2018). **Figure 3.4.1** reflects the distribution of the declared buildings and monuments in Kowloon City District. Some of them can be traced back to a history of several hundred years ago, such as the Sung Wong Toi Inscription Stone in Song Dynasty (1277 A.D.) (Fellows, 2020).
- 3.4.2. Not only do the historical assets witness the development of Kowloon City, they also constitute part of Hong Kong’s historic transformation from a small village to a contemporary international city. In addition, a series of festive events and customs are held all year round, for instance, the Opening of Kwun Yum Treasury and Tin Hau Festival in the beginning of the year, Songkran Festival and Yu Lan Festival in mid-year and Ancestral Worship of the Kwok Clan at the end of the year. The timeline of the festive events is shown in **Figure 3.4.2**. A mix of the eastern and western cultures are found in Kowloon City.



Figure 3.4.1: Declared Buildings and Monuments in the Study Area (Source: Fellows, 2020)



Figure 3.4.2: Timeline of the Festive Events in the Study Area (Source: Fellows, 2020)

Imbalanced Spatial Distribution of Healthcare Services

3.4.3. Concerning healthcare provision, it is revealed that the spatial distribution of the neighbourhood level healthcare service is imbalanced with regards to the elderly population, resulting in underserved healthcare services in some areas. Neighbourhood scale healthcare services are important to the elderly, as they could not travel for a long distance due to deterioration of their physique. More accessible neighbourhood healthcare facilities should be provided in the areas where elderly are concentrated. **Figure 3.4.3** shows the distribution of the medical service in the study area. Although most parts of the study area have been covered by the services of the general outpatient clinic (GOPC) within 10-minute walking distance, Ma Tau Kok, Ma Tau Wai, Lok Man and Ka Wai, where elderly population exceeds 20% of the total population, are not covered within the 5-minute walking distance. Furthermore, Kai Tak was underserved by the GOPC (Fellows, 2020). Nonetheless, the imbalance is expected to improve as more healthcare and medical facilities will be provided in the future KTD area.

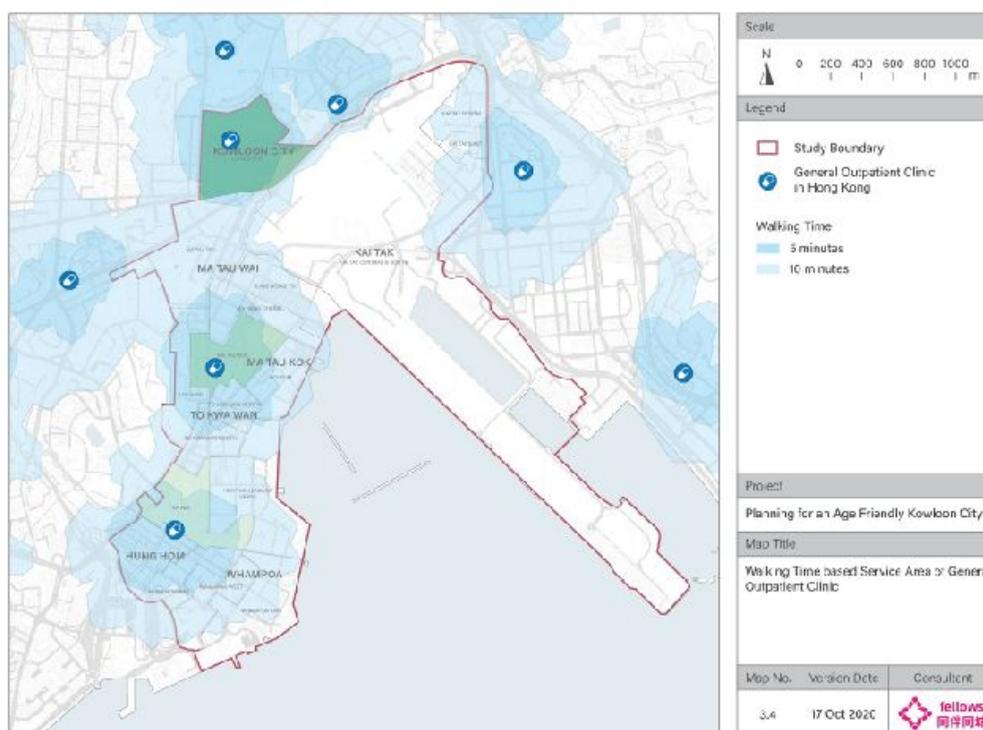


Figure 3.4.3: Location Map of Social Service for the Elderly (Source: Fellows, 2020)

Possibility to Enhance Intergenerational Interaction

3.4.4. Community cohesion and inclusiveness could be improved upon closer social and intergenerational interaction. **Table 3.4.1** shows the overall willingness and opportunities of people to have intergenerational interaction in the study area (Fellows, 2020). It is discovered that willingness for people to have intergenerational interaction in all sub-areas exceeded the opportunities provided in the community for interaction. The gap was the largest in Kai Tak, where there seemed to have fewer chances for interactions. The gaps thus presented the opportunities to encourage more intergenerational development in the study area to foster social cohesion.

Table 3.4.1: Existing Gap between Willingness and Opportunities for Intergenerational Interaction in Different Sub-areas (Source: Fellows)

Intergenerational Interaction	Overall	Kowloon City	Kai Tak	Ma Tau Wai	To Kwa Wan	Hung Hom & Whampoa
Willingness	3.59/5	3.49/5	3.60/5	3.61/5	3.56/5	3.64/5
Opportunities	3.07/5	3.08/5	2.74/5	3.13/5	3.11/5	3.15/5
Gap (Opportunities - Willingness)	(-0.52)	(-0.41)	(-0.86)	(-0.48)	(-0.45)	(-0.49)

Active Participation in Job Market

3.4.5. Finally, it is observed that there is an active participation in the job market within the study area, especially in Whampoa and Kowloon City. Currently, 77% of the residents age below 55 are active in the job market (**Figure 3.4.4**). While the percentage of working elderly in the total elderly population of Hong Kong is about 10.8%, Kowloon City District was 14% (Fellows, 2020). This reflects a slightly higher willingness for the elderly to engage in more activities after their retirement. Also, there is a high percentage of the working population engaging in social-service related industries (**Figure 3.4.5**). In view of the ageing population, it is expected that the employment demand for the healthcare industry will increase correspondingly in Kowloon City.

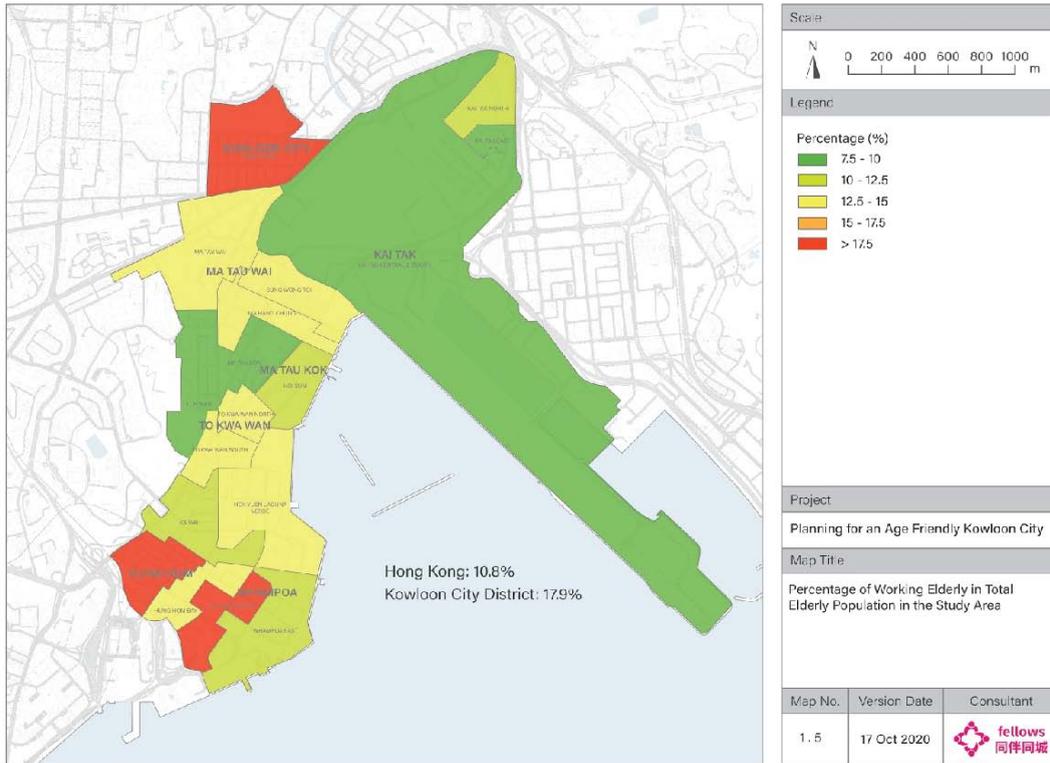


Figure 3.4.4: Percentage of Working Elderly in Total Elderly Population in the Study Area (Source: Fellows, 2020)

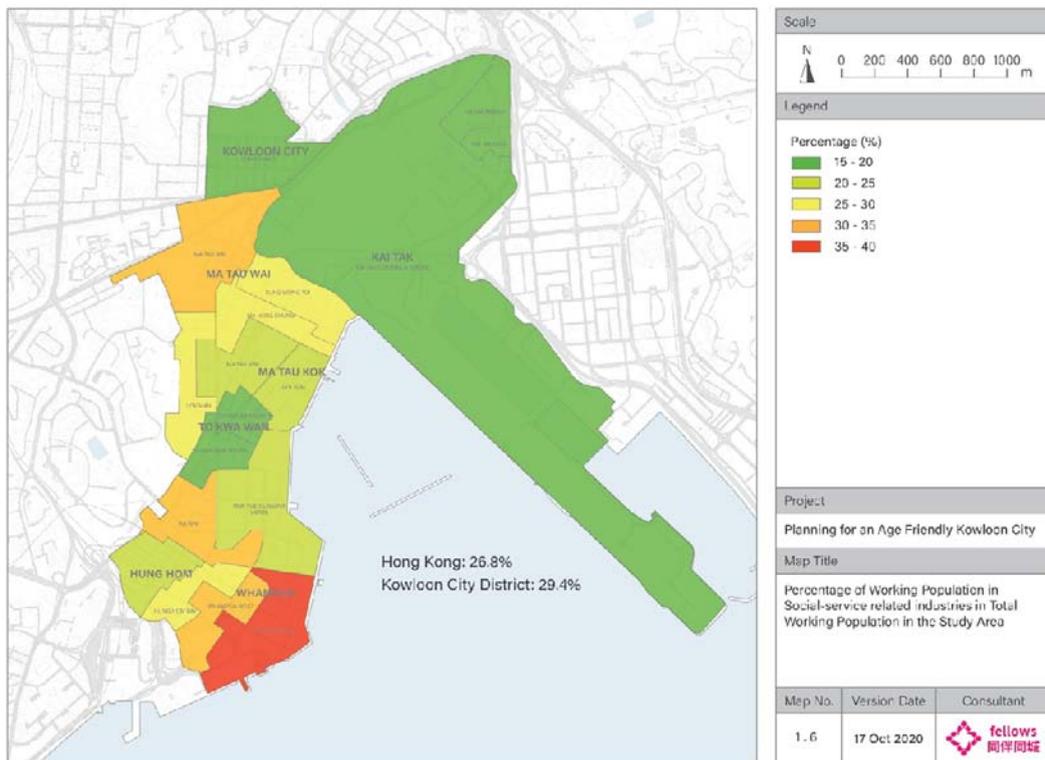


Figure 3.4.5: Percentage of Working Population in Social-service Related Industries in Total Working Population in the Study Area (Source: Fellows, 2020)

3.5. SWOT Analysis

3.5.1. In addition to the above key baseline findings, the Baseline Assessment and Evaluation Reports submitted by the study team and two other sub-consultants on the physical, environmental and infrastructure and socio-economic aspects are synthesized to produce a SWOT Analysis in **Table 3.5.1**, presenting the Strengths, Weaknesses, Opportunities and Threats in Kowloon City.

Table 3.5.1: SWOT Analysis of Kowloon City (Source: Study Team)

Strengths

- Rich historic and community assets
- Highly accessible open spaces at multiple levels which encourages outdoor recreational activities
- High variety and reliability of public transit services
- Active participation in job market particularly in social-service related activities

Weaknesses

- Imbalanced spatial distribution and insufficient service capacity in healthcare facilities
- Discontinued waterfront at Ma Tau Kok and Hung Hom with incompatible land uses
- Unsatisfactory pedestrian environment hindering walkability of the district due to poor wayfinding, narrow sidewalk, clutters and lack of lighting at night
- Inadequate universal design and access

Opportunities

- Different service provision for varied affordability level
- Possibility to enhance intergenerational interaction to fill the gap between willingness and opportunities
- Additional provision of healthcare and community facilities in Kai Tak
- Opening of Shatin-Central MTR line improves connectivity of the area to other districts
- A network of promenades is linked upon the completion of Kai Tak for the development of waterfront activities

Threats

- Double Ageing arising from ageing population and building stocks
- Opening of MTR lines will reduce the transport options available for the elderly
- Increase in vehicular flow triggers pedestrian-vehicle conflicts
- Impacts of redevelopment on property prices and community identity
- Launch of Kai Tak widens the socio-economic gaps
- Growing demands for medical services and recreational spaces due to ageing population

4. Community Engagement

4.1. Overview of Community Engagement

- 4.1.1. Community inputs are significant to facilitate the formulation of the AFCP. A 2-stage CE approach has been adopted to collect and analyse the public comments.
- 4.1.2. The approach consists of 2 main stages from September 2020 to November 2020. **Table 4.1.1** shows the dates and main objectives of the 2-stage CEs.

Table 4.1.1: Dates and Main Objectives of the 2-stage Community Engagement (Source: Study Team)

Action	Dates	Main Objectives
Roadshow and Questionnaire Survey	29/09/2020 - 04/10/2020	To collect public opinions on the existing conditions of the study area in the physical, environmental, infrastructural and socio-economic aspects as the public input of baseline studies, SWOT Analysis and the draft AFCP
Stage 2 - Community Planning Workshop	21/11/2020	To collect public comments and aspirations based on the draft AFCP, which will be considered and synthesized in the final AFC

4.2. Stage 1 Roadshow and Questionnaire Survey

- 4.2.1. Stage 1 CE consists of a roadshow and questionnaire survey from 29/09/2020 to 04/10/2020 for the collection of public opinions through both quantitative and qualitative questions set in the questionnaire. 328 valid questionnaire samples were received from the questionnaire surveys and were further used for the consolidation of the baseline review results. The extract of questionnaire survey results can be found in **Appendix 2** and the roadshow questionnaire respondent profile can be found in **Appendix 3**.



Figure 4.2.1: Photos of Stage 1 Community Engagement Activities (Source: Study Team)

4.3. Stage 2 Community Planning Workshop

- 4.3.1. Stage 2 CE consists of a community planning workshop held on 21/11/2020 for collecting public opinions on the draft AFCP. A total number of 25 participants including local residents, academia, social workers, district councillors and professional town planners attended the workshop. The Community Planning Workshop includes baseline presentation, draft AFCP presentations and focus group discussions. Focus group discussions were conducted based on the SIVs and the obtained public input had been considered and incorporated in the final AFCP.
- 4.3.2. We would like to express our sincere gratitude to all the guests for attending the Community Planning Workshop and providing us with useful feedback on the draft AFCP.



Figure 4.3.1: Promotion Poster of Community Planning Workshop (Source: Study Team)



Figure 4.3.2: Group Photo of Community Planning Workshop (Source: Study Team)

4.4. Rationales in Adopting Community Inputs

- 4.4.1. A large variety of public comments and alternative proposals have been received in the Community Planning Workshop. Instead of directly incorporating the comments, a screening process was carried out to identify the most significant and relevant comments. The screening is based on a balanced consideration on the following 4 major rationales:
- 4.4.2. First, the **significance to Age Friendliness** is considered. Fundamentally, as the study focuses on producing an AFCP, the comments that contribute to the betterment of Kowloon City's Age

Friendliness shall be prioritized. WHO’s “Age friendly City” framework is referenced to identify those relevant comments. The rationale also helps to better align the plan with its vision, so that the plan could be improved strategically.

- 4.4.3. Secondly, the **technical feasibility** is considered. It primarily assesses whether there is sufficient hardware and software to support the realization of the comments. These may include a preliminary understanding of the engineering technology, knowledge and skills that are available under the current institutional setting. Comments that are considered not technically feasible will be screened to ensure that the final plan is implementable.
- 4.4.4. Thirdly, the **financial viability** is considered. As financial resources are required in implementation, the rationale concerns the source of money, the amount, and the potential financial return as identified in the proposal. When government funding is required, the proposals shall take reference from the approved spending in the past, so that a reasonable budget could be estimated in the final plan. The financial burden in the long term shall also be bearable by the government to maintain financial sustainability.
- 4.4.5. Secondly, **cost-effectiveness** is considered. Taking into account the ratio of benefit to cost, which may not necessarily be monetary, it determines whether the expected outcomes are worth of value. The rationale is particularly important when public money is utilized, as fiscal prudence is exercised. Justification, especially on the expected societal benefits, shall be provided by the commenter when extra costs are incurred.
- 4.4.6. In light of the above 4 rationales, the relevant public comments have been identified, which they are carefully addressed and synthesized in the final AFCP. The specific public comments are presented in **Chapter 5.4-5.7** along with the proposals’ details.

4.5. Summary of Public Comments and Responses

- 4.5.1. **Table 4.5.1** summarises the key public comments, our responses and refinement to the Draft AFCP

Table 4.5.1: Comments from Community Planning Workshop (Source: Study Team)

Public Comments	Responses-to-comments
Society & Social Infrastructure	
<ul style="list-style-type: none"> ● Intergenerational interactions are idealistic but require more solutions to ensure feasibility of implementations. ● Soft programmes are required to facilitate interactions expected in the co-living proposal 	<ul style="list-style-type: none"> ● <i>Changes to plan:</i> <ol style="list-style-type: none"> a. Introduce WeCare Buddy Programme to Co-housing estate to enhance mutual support among elderly and young adults. b. Foster communal events in shared space for the neighbourhood. c. Launch shared spaces in GIC facilities to deliver community farming and self-organised community activities.
Leisure & Cultural Vibrancy	

- Community farming should be attractive to encourage elderly participation in social activities and foster intergenerational interactions.
- In view of the low mobility of elderly, more local open spaces are needed.
- Green Corridors are useful to encourage elderly activity, connection between open space and the corridors should be further explored
- *Changes to plan:*
 - a. Shared Spaces in GIC facilities will open up rooftop spaces to deliver community farming programmes to foster interactions.
- In the draft AFCP, green corridors are proposed to explore opportunities for other uses on sidewalks.
- The locations of green corridors are strategically selected according to their proximity to open spaces and pedestrian volume.
- *Changes to plan:*
 - a. 3 locations are selected on green corridors to provide linear parks and pocket spaces.

Health

- There is insufficient community resources to support elderly with dementia and their care-takers.
- In the draft AFCP, Hong Kong's first dementia wellness centre is proposed at Ma Tau Wai
- *Changes to plan:*
 - a. Introduce a dementia friendly park and walking path to create a safe environment for patients and their care-takers.

Economy

- Some elderly are knowledgeable on traditional handcrafts and food production. The plan could further explore the opportunities of that.
- In the draft AFCP, 5 streets cultural and creative incubator is introduced, providing facilities for production.

Housing

- Redeveloping PRH as co-housing might defer family applicants from getting affordable housing..
- *Changes to plan:*
 - a. Apart from young adults and elderly, families on the PRH queue are also eligible to live in the estate.
 - b. Young adults will also be prioritized based on their economic needs to ensure resources are allocated on need-based rationale.

Transport

- The elderly prefer buses and minibuses as they are more point-to-point.
- Road transport gives the elderly a stronger sense of security as they can keep oriented by looking outside of the window.
- Concerned about the reduction in road transport options upon the opening of the
- *Changes to plan:*
 - a. Circular feeder service with lower floor wheelchair accessible public light bus connecting major POIs and Medical facilities.

MTR line.

- Intra-district connectivity is important. Thus, hinterland connectivity should be further explored to better connect the proposed waterfront, as well as other POIs.
- Current bus stops are not wheelchair friendly, it is difficult to stop right next to the curb.
- Pedestrian-vehicle conflict is very severe in areas near To Kwa Wan.
- Illegal Parkings within the study area created safety concerns.
- In the draft AFCP, green corridors are proposed to enhance walkability towards the waterfront.
- *Changes to plan:*
 - a. Circular feeder service is proposed to enhance connectivity with Kai Tak.
- *Changes to plan:*
 - a. Wheelchair-friendly Bus Stop designs is introduced in the universal access and design programme
- *Changes to plan:*
 - a. Wheelchair-friendly Bus Stop designs is introduced in the universal access and design programme
 - b. Pedestrian Priority Zones with traffic calming are introduced to enhance pedestrian's right-of-way at high risk areas.

Environment

- Hygiene Problems are severe near To Kwa Wan Market. The sidewalk is slippery with a lot of trash.
- In the draft AFCP, a smart environmental monitoring app is introduced.
- *Changes to plan:*
 - a. The environmental reporting function is enhanced to facilitate prosecution.

Land Use and Infrastructure

- Concerned about the feasibility of connecting the waterfront due to fragmented private ownership.
- Development control could be exercised to implement a connected waterfront even within private lots.
- *Changes to plan:*
 - a. Plan amendment on Hung Hom OZP to add minimal requirement of the waterfront promenade.
- Arts and cultural industry should develop naturally.
- Redevelopment in 13 streets/ 5 streets would displace the organic art businesses.
- 13 streets/ 5 streets have been identified as a priority area in DURF, redevelopment would be inevitable due to the dilapidating buildings.
- The cultural and creative incubator proposal serves as a remedial measure to retain special industries within the district to prevent displacement.
- *Changes to plan:*
 - a. Concessionary rate terms added to JV contracts to ensure incubator space provided are affordable.

5. Final Age Friendly Community Plan

5.1. Vision

To build an age friendly, sustainable, smart and liveable community that enables Kowloon City dwellers to live with autonomy, health and wellbeing, social connectedness, sense of security and resilience as they age.

5.1.1. The vision of the AFCP is developed aiming to cover the different facets of life for all ages. The plan stresses on identifying opportunities in creating an age friendly environment, catering for the different needs of the residents when progressing through their life stages.

5.2. Planning and Design Principles

5.2.1. In order to achieve the above mentioned vision, 8 planning and design principles are developed (Figure 5.2.1). These principles will be the considerations guiding the planning and design for each proposal.

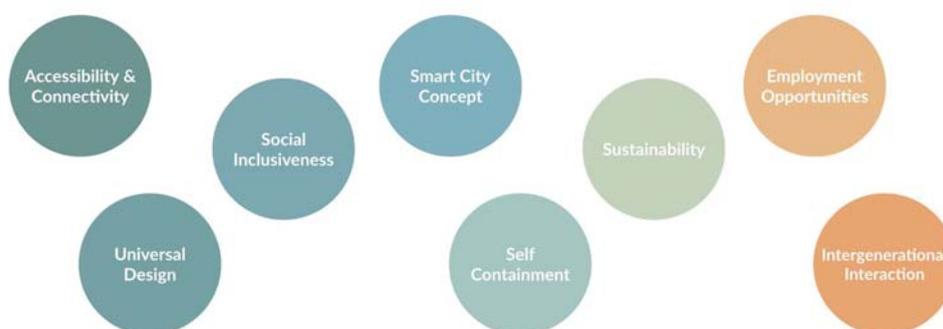


Figure 5.2.1: 8 Planning and Design Principles (Source: Study Team)

5.2.2. **Accessibility and Connectivity:** This principle ensures that users, especially elderly can conveniently reach the existing and proposed public facilities, extending the benefits and services provided by these facilities to a larger user group.

5.2.3. **Universal Design:** With the thorough adoption of universal design concepts, people with different levels of mobility can also use and enjoy the facilities provided. Universal design concepts will be adopted in all new development while improvement works towards the existing environment would be suggested.

5.2.4. **Social Inclusiveness:** The plan would be cautious in planning to optimise opportunities for all, allowing a more equal enjoyment of the benefits by people with different abilities and backgrounds. Considerations will also be integrated to minimise the diminish of local culture and displacement.

5.2.5. **Smart City Concept:** In the era of smart city, smart initiatives will be incorporated in different proposals to enhance the efficiency of public services. Moreover, the utilisation of technology can allow a higher degree of citizen engagement and effective city management.

- 5.2.6. **Self Containment:** Planning and design will also embrace the concept of self-sustained and sufficient community. Building on the strength of vertically mixed-use development found in the district with a wide range of facilities provided, a self-sustained community can also enhance the accessibility to services.
- 5.2.7. **Sustainability:** Sustainable development principles will serve as an overarching principle in all proposals to enhance the wellbeing of citizens. All three aspects of sustainability (social, economic, and environmental) should be equally considered .
- 5.2.8. **Employment Opportunities:** Apart from the immediate benefits brought by the AFCP, the extended benefits of job opportunities created will also be concerned. The provision of job opportunity for third-age is an integral part towards active ageing.
- 5.2.9. **Intergenerational interaction:** Opportunities for intergenerational interaction will be harnessed through planning and design, promoting a harmonious community with the intensification of ageing population.

5.3. Overview of Strategies and Proposals

Conceptual Spatial Framework

- 5.3.1. Through the baseline review, existing major transport and pedestrian networks were mapped out. These connections lay the foundation for the development of strategic areas and corridors. To address the identified issues and community aspirations holistically and coherently, strategic areas are drawn with respect to their locational advantages, supported with a strategic network of the connected waterfront and green corridors. Special attention has been paid in linking up the strategic network with existing open space and pedestrian networks, as shown in **Figure 5.3.1**.

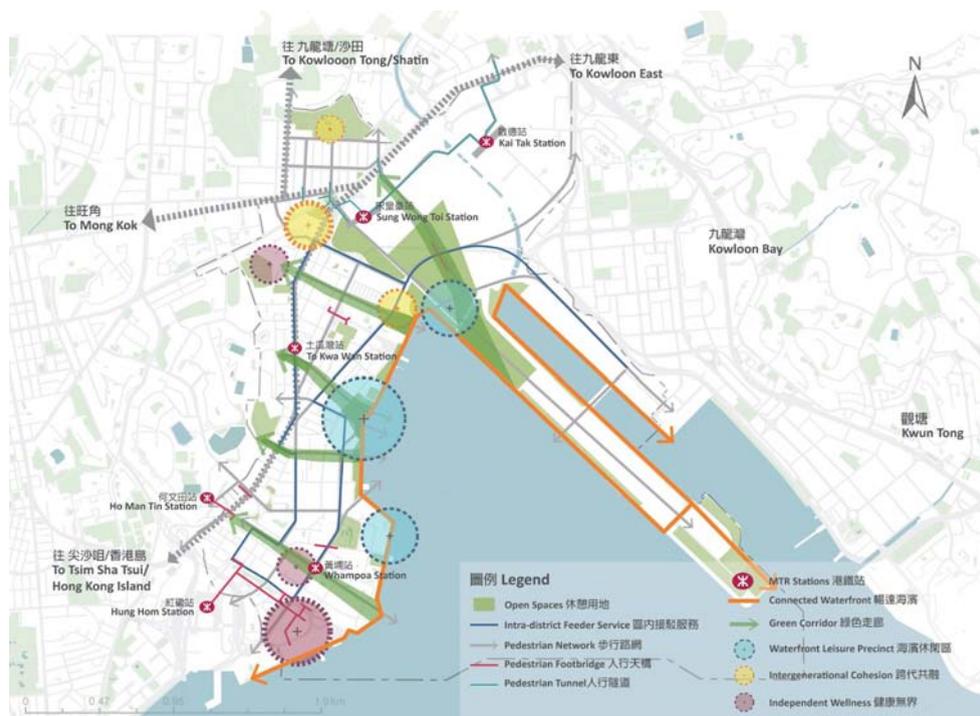


Figure 5.3.1: Conceptual Spatial Framework (Source: Study Team)

4I Strategies

5.3.2. The “4I Strategies” (Figure 5.3.2) are developed from the different facets of life outlined in the vision statement. The aforementioned strategic areas and green corridors are thus the action translating strategies into actual implementations. These 4 encompassing strategies will shape the transformation of Kowloon City District into an age friendly community to provide a more fulfilling lifestyle for dwellers.



Figure 5.3.2: 4I Strategies (Source: Study Team)

5.3.3. **Interconnected Web** () is intended to strengthen the intra-district connections and pedestrian networks. The waterfront is regarded as a major asset which the connectedness of it will be crucial for the overall pedestrian network. Connectivity of different transport modes as well as BFA will be enhanced to comprehensively construct an interconnected network.

5.3.4. **Integrative Environment** () emphasises the utilisation and improvement of environmental resources. Both physical and smart initiatives will be suggested in order to ensure the improvement in wellbeing of residents, mitigating the pollution.

5.3.5. **Intergenerational Cohesion** () tackles the conflict brought by the continuously growing ageing population in a creative way. Recognising the achievement of the elderly and introducing a combination of hard interventions and soft programmes in fostering cohesion.

5.3.6. **Independent Wellness** () is envisioned to provide a continuum of care from preventive to treatment services. It embraces the differences in individual health conditions which proposals will be tailored to the respective needs in achieving wellness as a whole community.

The Masterplan

5.3.7. The final AFCP is shown as follows (Figure 5.3.3) and an overview of the proposals is provided (Table 5.3.1). The proposals have integrated the draft AFCP with community input and 12 proposals have been put forward.



Figure 5.3.3: Final AFCP (Source: Study Team)

Table 5.3.1: Overview of Proposals for the Final AFCP (Source: Study Team)

4I Strategies	Proposals	Overview
Interconnected Web	Connected Waterfront	Linking up the fragmented waterfront
	Circular Feeder Service*	Intra-district transportation for the elderly
	Universal Access & Design Improvement	Promoting safe mobility
Integrative Environment	Green Corridor	Provision of E-W pedestrian connections with streetscape greening
	Smart Environmental Monitoring App	Smart mobility in mitigating the effects of pollution
	Intergenerational Co-Living Units	Co-living hub with soft programmes in bridging the gap between the young and old
Intergenerational Cohesion	Shared Spaces in GIC Facilities*	Utilising existing underutilised spaces for community uses
	5 Streets Cultural and Creative Incubator	Cultural hub harnessing the historical and cultural legacies of the district
	Multi-Level Healthcare Composite Building	One-stop public medical services with Hong Kong's first dementia support facility
Independent Wellness	Institution-led Specialist Healthcare Building	Provide affordable healthcare services to supplement public healthcare system
	Private-led Wellness Services	Segmenting the healthcare market for precise care services
	Dementia-friendly Park*	An enjoyable recreational space for all with special focus on elderly with dementia

* Additional proposals after Community Planning Workshop

5.4. Strategy 1 Interconnected Web

Key Issues

5.4.1. With reference to the findings of baseline study and CE, proposals of Strategy 1 aims at addressing the following key issues:

- While the population in the Study Area is ageing, the narrow and poorly maintained sidewalks with unsafe crossings could hardly cater the needs of elderly with reduced mobility. The district also lacks barrier free accesses and legible signages. Walkability in neighbourhoods such as Hung Hom and To Kwa Wan is unsatisfactory which could inhibit the willingness of the elderly to commute by walking.
- The waterfront is obstructed by the industrial buildings clusters and public service utilities at Ma Tau Kok and Hung Hom. Narrow walkway along the 5 streets cluster is also undesirable for recreational uses, serving as the gateway to Kai Tak. Physical connectivity of the waterfront should be improved for public enjoyment and better connection of the existing and planned open spaces along the waterfront.
- There is a foreseeable reduction in road-based public transit services upon the opening of SCL. Particular attention should be placed on retaining sufficient road-based services, especially last mile transit as the elderly are less familiar and feel insecure with railway services.
- Despite the strategic site selection, POIs and service provision could still remain further away from some of the elderly residents. It is needed to enhance the hinterland connectivity from streetscape and transport services perspectives to better cater user needs.

Planning Objectives

5.4.2. To address the above key issues, a series of planning objectives are proposed for Strategy 1. The proposals intend to:

- Improve intra-district and inter-district connectivity and accessibility;
- Provide and retain road transport services that are favourable for the orientation of elderly;
- Reconnect the waterfront and utilise blue resources for public enjoyment; and
- Improve universal access on the streetscape level to enhance the accessibility and mobility, particularly for the elderly.



Figure 5.4.1: Proposals of Strategy 1 Interconnected Web (Source: Study Team)

Proposal 1: Connected Waterfront

Key Community Input

- 5.4.3. During the Stage 1 CE, many respondents revealed the existing waterfront lacks attractiveness due to its discontinuity, absence of leisure and recreational facilities, as well as the undesirable environment brought by temporary works.
- 5.4.4. The consolidated findings from Stage 2 CE have acknowledged the importance of waterfront connection for better intra-district connectivity with Kai Tak, especially the proposed commercial and sports facilities cluster near the waterfront. More attractions are also required to enhance the vibrancy of the future promenade. However, some respondents are concerned about the feasibility to connect the waterfront due to the fragmented private land ownership.

Proposal Details

- 5.4.5. As there are three major obstructions along the Ma Tau Kok and Hung Hom waterfront (**Figure 5.4.2**), three recommendations are provided in Proposal 1 to reconnect the waterfront in a holistic manner. In response to the public's aspiration on the attractiveness and vibrancy of waterfront, Cultural & Celebration, Age-friendly Leisure and Lohas Wellness will be incorporated as thematic precincts with reference to the location of the planned Kai Tak Sports Park and Hoi Sham Park Extension (**Figure 5.4.3**).

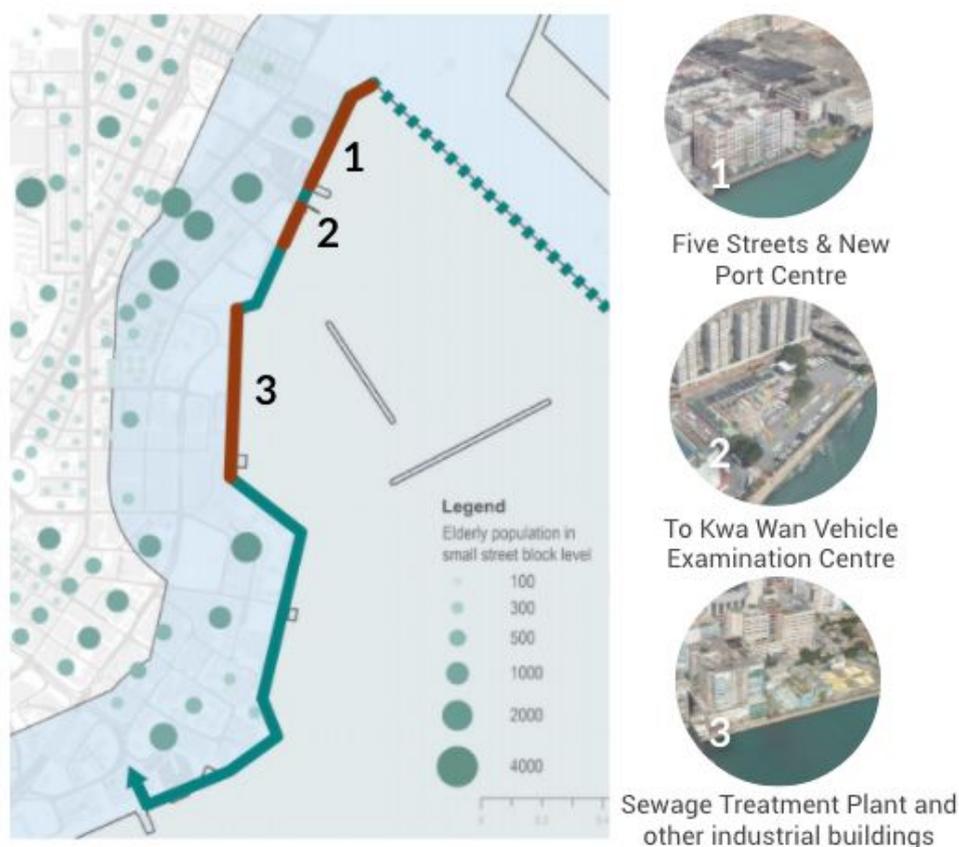


Figure 5.4.2: Location Map of Major Obstructions along the Waterfront (Source: Study Team)



Figure 5.4.3: Thematic Precincts of the Connected Waterfront (Source: Study Team)

5.4.6. **Waterfront site redevelopment:** Due to physical constraints, it is necessary to expedite redevelopment of waterfront sites including 5 Streets Comprehensive Development Area (CDA), Hilder Centre and Harbour Centre Industrial Buildings for the re-provision of waterfront access. As the public is skeptical of the government’s interference with private lots, it is important to note that the requirement of “a 20-meter wide waterfront promenade” has been stipulated on the Kai Tak OZP in the CDA zone (Figure 5.4.4). In line with the government’s initiative to enhance waterfront access along the Victoria Harbour, a plan amendment is proposed on *Hung Hom OZP* for the Hilder Centre and Harbour Centre site from “*Other Specified Use (Business)*” to “*Other Specified Use (Business)1*” (Figure 5.4.5) to include an additional remark on the provision of waterfront promenade. Plan Amendment is detailed as follows:

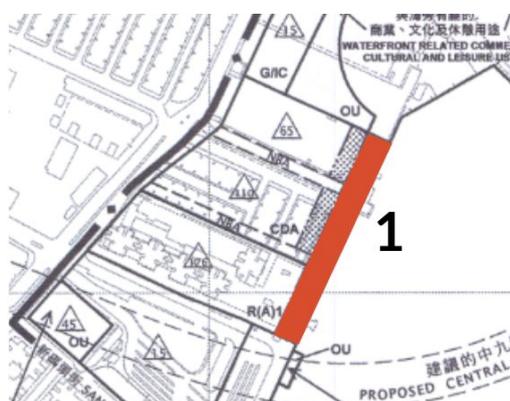


Figure 5.4.4: Waterfront Promenade designated on Kai Tak OZP (Source: PlanD)

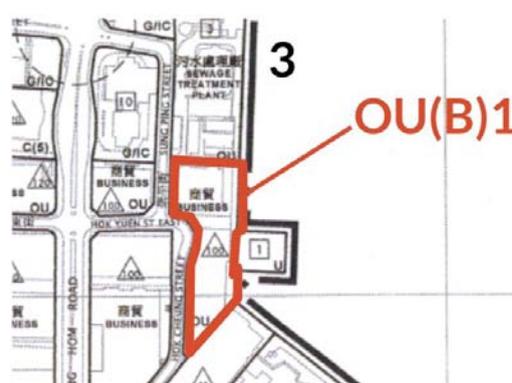


Figure 5.4.5: Plan Amendment on Hung Hom OZP (Source: PlanD)

Additional Remarks of “OU(B)” on Approved Hung Hom OZP No. S/K9/26

On land designated “Waterfront Promenade” in the “Other Specified Use (Business)1” zone, a **20m-wide promenade abutting the waterfront** shall be provided for public enjoyment purpose.

- 5.4.7. Such amendment will safeguard the provision of waterfront promenade upon redevelopment, which is expected to happen in the near future. As both of the industrial buildings on the “OU(B)1” site aged 30 years above, the government could incentivize the owners to redevelop through policy initiatives similar to the Revitalising Industrial Building Scheme.
- 5.4.8. **Green Sensory Pathway:** To Kwa Wan Vehicle Examination Centre Enhancement Works is proposed to vacate a small portion of the existing underutilised facilities for public enjoyment (**Figure 5.4.6**) Synergising with its planned Ma Tau Kok Landscape Deck under the Central Kowloon Route Project, the vacated part will be refurbished as a green sensory pathway with water features and soft landscaping that emphasise on sensory stimulation (**Figure 5.4.7**). It is anticipated that the new pathway will be a new destination attracting families with young children and the elderly.



Figure 5.4.6: Photomontage of Green Sensory Pathway (Source: Study Team)



Figure 5.4.7: Design Elements of Green Sensory Pathway (Source: Study Team)

- 5.4.9. **Intergenerational Landscape Deck:** The enhancement work of To Kwa Wan Primary Sewage Plant will provide innovative solutions to co-locate sewage and recreational facilities. Public Passage could be reconnected through the proposed multi-purpose, barrier-free landscape deck above the sewage plant (**Figure 5.4.8**). In response to public comments which anticipate a more vibrant and attractive waterfront, the proposed landscape deck will be a new intergenerational hot spot with vibrant play spaces and exercise facilities serving both children and the elderly. The elevation will also provide an alternative perspective of the adjacent Hoi Sham Park Extension and the Victoria Harbour. While **KTSPS** has proven the technical feasibility of co-location with no disruption to existing service during the construction phase, participatory design could be incorporated through inviting Non-government Organisations (NGOs) as partners. For instance, Playright and SKH Welfare Council could be potential collaborators given their experience in community design with children and the elderly.



To Hung Hom

To Hoi Sham Park Extension

Figure 5.4.8: Section of the Landscape Deck (Source: Study Team)

Local Case: Enhancement Works for Kwun Tong Sewage Pumping Station (KTSPS)



While upgrading the peak capacity to cater the growing population in Kowloon East, the enhancement work of KTSPS will incorporate a roof garden adjoining the planned Cha Kwo Ling Waterfront for public enjoyment. To invite community input, Playright was invited to design the 10,000 m² garden which will include numerous children's playgrounds, elderly gym facilities and resting pavilions (星島日報, 2020).

Planning Benefits

- 5.4.10. It has long been the Development Bureau and Harbourfront Commission's vision to provide an accessible, connected and enjoyable harbourfront for public enjoyment. With the planned Cha Kwo Ling and Kai Tak Waterfront projects, this proposal overcomes one of the major obstacles towards an inter-connected promenade, linking promenades all the way from Yau Tong to Tsim Sha Tsui (~15km). The connection would not only provide alternative inter and intra-district pedestrian links but also elevate the efforts in providing family and age-friendly recreational facilities to actualise the planned harbourfront enhancement initiatives.

Implementation Programme

- 5.4.11. Due to the uncertainty involving private ownerships, the implementation timeline of the connected waterfront is expected to be around 10-15 years, depending on the redevelopment progress in the first recommendation (Table 5.4.1; Table 5.4.2). Meanwhile, the Green Sensory Pathway and Intergenerational Landscape Deck could be materialised sooner in 3 and 6 years time as it is public works initiated by government departments (Table 5.4.3; Table 5.4.4).

Table 5.4.1: Implementation Process of Waterfront Site Redevelopment (5 Streets) (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Property Acquisition	URA	5 years	By 2025
	Preparation and Approval of URA Scheme Plan	URA, TPB, Planning Department (PlanD)	10 months	By 2022
2	Preparation and Tendering for Joint-venture Partnership	URA & Property Developers	1 year	By 2026
3	Detailed Design	URA & Property Developers	1 year	By 2027
	Demolition & Construction	Contractor Appointed by URA & Property Developer	3 year	By 2029
4	Management & Maintenance/ Surrender of Promenade to Government	Property Developer/Leisure and Cultural Services Department (LCSD)	Not Applicable (N.A.)	From 2030

Table 5.4.2: Implementation Process of Waterfront Site Redevelopment (Industrial Buildings) (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Plan Amendment	PlanD	9 months	By 2023
2	Liaise with IB Owners	PlanD, DEVB, Lands Department (LandsD), IB Owners	2 years	By 2025
3	Planning and Design	IB Owners	1 year	By 2026
4	Planning Application (If Applicable)	IB Owners, PlanD, TPB	6-10 months	By 2027
5	Demolition and Construction	Contractor Appointed by IB Owners	3 years	By 2030
6	Management and Maintenance/ Surrender of Promenade to Government	IB Owners/LCSD	N.A.	From 2033

Table 5.4.3: Implementation Process of Green Sensory Pathway (To Kwa Wan Vehicle Examination Centre Enhancement Works) (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Technical Feasibility Studies	Transport Department (TD), Architectural Services Department (ArchSD)	4 months	By 2021
2	Preparation for DC Consultation and Approval of District Minor Works Project	Kowloon City District Council (KCDC)	6 months	By 2021
3	Detailed Design	ArchSD, LCSD	6 months	By 2022
4	Construction	ArchSD	6 months	By 2022
5	Management and Maintenance	LCSD	N.A.	From 2023

**Table 5.4.4: Implementation Process of Intergenerational Landscape Deck
(To Kwa Wan Primary Sewage Plant) (Source: Study Team)**

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Technical Feasibility Studies	DSD, ArchSD	2 years	By 2023
2	Public Consultation	DSD, ArchSD, KCDC	1 year	By 2024
	Funding	Legislative Council of Hong Kong (LegCo) Panel of Financial Affairs: Funding	1 year	By 2024
3	Detailed Design	DSD, ArchSD, LCSD, Playright, SKH	1 year	By 2025
	Tendering	DSD, ArchSD	3 months	By 2026
4	Construction	DSD, ArchSD	2 years	By 2028
5	Management and Maintenance	LCSD, DSD	N.A.	From 2030

Proposal 2: Circular Feeder Service

Key Community Input

- 5.4.12. The foremost concern of the elderly expressed in the CE regarding traveling to other sub-areas remains their low mobility, which is highly restricted by the public transport availability. Moreover, dwellers in Kowloon City, especially the elderly have been relying on the mature road-transport system due to the long absence of railway in the district, thus, they still prefer more road-transport options to improve the intra-district connectivity.

Proposal Details

- 5.4.13. **North-South Connection:** The launch of the circular feeder service aims at improving the north-south connectivity of the district in a loop and forms part of the multi-modal Environmentally Friendly Linkage System as highlighted by 2020 Policy Address (**Figure 5.4.9**). A special focus is placed on the hinterland along the eastern and western edges, where the local iconic destinations, Hoi Sham Park and Ko Shan Theatre, are located respectively.



Figure 5.4.9: Circular Feeder Service Routing (Source: Study Team)

- 5.4.14. **Overcome Bottleneck to KTD:** The feeder service intends to overcome the existing bottleneck between Sung Wong Toi Road and KTD, which immensely hinders the connection between Kai Tak with other sub-areas in the district. As soon as the bottleneck between the areas is overcome, the KTD area could seamlessly integrate with the old and traditional neighborhoods.
- 5.4.15. **Medical Services at your Doorstep:** The circular feeder service runs through major destinations in the district, including major medical and healthcare centres as well as recreational destinations. The major healthcare facilities accessible from the feeder transit include the Institution-led Specialist Healthcare Building we have proposed in Hung Hom and the future planned medical cluster in KTD. On top of the medical destinations, the service also provides direct feeder towards local iconic destinations, such as To Kwa Wan Market.
- 5.4.16. **Better Utilize the Planned Community Facilities in KTD Area:** It is also acknowledged that there will be an ample amount of community facilities to be offered in KTD in the near future. Instead of erecting additional GIC composite buildings for community and social facilities, it is believed that once the connection between KTD area and other sub-areas is improved, Kowloon City dwellers are able to enjoy more quality facilities there. Thus, these planned facilities could thus be better utilized while additional institutional resources could be alternatively used to fill the existing service gap.
- 5.4.17. **Lower Floor Wheelchair Accessible Public Light Bus:** The feeder service would operate under the public light bus system, with the newly designed lower floor wheelchair accessible public light bus as shown in Figure 5.4.10. The wheelchair accessible design is featured for audiences with lower mobility in order to raise their willingness to venture out.



Figure 5.4.10: Lower Floor Wheelchair Accessible Public Light Bus (Source: info.gov.hk)

Planning Benefits

5.4.18. Kowloon City has long been served by a mature road-transport system, including franchised bus and minibus services, yet, the majority is worried about the gradual reduction in road-transport services with the opening of SCL. Not only will this proposal contribute to the enhancement of the road-transport system and the last mile transit, the bottleneck between KTD area and other sub-areas in the district could also be overcome and maximize the usage of the planned community facilities in Kai Tak.

Implementation Programme

5.4.19. The circular feeder service would be a quick win to the Kowloon City community, as it could be put into service in the next 2 years, as soon as the TD completes the consultation with KCDC Transport Committee and relevant stakeholders, followed by the tendering of operation (Table 5.4.5).

Table 5.4.5: Implementation Process of Circular Feeder Service (Source: Study Team)

Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1 Public Consultation	TD, KCDC Transport Committee, Home Affairs Department (HAD), Hospital Authority (HA)	1 year	By 2021
2 Tendering for Operation	TD	2 months	By 2021
3 Submission of Routing	Successful Public Light Bus Tenderer	1 month	By 2022
4 Approval of Routes/Issuance of License (If Necessary)	TD	2 months	By 2022
5 Feeder Service Put into Service	Successful Public Light Bus Tenderer	N.A.	By 2022

Proposal 3: Universal Access and Design Improvement

Key Community Input

- 5.4.20. The public agrees that there is still room for improvement in Kowloon City, particularly for the elderly and disabled users. In specific, it is concerned that some public facilities, such as bus stops, fail to cater the needs of wheelchair users. Currently, ramps are extendable from most of the bus fleets for boarding. Yet, it is reflected that the queues and occasionally the crowding of pedestrians at the bus stops block the ways of wheelchair users, which increases the risk of collisions on the sidewalk. In addition, illegal parkings on both sides of the road posed potential threats to pedestrian safety, as they block the visibility of pedestrians. Elderly and disabled persons, possessing lower mobility level and response, are the vulnerable road users. In view of the elderly-related grade-crossing accidents in Kowloon City, the public hence restated the necessity to combat illegal parkings.

Proposal Details

- 5.4.21. **Demand-led universal access programme:** universal access improvement in the public area should be expedited. Adopting the demand-led scheme of *Hillside Escalator Links and Elevator Systems*, regular channels would be set up for the public to apply for universal access improvement in certain locations based on their demands. After the need-based assessment, technical and feasibility studies will be conducted. The design proposal would proceed to construction after the funding required is approved. After construction, the public could provide their feedback to evaluate the effectiveness of the modification and for better monitoring. The programme would help to fill the blind spots in the existing provision of universal access.

Similar policy: Hillside Escalator Links and Elevator Systems (HEL)



Following the 2017 Policy Address to make Hong Kong a more walkable city, the HEL scheme was launched in 2009 with the aim to enhance the connectivity and accessibility of hillside areas and major transport facilities by building pedestrian facilities such as escalators and elevators upon the requests of the public. Initial screening and scoring for prioritization were applied on the proposals. 18 HEL proposals were suggested and 5 have been implemented. The government is responsible for all construction and maintenance costs (Source: Legco, 2019).

- 5.4.22. For instance, the designs for Barrier Free Access (BFA) could be improved by the programme through expediting the provision of ramps and handrails, meeting the requirements recommended in the Design Manual for BFA. For instance, BFA is insufficient in older public housing estates like Ma Tau Wai Estate. Handrails and ramps shall be added to aid the accessibility of wheelchair users as shown in **Figure 5.4.11**. This proposal promotes a comprehensive review of the BFA provision of all public premises with a priority on public housings, so that modification works and building retrofitting could be facilitated.

5.4.23. For private residential buildings, subsidized rehabilitation schemes promulgated by URA such as Common Area Repair Works Subsidy and Operation Building Bright 2.0 shall be further promoted.

5.4.24. **Wheelchair-Friendly Bus Stop Design:** In response to the concerns on bus stop designs, the proposal suggests retrofitting existing bus stops by the addition of handrails, seatings and a designated wheelchair area as shown in **Figure 5.4.12**. The inclusive design would help to improve the safety for wheelchair users while they are waiting for buses.



Figure 5.4.11: Re-provision of BFA in Ma Tau Wai Estate (Source: Study Team)



Figure 5.4.12: Wheelchair-friendly Bus Stop Designs (Source: Study Team)

5.4.25. **Improve BFA to Tin Kwong Road Recreation Ground:** Due to the level difference in gradients, currently visitors must climb long and steep staircases, which discourages the elderly and disabled persons from using the recreational facilities. A footbridge with lift is recommended to be built to connect the redeveloped Ma Tau Wai Estate at the south of the recreation ground as shown in **Figure 5.4.13** and **Figure 5.4.14**. Not only does the footbridge benefit the disabled users, it also improves the general accessibility of Tin Kwong Road Recreation Ground, so that the major open space in the neighborhood could be easily enjoyed by all users.



Figure 5.4.13: Illustration of the Proposed Footbridge with Lift Connecting Tin Kwong Road Recreation Ground (Source: Study Team)



Figure 5.4.14: Location Map of the Proposed Footbridge with Lift Connecting Tin Kwong Road Recreation Ground (Source: Study Team)

- 5.4.26. **Improve the wayfinding facilities:** As assessed, the monotonous design of signages is not favourable to elderly with memory loss and dementia. It is recommended that colourful, simple and clear signages accompanied by universal symbols should be placed near the major social and municipal facilities, such as municipal buildings to assist way finding. Elderly friendly smart apps with simple layout could also be tailor made in Kowloon City for simple navigation.
- 5.4.27. **Pedestrian priority zones:** According to the traffic black spots, two priority zones near Ma Tau Wai Estates and To Kwa Wan Market are designated as indicated in **Figure 5.4.15**. Speed limit, speed kerbs and road widening are adopted in the zones for traffic calming, hence creating a safe, pedestrian-friendly environment for all users (**Figure 5.4.16**). To combat the illegal parking problem, apart from stricter enforcement, more public parking spaces shall be provided in the long term to solve the root cause. As illustrated in **Figure 5.4.15**, new car parks will be provided in the redeveloped Government/Institutional, Community (G/IC) lots. Furthermore, future private redevelopment shall also be required to provide extra public vehicle parking spaces higher than the HKPSG standard.



Figure 5.4.15: Location Map of Proposed Pedestrian Priority Zones (Source: Study Team)



Figure 5.4.16: Traffic Calming Measures in Proposed Pedestrian Priority Zones (Source: Study Team)

Planning Benefits

5.4.28. Ultimately, the proposal would improve the pedestrian accessibility to public facilities, which the special needs of elderly and the disabled persons, especially wheelchair users, could be taken care of. The improvement in wayfinding helps to eradicate elderly’s difficulties in independent mobility and to encourage active transport among elderly. The proposal is also expected to promote safe mobility through reducing potential vehicle-pedestrian conflicts arising from illegal parkings. Apart from designing a more inclusive pedestrian environment, long term solutions are in place to resolve parking space shortages.

Implementation Programme

5.4.29. With reference to **Table 5.4.6**, a coordinated effort will be required from the Highways Department (HyD), TD and CEDD to design, construct and manage the BFA improvement works. The medium term proposal is expected to be in operation from 2027. **Table 5.4.7** shows the implementation for the pedestrian priority zones, which will demand more feasibility and consultation led by TD and PlanD. Operation is expected to commence in 2025.

Table 5.4.6: Implementation Process of Improvement Works for Barrier Free Access and Wayfinding (Source: Study Team)

Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1 Planning and Design for Universal Access Improvement	ArchSD, CEDD, HyD	2 years	By 2022
2 Funding	LegCo Panel on Financial Affairs: Funding	1 year	By 2023
3 Tendering for New Bus Stop	TD	1 year	By 2023
4 Construction	CEDD, HyD, Housing Authority (HA), TD	2 years	By 2025
5 Management and Maintenance	CEDD, HyD, HA, TD	N.A.	From 2026

Table 5.4.7: Implementation Process of Pedestrian Priority Zones (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Feasibility Study	TD, PlanD	1 year	By 2021
2	Public Consultation	TD, PlanD, KLDC	1 year	By 2022
3	Funding	LegCo Panel of Financial Affairs: Funding	1 year	By 2023
4	Minor Road Modification Works	HyD, TD	1 year	By 2024
5	Operation	TD	N.A.	From 2025

5.5. Strategy 2 Integrative Environment

Key Issues

5.5.1. With reference to the findings of baseline study and CE, proposals of Strategy 2 aims at addressing the following key issues:

- The open spaces in the district are fragmented and require better physical linkages as well as visual guidance to reinforce active ageing by improving the accessibility of the elderly to open spaces.
- Surrounded by highly-dense ageing buildings, the built-up environment in the district tends to be monotonous in general. They lack well-designed functional open spaces to cater the elderly residents' variety of leisure needs. The aesthetics of streetscape should be improved to bring vitality and dynamics to streets.
- In addition to the overall uneven green coverage in the district, it has also been observed that there is a lack of sufficient and continuous allee-trees to provide shade for pedestrians enhancing the comfort of the walking environment.
- On streets with high vehicular traffic volume, the carbon emissions from congested vehicles aggravate the heat island effect in the districts, posing health threats for the public.

Planning Objectives

5.5.2. To address the above key issues, a series of planning objectives are proposed for Strategy 2. The proposals intend to:

- Enhance the community's physical accessibility and visual guidance to public open spaces;
- Provide new attractive open spaces that facilitate active and passive recreational uses on street level;
- Improve pedestrian's comfort of walking in the district;
- Increase natural ventilation and mitigate air pollution to ensure public health; and
- Integrated planning for sustainable environment, universal access and smart city development.



Figure 5.5.1: Proposals of Strategy 2 Integrative Environment (Source: Study Team)

Proposal 4: Green Corridor

Key Community Input

- 5.5.3. It was identified in Stage 1 CE that 61% of elderly respondents visited open space on a daily basis. However, according to the respondents, the current environment was not satisfactory due to the challenging walking environment as well as the general poor accessibility and unpleasing hygiene condition of open spaces.
- 5.5.4. During Stage 2 CE, respondents highlighted the importance of connecting the current fragmented open spaces and echoed to the proposed idea of adopting green corridors in the district. The possibility of creating new functional community open spaces out of vacant or forgotten spaces were also raised by the respondents. In terms of streetscape, some respondents expressed their concerns over the challenging experience of wheelchair users at bus stops and the safety threats to pedestrians caused by illegal parking.

Proposal Details

- 5.5.5. Five green corridors are proposed to connect the key open spaces from the waterfront to the inner streets in line with the prevailing wind direction of the district as shown in **Figure 5.5.2**. The green corridors will not only act as a visual guidance for residents to enjoy the blue-green resources but also wind corridors where breezeways will be created through inter-linked open spaces and enhance the ventilation of the district.

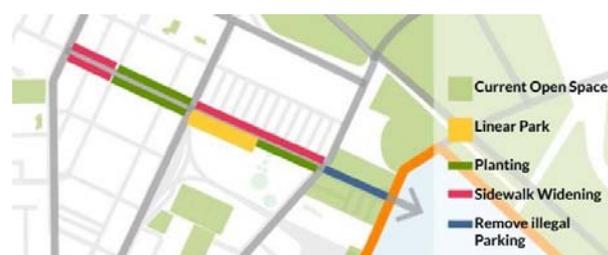
5.5.6. The five suggested green corridors will widely cover the five districts of Kowloon City including:

- ① Kai Tak Metro Park to Lung Shing;
- ② Kowloon City Ferry Pier Promenade to Ma Tau Wai Estate;
- ③ Hoi Sham Park to To Kwa Wan Market;
- ④ Hoi Sham Park Extension to Ko Shan Theatre;
- ⑤ Whampoa Promenade to Ho Man Tin MTR station.

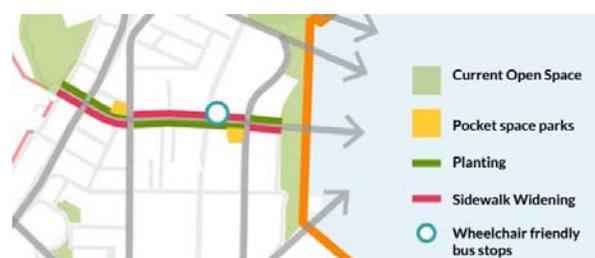
5.5.7. To establish the green corridors, it fundamentally depends on three street-scale interventions with pedestrian-friendly design features, including sidewalk widening & bus bulbs, greening & shading as well as linear parks & pocket spaces. The indicative plans of street-scale interventions of green corridors at Ma Tau Wai, To Kwa Wan and Whampoa are illustrated in **Figure 5.5.3**.



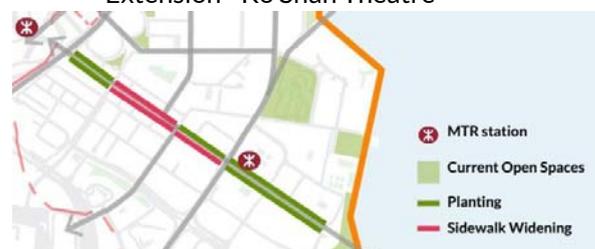
Figure 5.5.2: Proposed Five Green Corridors
(Source: Study Team)



(a) Green Corridor 2: Kowloon City Ferry Pier Promenade - Ma Tau Wai Estate



(b) Green Corridor 4: Hoi Sham Park Extension - Ko Shan Theatre



(c) Green Corridor 5: Whampoa Promenade - Ho Man Tin MTR station

Figure 5.5.3: Indicative Plans of Green Corridors
(Source: Study Team)

5.5.8. **Sidewalk Widening & Bus Bulbs:** The first intervention is to widen sidewalks in sections with high pedestrian volumes to enhance pedestrian comfort and enhance universal access for pedestrians with reduced mobility. An ideal minimum of 3.5m sidewalk width is suggested to be appropriate for providing comfortable walking experience according to the HKPSG. Given the highly-dense environment of the district, the sidewalk widening can be firstly implemented along the green corridors where the existing sidewalks width are below 2m standard. Through “lane diet”, the space of sidewalks can be freed up to create more street furniture and streamlined access to bus stops (Figure 5.5.4).

5.5.9. In response to the concerns over the design of the current bus stops as detailed in Chapter 5.4, potential locations for adopting wheelchair-friendly bus stops along the green corridors are identified in line with the sidewalk widening intervention. Additionally, bus bulbs located at the extension of the curb can provide extra space for passengers to wait for buses under shelters without taking up the space of sidewalks (Figure 5.5.5). Bus bulbs can also be designed with amenities such as plantings and wayfinding maps catering needs of both the transit users and the pedestrians.

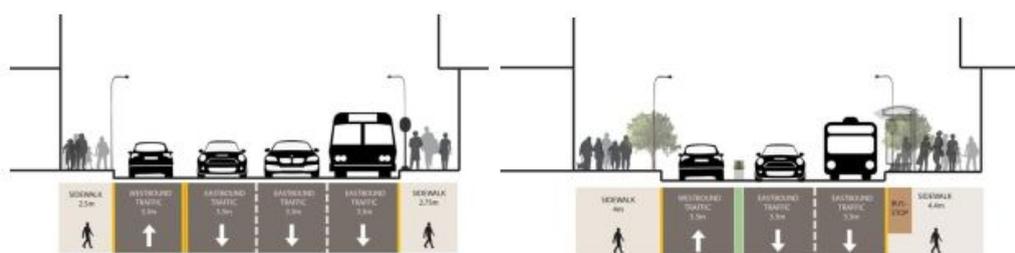


Figure 5.5.4: Section of Sidewalk Widening at Wuhu Street in Green Corridor 5
(Left: before intervention; Right: after intervention) (Source: Study Team)



Figure 5.5.5: Photomontage of Bus Bulbs along with Sidewalk Widening at
Wuhu Street in Green Corridor 5
(Left: before intervention; Right: after intervention) (Source: Study Team)

5.5.10. **Greening & Shading:** Due to the limited building setbacks and street width, there is limited plantation on the streets currently. With the introduction of sidewalk widening, allee-trees can be planted to provide shading for pedestrians at sections where shading is currently absent (Figure 5.5.6). According to the public, illegal parking can be commonly found at Ma Tau Kok near the waterfront, which greatly undermines pedestrian’s safety. As stressed in Proposal 3, illegal parking can be gradually removed from streets along the green corridors with the

provision of new car parks. Thus, the removal of illegal parking can provide new opportunities for increasing green coverage on streets (**Figure 5.5.7**).



Figure 5.5.6: Photomontage of Sidewalk Planting in Green Corridor 3
(Left: before intervention; Right: after intervention) (Source: Study Team)



Figure 5.5.7: Photomontage of New Planting after Removing Illegal Parking in Green Corridor 2
(Left: before intervention; Right: after intervention) (Source: Study Team)

- 5.5.11. **Linear Park & Pocket Spaces:** With regards to the public's desire of adding small-scale parks to the current open spaces network, vacant or forgotten places, green corridors can be better designed and utilised as linear parks or pocket spaces. New linear parks and pocket spaces will be designed as intermediate stops providing resting amenities to better cater the needs of the elderly. Opportunity for linear open spaces near the Cattle Depot Artist Village in the Green Corridor 2 is identified. As shown in **Figure 5.5.8**, The linear park will provide new extended seating area and intergenerational fitness facilities with plantings.
- 5.5.12. New pocket spaces as well as upgrading the existing pocket spaces can be implemented in the Green Corridor 4 connecting the extension of Hoi Sham Park and the Ko Shan Theatre (**Figure 5.5.9**). The pocket space can be designed as a social gathering point and a resting garden for the local residents by providing a sheltered seating area. Information boards can be integrated into the pocket spaces near pedestrian crossing, providing signage guidances to the pedestrians.

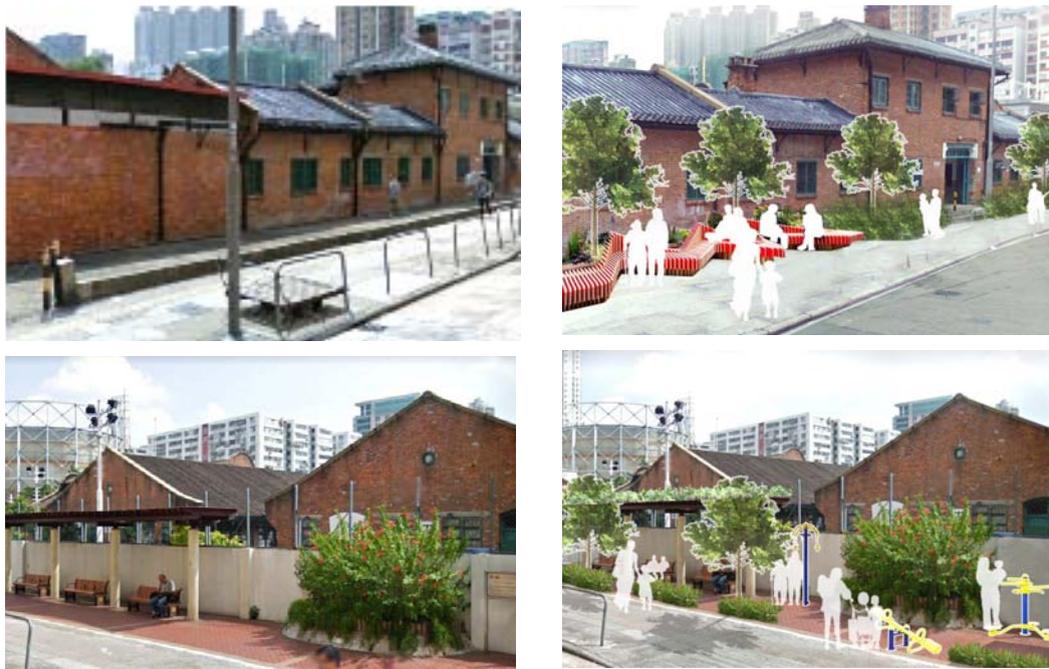


Figure 5.5.8: Photomontage of New Linear Park near Cattle Depot Artist Village in Green Corridor 2 (Left: before intervention; Right: after intervention) (Source: Study Team)



Figure 5.5.9: Photomontage of Upgrading Existing Pocket Space in Green Corridor 2 (Left: before intervention; Right: after intervention) (Source: Study Team)

Planning Benefits

5.5.13. To summarise, the proposed green corridors will improve the community's accessibility to a series of continuous and functional open spaces in different scales to cater the needs of the elderly. The proposal can also contribute to improve the overall environmental quality and mitigating the urban heat island effect in the high-density district by increasing green coverage at street-level and enhancing natural ventilation into the hinterland area. It is also foreseeable that the green corridors can function as an exemplar to demonstrate the benefits of street-scale interventions in providing a comfortable walking environment.

Implementation Programme

5.5.14. The implementation of green corridors ranges from short term to long term. Major works have to be done in assessing the feasibility and traffic impact, it is expected that construction works for road widening can commence as early as in 2023. In Whampoa, as it involves private road sections, negotiations between the Whampoa Garden is required for the resumption of private road sections. Given the incremental process in fully realising green corridors, improvement works would first kickstart in upgrading existing and providing new pocket spaces.

Table 5.5.1: Implementation Process of Green Corridors (Source: Study Team)

Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1 Planning and design for pocket spaces/linear parks	LCSD, KCDC and HyD	1 year	By 2021
2 Inspection and Negotiation with Whampoa Garden	TD, HyD and Whampoa Garden	2 years	By 2022
3 Inspection, traffic trial and TIA	TD	2 years	By 2023
4 Handover to HyD and commence construction	TD and HyD	N.A	By 2023
5 Construction	HyD	2 years	By 2025
6 Partial operation of Green Corridors	TD and HyD	N.A	From 2026
7 Resumption of private road in Whampoa Garden	TD, HyD and Whampoa Garden	N.A	By 2029
8 Handover to HyD and commence construction	TD and HyD	N.A	By 2030
9 Construction	HyD	2 years	By 2031
10 Full operation of Green Corridors	TD and HyD	N.A	From 2031

Proposal 5: Smart Environmental Monitoring App

Key Community Input

5.5.15. The proposal is to develop a smart environmental monitoring app for the elderly. The public is generally interested in the concept of making use of smart technology in assisting elderly wayfinding and getting notifications regarding environmental health. However, the public is also worried that the elderly may have difficulties in learning and adapting to smart technology.

Proposal Details

5.5.16. For integrating the smart technology into building an age friendly Kowloon City, a smart environmental monitoring mobile app is introduced.

5.5.17. **Notifications on the surrounding environmental health:** The app makes use of the real-time Air Quality Health Index (AQHI) level released by the Environmental Protection Department (EPD) and the locational services of the smartphone to illustrate the real-time environmental

conditions surrounding the user. When the AQHI level is over 4, a notification will be pushed to the smartphone for recommending the mitigation measures of poor air quality (Figure 5.5.10).



Figure 5.5.10: Feature 1 - Notifications on the Surrounding Environmental Health (Source: Study Team)

5.5.18. **Route suggesting services:** By collaborating with different departments in the government, different street-level data and information such as AQHI, footbridges, safe crossings, street vibrancy, topography and other factors affecting the walkability will be integrated in the app. These data will be analysed, thus suggesting the best travelling routes to the users. As we are targeting elderly users who have relatively lower mobility levels, the suggested routes will be mostly flat, with safe crossings, less problematic traffic conditions and with better air quality (Figure 5.5.11). The users can also personalise their selection criteria in the route suggesting services.



Figure 5.5.11: Feature 2 - Route Suggesting Services (Source: Study Team)

5.5.19. **Augmented Reality (AR) wayfinding:** It is considered that the traditional map apps are hard for the elderly to navigate, thus introducing AR wayfinding with the route suggesting features will provide a better user experience for easier way finding. AR wayfinding can allow the elderly users to integrate the virtual map with the actual environment (Figure 5.5.12). The signage and street names will be shown on the screen. Taking the deteriorating eyesight of elderly as one of the design considerations, word enlargement and voice navigation features will be offered.



Figure 5.5.12: Feature 3 - AR Wayfinding (Source: Study Team)

5.5.20. **Environmental reporting:** The app allows the public to report environmental issues like poor hygiene or environmental destruction. By filling in an easy e-reporting form with photos attached (Figure 5.5.13), the users can assist the prosecution authorities such as Food, Environmental Hygiene Department in maintaining better street conditions and formulating a comfortable walking experience. Other features like 48-hours environmental forecast will also be introduced after the release of the app.

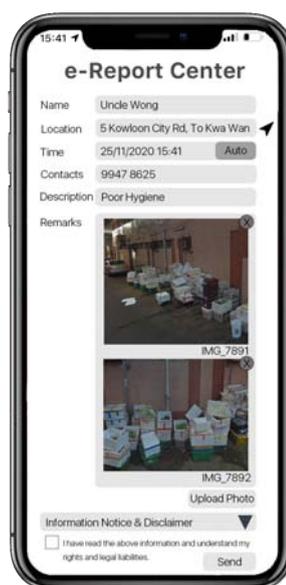


Figure 5.5.13: Feature 4 - Environment Reporting (Source: Study Team)

5.5.21. **Training for elderly:** It is noticed that some elderly are new to smartphone and mobile apps, free training programmes and free workshops will be offered under the collaboration between the district council, community centres and NGOs like Hung To Alliance and Lok Sin Tong. It is expected that the elderly can learn some basic knowledge about smartphone and mobile apps.

Planning Benefits

5.5.22. First, development of the smart environmental monitoring app can give alerts to the public regarding the surrounding environmental conditions and let them plan their journey that is the best for their health and well-being. Also, the app is the product under the collaboration of many departments in the government, allowing the public to use one app for all-purpose and receiving governmental information. This creates a more convenient and direct communication platform between the government and the elderly. Moreover, these free smartphone and mobile apps workshops not only teach the elderly to use the app smoothly, but serve as a “long-term investment” helping them to cope with the changes in the technological era. Through educating them on the use of smartphones, the elderly can thus communicate with the new generation in the digital ages, enhancing the intergenerational relationships in the long run.

Implementation Programme

5.5.23. The implementation of the smart environmental monitoring app requires the collaboration between different departments in the government, the government will be responsible for app development, funding and data provision. Before the official launch of the app, NGOs and the public will be invited to comment on the app for optimizing the app. Innovation and Technology Bureau (ITB) will integrate the comments and modify the app accordingly in order to suit the public aspiration. The app will approximately be released to the app stores by 2026 and will be updated continuously to accommodate the ever changing environment (**Table 5.5.2**).

Table 5.5.2: Implementation Process of the Smart Environmental Monitoring App (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	App Design and Tendering	Office of the Government Chief Information Officer (OGCIO) and ITB	1 year	By 2022
2	Public Engagement	ITB	0.5 year	By 2022
3	Funding	LegCo Panel of Financial Affairs: Funding	1 year	By 2023
4	Data Provision	Various Departments But Not Limited to EPD, TD, LandsD, PlanD, Social Welfare Department (SWD), HA, LCSD	N.A.	By 2023
5	App Development	ITB	1 year	By 2024
6	Public Commenting and App Optimisation	NGOs like Jockey Club Design Institute for Social Innovation (JC DISI), Smart City Consortium (SCC) etc. and public	1 year	By 2026
7	Launching of App and Further Management	ITB	N.A.	From 2026

5.6. Strategy 3 Intergenerational Cohesion

Key Issues

5.6.1. With reference to the baseline findings and CE, the proposals of strategy 3 aim at addressing the following issues:

- Double ageing arising from ageing population and dilapidation of buildings, since 70% of buildings are of age 50 years or above and more than 20% of the population are elderly. The ageing built environment could not cater to the growing needs of the residents when they age. The trend is also obvious among PRH estates;
- Limited interfaces between the young and old residents are offered within the community. There are insufficient physical settings and activities to facilitate communication and mutual learning among people of different ages;
- The disparity in socio-economic status and housing affordability might be increased across Kowloon City upon the launch of new developments in KTD;
- Diminishing cultural and historical assets due to redevelopment and the inconsistent efforts to conserve, maintain and pass on the knowledge and values;
- Absence of new business drivers results in limited employment opportunities. New businesses are expected to concentrate near KTD with negligence in the older urban districts.

Planning Objectives

5.6.2. In order to enhance the intergenerational cohesion of the Kowloon City, the proposals of strategy 3 aim to:

- Stimulate Intergenerational interaction through co-location of quality housing for different age groups;
- Strengthen community support by generating shared space and access to social resources;
- Rejuvenate the inheritance of cultural heritage and industrial legacy; and
- Create employment opportunities with a focus on third-age employment.



Figure 5.6.1: Proposals of Strategy 3 Intergenerational Cohesion (Source: Study Team)

Proposal 6: Intergenerational Co-living Units

Key Community Input

- 5.6.3. The public is generally interested in the concept of intergenerational living, as it is a rather innovative housing concept in Hong Kong. Despite the positive responses, some practical concerns are raised. First, they are worried that redeveloping PRH into a co-housing estate might reduce the chance for family applicants to be admitted to affordable housing since the co-living flats might primarily target young adults and elderly. Besides, it is concerned the different habits and customs of the elderly and younger residents may result in more conflicts. The public questioned if any measures will be in place to prevent and resolve these potential conflicts.

Proposal Details

- 5.6.4. The major reason to select Chuen Seen Mei Chuen is that it is an old public housing estate with more than 50 years of building age (Hong Kong Housing Society [HKHS], 2020). With a high elderly population, it is also identified with prevalent double ageing issues in the baseline study. In the Chief Executive's 2018 Policy Address, the government had decided to facilitate HKHS in redeveloping Chun Seen Mei Chuen (The Government of the Hong Kong Special Administrative Region [HK Government], 2018). Furthermore, the site is located near the future Sung Wong Toi MTR Station as shown in Figure 5.6.2 (MTR, 2013). The proximity to the MTR station will provide convenience to the young residents and families for transportation. The site hence has the potential to be redeveloped into a co-housing estate.

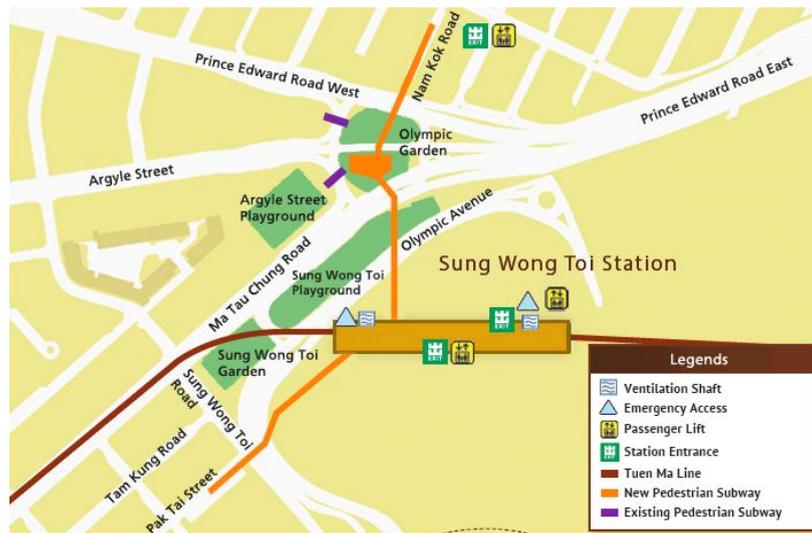


Figure 5.6.2: Location Map of the Future Sung Wong Toi MTR Station (Source: MTR, 2013)

5.6.5. **Quality Individual Lodging:** in view of the expensive rent in the market and to satisfy the young adults' need for independent living, the co-living estate will provide individual lodging with quality private living space to the young adults at 60% of the market rent, which is a more affordable price (Figure 5.6.3). Correspondingly, young adults must commit to accomplishing 20 elderly service hours per month in the estate.

5.6.6. **“WeCare Buddy Programme”:** To reduce the possible conflicts arising from the age gaps, the programme will be introduced to invite all residents-to-be to undergo a personality assessment. An elderly and a young resident will be paired up to encourage mutual support in their daily living. The buddy pairs are also encouraged to spend time together at the shared facilities in the estate as shown.

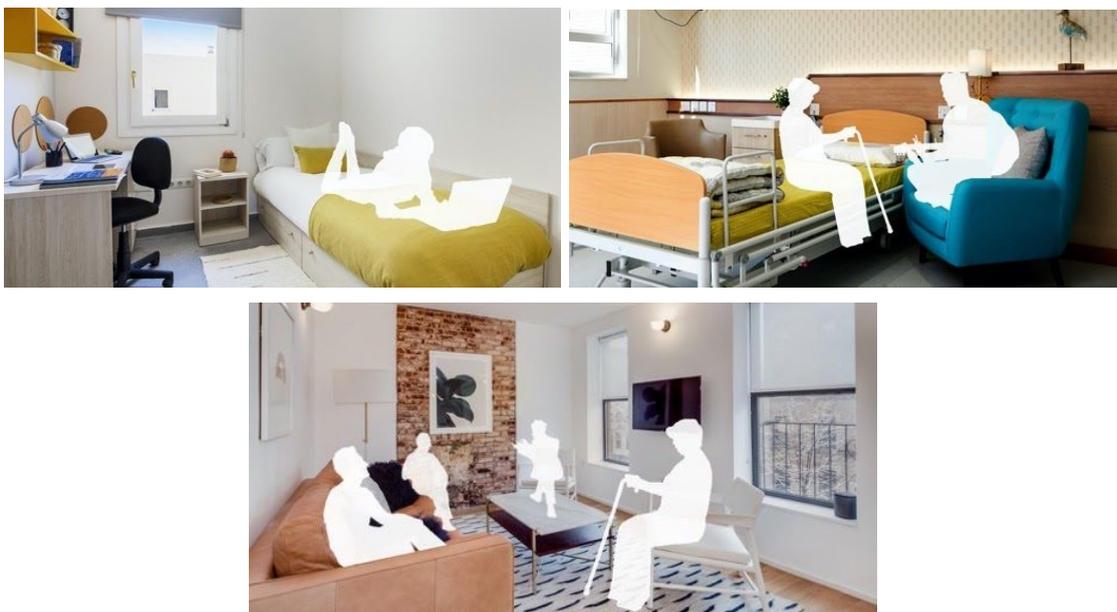


Figure 5.6.3: Individual Lodging and Elderly Community Services (Source: Study Team)

- 5.6.7. **Mix of family flat and co-living flats:** Responding to the public concerns over the reduced supply of family flats, the co-housing estate will provide both family flats and co-living flats to balance the interests of different stakeholders. The ratio of family flats to co-living flats will be about 2:1, while the ratio of younger adults and the elderly in co-living flats should be approximately 1:5. Furthermore, the priority of the housing will be given to young adults with working experiences of less than five years and \$17,000 monthly income cap, so as to allocate social resources more equitably.
- 5.6.8. **Shared spaces for communal events:** To facilitate interactions, the lower-storeys of the estate will be used as common shared spaces for the residents and different communal events will be held for the residents as well as the larger neighbourhood. The activities include food sharing and cookery class in community canteen, weekend public aerobics in the fitness centre, charity bazaar and festive celebrations in the larger common rooms. **Figures 5.6.4 & 5.6.5** show the plan and the section of the co-housing estate respectively.



Figure 5.6.4: Site Plan of the Co-housing Estate (Source: Study Team)

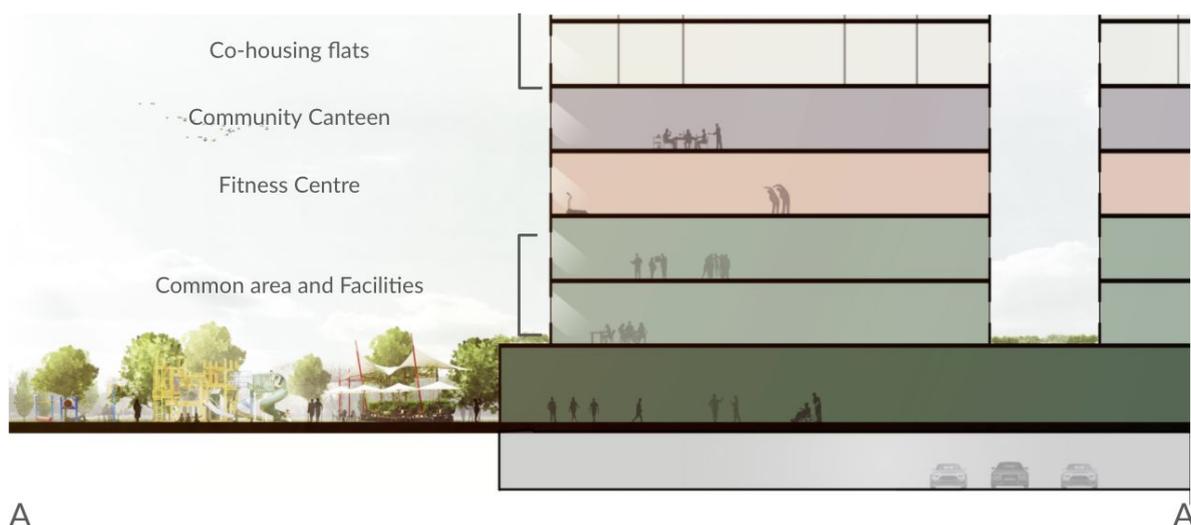


Figure 5.6.5: Section of the Co-housing Estate (Source: Study Team)

- 5.6.9. **Table 5.6.1** shows the development parameter of the plan. A total of 1,651 flats will be provided in the estate to cater around 3,900 residents.

Table 5.6.1: Development Parameters of the Intergenerational Co-living Units (Source: Study Team)

Site Area	11240 sq. meter
Plan	Draft Ma Tau Kok Outline Zoning Plan No. S/K10/25
Plot Ratio	About 5.1 (Domestic), About 0.9 (Non-domestic)
Building Height	Not more than 80mPD
Domestic GFA	Not more than 57324 sq. meter
Non-domestic GFA	Not more than 10116 sq. meter
Total Numbers of Flats (Est.)	1651
Family Flats (Est.)	1101
Co-living Flats (Est.)	550
Total Population (Est.)	3944 (2630 family residents, 219 young residents, 1095 elderly residents)
Open Space	10116
Parking for residents	43 (private car), 3 (Light Goods Vehicles (LGV))
Parking for public	76 (private car), 10 (LGV)
Loading and Unloading Spaces for residents	6
Loading and Unloading Spaces for public	12

Planning Benefits

- 5.6.10. To conclude, intergenerational co-living units will provide a better living environment for the residents as the old PRH estate will be redeveloped with more comprehensive facilities to satisfy the needs for all ages. It is also expected to create an intergenerational living environment through advocating mixed-generational housings and sharing of community facilities. It is hoped that the intergenerational relationships in the community could be tightened through pioneering the innovative housing concept.

Implementation Programme

- 5.6.11. To create Intergenerational co-living units is a medium to long term proposal. The total required time is about ten years, and the Housing Authority (HA) will be the major department in charge. It will collaborate with several stakeholders, such as the SWD and NGOs (e.g. The Hong Kong Society for the Aged). Proposal 6 is expected to commence operation by 2030, and the details of the programmes are demonstrated in **Table 5.6.2**.

Table 5.6.2: Implementation Process of the Intergenerational Co-living Units (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Planning and Design	HA	3 years	By 2024
2	Financial Funding Approval	LegCo	1 year	By 2025
3	Demolition and Construction Works as well as Relocation of Affected Residents	HA	3 years	By 2028
4	Tendering for Partnership with NGO	HA, SWD, NGOs (e.g. The Hong Kong Society for the Aged)	1 year	By 2029
5	Operation and Management	HA, NGOs (e.g. The Hong Kong Society for the Aged)	N.A.	From 2030

Proposal 7: Shared Space in GIC Facilities

Key Community Input

- 5.6.12. During the Community Planning Workshop and Roadshows, frontline social workers had expressed that there is insufficient community space for NGOs to organise social activities for the elderly. The situation is more severe for NGOs and community groups that only have a premises for office use. The lack of space has limited the efficiency and functionality of those groups in engaging the elderly. In addition, regarding social activities, it had been widely deliberated that the medium of farming is suitable to boost intergenerational interaction and knowledge exchange. Throughout the process, the elderly can share their own experience in gardening while children and teenagers can receive education on food production.

Proposal Details

- 5.6.13. Available GIC facilities are identified and categorised into two types to cater for different uses as shown in **Figure 5.6.6** in response to the community input.



Figure 5.6.6: Potential Sites for Shared Space in GIC Facilities (Source: Study Team)

5.6.14. **Shared School Facilities:** In view of the vacancy of school facilities during weekends, after school hours and school holidays, the proposal would take reference from the current **Opening up School Facilities for Promotion of Sports Development Scheme** to further open up school facilities to community groups. These facilities, such as covered playground, function rooms, are all valuable resources that the community could mobilise when they are not in use during the weekend. As the current policy only targets sports promotion, the proposal would have a broader focus on community building events especially for elderly or intergenerational events. Registered non-profit-making organisations would be eligible to apply with the event proposal attached, applications would be reviewed based on the nature of the event, relevance with the promotion of age-friendly and intergenerational concepts, and records of that non-profit-making organisation.

Similar Policy: Opening up School Facilities for Promotion of Sports Development

Since the 2017/18 school year, the Education Bureau (EDB) and Home Affairs Bureau (HAB) have coordinated to launch the scheme, allowing the listed sports organisations to apply for using sports facilities in schools. However, the current scheme aims to only facilitate sports related training, other organisations have to have experience in organising large scale sports event in order to be eligible for the scheme (Source: Oriental Daily, 2018; EDB Circular, 2020)

5.6.15. **Community Farming:** Urban/community farming gained its popularity in recent years. According to a news report (HK01, 2018), the Community Garden Programme launched by LCSD is among the top three most popular programmes offered by the department. The proposal thus will utilise rooftop spaces in GIC facilities to provide additional spaces for the

setting up of community gardens (**Figure 5.6.7**). Potential sites include the Kowloon City Municipal Building, Ko Shan Theatre, Hung Hom Community Hall, the proposed Mau Tau Kok Landscape deck, etc. In partnership with urban farming organisations, soft programmes could be offered in enhancing intergenerational communication and mutual learning.



Figure 5.6.7: Shared Spaces in GIC Facilities (Source: Study Team, Project Grow)

Planning Benefits

5.6.16. The proposal exploits the available resources within the community, utilising vacant or temporary vacant spaces for community building purposes. It is anticipated that more local community organisations will be able to obtain a venue to deliver their services, offering opportunities for them in providing more diverse activities for the elderly. While the community farming proposal will respond to the insufficient community gardens offered in the district (only 1 in Kowloon Tsai Park). In addition, partnering with NGOs to deliver community farming programmes can better harness the potential of boosting intergenerational connection for community farming.

Implementation Programme

5.6.17. The opening up of the two types of GIC facilities would be a short term proposal, which the revising of the existing opening up scheme led by the Education Bureau (EDB) can go parallel with the negotiation process for site selection for the setting up of Community Farms. It is expected that the first shared school facilities programme can commence and the first community farms could be set up in 2023 (**Table 5.6.3**).

Table 5.6.3: Implementation Process of Shared Space in GIC Facilities (Source: Study Team)

Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	New scheme design (Shared School Facilities)	EDB and HAB	
	Negotiations, Consultation & Feasibility Study (Community Farm)	LCSD, Food and Environmental Hygiene Department, KCDC	2 years By 2022
2	Implementation of scheme and operation of community farm	EDB, HAB, LCSD and NGOs (e.g. City Farm, Urban Oasis, Caritas Hong Kong)	N.A. From 2023

Proposal 8: 5 Streets Cultural and Creative Incubator

Key Community Input

- 5.6.18. As per the aspirations of the public in boosting local employment opportunities, especially for the silver group because not only could third-age employment provide financial support but also boost the self-esteem and life satisfaction level of the elderly. It is also appreciated by the public to preserve and inherit the local arts and cultural production. However, on the other hand, there are public concerns over the locational constraints of the incubator, that the planning intention of CDA zonings should be respected during redevelopment. Moreover, some pointed out that the arts and cultural industry usually evolves organically, proposals should respect their original pattern and minimize interference.

Proposal Details

- 5.6.19. **Intergenerational Co-Creative Workshops:** 5 streets cluster, including Ma Tau Kok Road; Ming Lun Street; Chung Shun Street; Hing Yin Street; and Hing Yan Street, has been identified as the redevelopment priority area by URA and soon will be redeveloped upon acquisition of properties. The redeveloped mixed-use residential complex will reserve two storeys for local arts and cultural production as co-creative intergenerational workshop spaces, to foster mutual learning and encourage communication among artists of all ages and backgrounds (**Figure 5.6.8**).

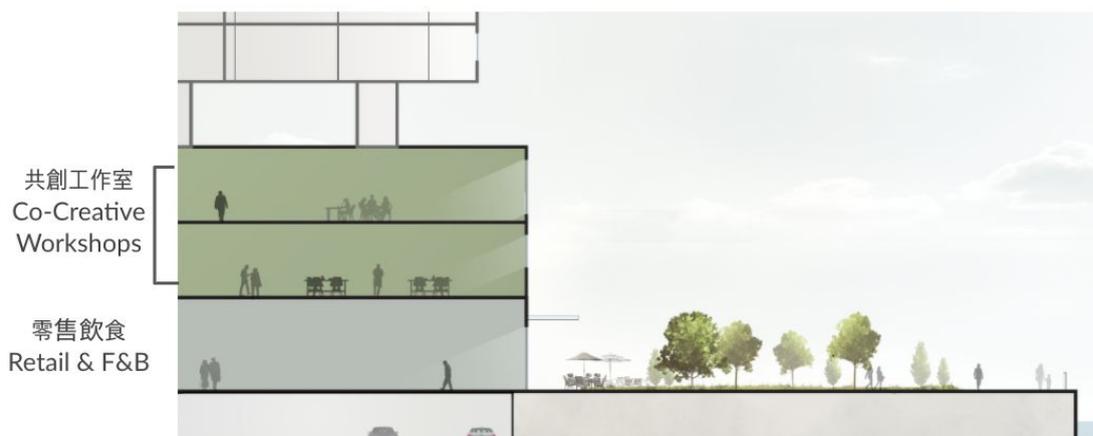


Figure 5.6.8: Section of 5 Streets Cultural and Creative Incubator (Source: Study Team)

- 5.6.20. The intergenerational co-creative workshop will adopt co-working studio-like interior layout with high ceiling height to offer a pleasant environment for the artists to jointly promote local culture. Regular interest classes of different levels as well as annual apprenticeship will be hosted in the incubator to provide edutainment opportunities. Local and foreign top artists will also be invited to host exhibitions in house to inspire cultural cohesion. **Table 5.6.4** shows the development parameters of the incubator.

Table 5.6.4: Development Parameters of 5 Streets Cultural and Creative Incubator
(Source: Study Team)

Site Area	8678 sq. meter
Plan	Draft Kai Tak Outline Zoning Plan No. S/K22/6
Plot Ratio	About 4.5(Domestic), About 0.5(Non-domestic)
Domestic GFA	Not more than 39051 sq. meter
Non-domestic GFA	Not more than 4339 sq. meter (Workshop Space: 2150 m ²)
Building Height	Not more than 110mPD
Number of blocks	4
Total Numbers of Flats (Est.)	672
Total Population (Est.)	1880
Open Space	4230 sq. meter (Waterfront Promenade: 1260 sq. meter)
Parking for residents	52 (private car), 2 (LGV)
Parking for public	80 (private car), 4 (LGV)
Loading and Unloading Spaces for residents	1

5.6.21. **Partner with NGOs/DECC:** Understanding the networking resources of local organizations, such as NGOs and DECCs, who have a close relationship with the local residents and elderly, will be partnered with in working hand in hand to promote together the local culture with silver employment for possible local partners (**Figure 5.6.9**). Besides, to our knowledge, To Kwa Wan was once the industrial hub in the territory that walked Hong Kong through the way to be one of the Four Asian Tigers, while Lung Shing nurtures various legendary local food production. The active collaboration between URA and local organizations in and out of the incubator could further achieve silver production and strive for the success of the brand “Made in Kowloon City”.



Figure 5.6.9: Potential Local Partners (Source: Study Team)

- 5.6.22. **Prioritize Displaced Artists & Concessionary Rent:** Redevelopment of 5 streets and 13 streets clusters is inevitable. While they have been rezoned as CDA earlier, comprehensive residential and commercial developments are expected. In view of the developed arts and cultural production industry in To Kwa Wan, the co-creative workshop spaces will be a chance to relocate the displaced studios due to redevelopment, who will be given the highest priority in leasing, and more importantly, at a concessionary rate. It is possible to specify the terms of concessionary rent for the local arts and cultural industry on the Contractual Agreement for Joint-Venture Projects to ensure the compliance of such social responsibility of private developers.

Recent Practice: HK Government Space Sharing Scheme for Youth by Henderson Land



In 2019, Henderson Land offered six units at The Globe in Cheung Sha Wan for use by the Hong Kong Arts Development Council and Arts with the Disabled Association Hong Kong at a HK\$1 monthly rent over a six-year term. The units are expected to be leased to local artists, as well as becoming a training centre for people or artists with disabilities. The Scheme, as a joint collaboration between the public and private sector, aims to provide areas that can be used for co-working spaces or studios to support youth development in Hong Kong (Source: Henderson Land, 2019)

Planning Benefits

- 5.6.23. In view of the prestigious cultural and historical assets of the area, the proposal attempts to capitalize on and further promote the district legacies to provide employment among the silver generation and cater for the growing demand for production spaces. Meanwhile, this proposal generally promotes economic sustainability of the whole district to foster community effort to boost social participation of different ages, backgrounds and generations.

Implementation Programme

- 5.6.24. The 5 streets incubator would be a long term proposal. Could all properties be acquired by URA as not until 2025 and afterwards to tender out as a joint venture project with private property developer(s). In parallel, the local parties and stakeholders will be consulted to gain policy and institutional support, for instance KLDC. Lastly, a close relationship has to be maintained with the DECC and local communities to promote silver employment in the incubator after completion (Table 5.6.5).

Table 5.6.5: Implementation Process of 5 Streets Cultural and Creative Incubator (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Property Acquisition	URA	5 year	By 2025
2	Preparation and Tendering for Joint-venture Partnership	URA & Property Developers	1 year	By 2026
3	Joint-venture Redevelopment	URA & Successful Tenderer	3 year	By 2029
4	Public Consultation & Gain Policy/Institutional Support	URA & Successful Tender, KCDC, NGO	1 year	By 2029
5	Workshop Spaces and Employment Opportunities Provision	URA & Successful Tender	N.A.	By 2030
6	Promotion Towards Local Organisations to Draw Attention	NGOs, DECCs, Civic Organisations	N.A.	From 2030

5.7. Strategy 4 Independent Wellness

Key Issues

5.7.1. With reference to the findings of baseline study and CE, proposals of Strategy 4 aim at addressing the following key issues:

- The medical service to elderly population ratio in Ma Tau Wai and Whampoa are relatively lower than that in other constituencies of Kowloon City, showing the problem of insufficient healthcare provision for the foreseeable growing elderly population in these two constituencies.
- There are limited healthcare options to cater the needs of elderly with different levels of physical mobility and purchasing power. Also, there are insufficient affordable healthcare services within favourable travelling distances.
- Dementia is a common disease among the elderly. These patients require special treatment and care to reduce their deterioration in abilities. Inadequate support for dementia treatment and care facilities for dementia patients and their caregivers are observed.
- Poor open space design discourages the elderly from engaging in physical activities. Features of age friendly designs can be enhanced in future open space.

Planning Objectives

5.7.2. To address the above key issues, a series of planning objectives are proposed for Strategy 4. The proposals intend to:

- Create accessible and effective healthcare network with varied affordability options;
- Promote ageing-in-place with sufficient physical, social and psychological support,; and
- Facilitate independent living with health and community care services.



Figure 5.7.1: Proposals of Strategy 4 Independent Health (Source: Study Team)

Proposal 9: Multi-level Healthcare Composite Building

Key Community Input

5.7.3. During the Community Planning Workshop, the public raised that there are insufficient community and healthcare resources in supporting the elderly with dementia and their caregivers. Patients are required to attend frequent follow-up consultations and are transferred to different medical centres for diagnosis or treatments, which creates huge mental and physical pressure on the patients and their caregivers. Insufficient dementia diagnosis and day care facilities are reflected.

Proposal Details

5.7.4. As there is a relatively low GOPC to elderly population ratio in Ma Tau Wai, revealing the insufficient medical services provision to cater the demand of the increasing elderly population. A new multi-level healthcare building can increase the supply of medical services for the elderly. A multi-level healthcare composite building will thus be introduced upon the redevelopment of Ma Tau Wai Estate.

5.7.5. **First all-rounded dementia wellness centre:** Responding to the public comments regarding the lack of support for dementia patients and their caregivers, the first all-rounded dementia wellness centre in Hong Kong is introduced in the building, which provides one-stop services from diagnosis to treatment and social support for both patients and caregivers within the multi-level healthcare composite building (Table 5.7.1). This aims to reduce the travelling time which could relieve the physical and mental burden to the patients and their caregivers.

Table 5.7.1: Medical Services Needed for Dementia Patients (Source: Study Team)

Diagnosis	Cognitive and Neuropsychological Tests Brain Scans Laboratory Test
Treatment	Medication Social Therapy
Life Support	Home Modification Social Networking and Support Pressure Relief for Caregivers

5.7.6. **Multi-level healthcare:** Residential Care Home for the Elderly (RCHE), Day Care Centre, Dementia Wellness Centre, Integrated Home Care Services (Frail Cases) and Enhanced Home and Community Care Services (Home-based CCS Team) will be located within the same composite building to provide healthcare services of varying intensity. A ceiling height of 3.3m will be applied in the building design, which exceeds the 2.5m restriction stipulated on the code of practice of RCHE (SWD, 2013). Besides, the location requirement of the RCHE and Day Care Centre, which is to be located within 24m above the ground level, is also observed. Thus, the RCHE and day care centre in the new building will be located on the lower floors, fully complying with the requirement of the HKPSG (PlanD, 2020).

5.7.7. **Government-led development:** To safeguard accessible healthcare services to the public regardless of socio-economic status, the government shall be the key operator of the building to provide affordable healthcare services. The new building also provides dementia patients and their caregivers a holistic medical service cycle from diagnosis and treatment to daily life support in the community. The section and development parameters are shown in **Figure 5.7.2** and **Table 5.7.2**,

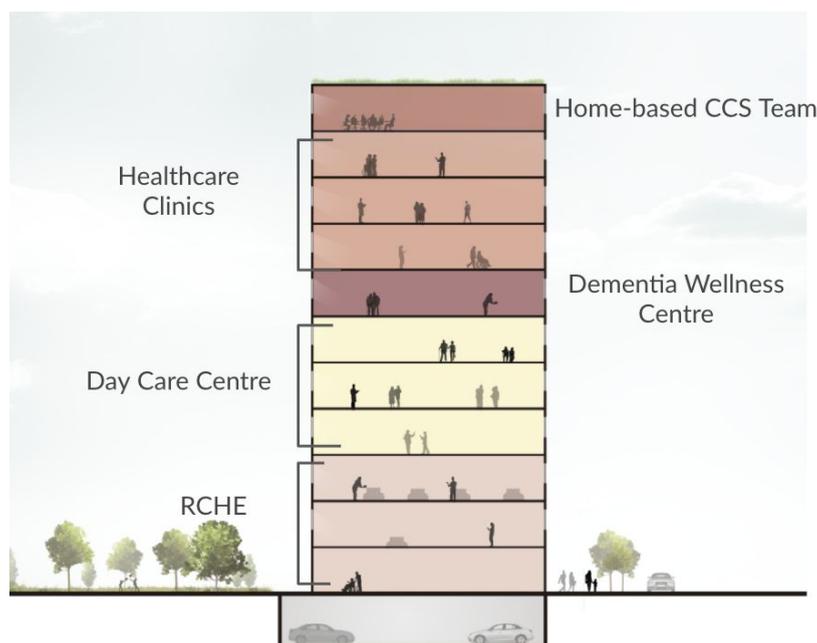


Figure 5.7.2: Section of Multi-level Healthcare Composite Building (Source: Study Team)

Table 5.7.2: Development Parameters of Multi-level Healthcare Composite Building
(Reference from HKPSG Ch. 3 and 8) (Source: Study Team)

Site Area	About 845 sq. meter
Plan	Approved Ma Tau Kok Outline Zoning Plan S/K10/25
Current Zoning	Residential (Group A)
Applied Use	Social Welfare Facility and Public Clinic (No rezoning is required)
Gross Floor Area	Around 6971 sq. meter (Non-domestic)
Plot Ratio	Around 8.25
No of Blocks	1 (Non-domestic)
Number of Storeys	11
Service Provision	Around 87 beds (RCHE), 198 places (Day Care Centre), 1 Healthcare Clinic, 369 places (home-based CCS centre)
Open Space	Around 600 sq. meter
Car Parking	60 public car parking spaces, 5 car parking spaces for disabled person
Loading and Unloading Bays	13 lay-bys for ambulances, 10 taxi/private car lay-bys, 2 lay-bys for MGVs/HGVs

5.7.8. **Location advantage:** After considering the mobility and affordability levels of elderly, the new multi-level healthcare building in Ma Tau Wai will be located in proximity to the proposed intergenerational co-living housing estates. The new multi-level healthcare building is also located in proximity to the future Sung Wong Toi MTR station, which will be convenient to the elderly in Kowloon City district who travel by MTR.

5.7.9. **Synchronised medical record system:** As the healthcare clinics targets to alleviate the pressure of the public health system, the current medical record system in the HA will be synchronized through the e-Health system. The increase in community and medical care services provisions can fulfil the escalating demand from the anticipated increase of the elderly population in the future.

Planning Benefits

5.7.10. The increased medical and healthcare services provisions echo our planning vision in building an age friendly Kowloon City for elderly by contributing to elderly's health and well-being. The new multi-level healthcare composite building can provide more facilities to supplement the relatively low GOPC or RCHE to elderly ratio in Ma Tau Wai. Furthermore, it expands the

medical network by providing all-rounded care to dementia patients and caregivers. Therefore, it can ultimately relieve the pressure of the current public healthcare system in Kowloon City.

Implementation Programme

- 5.7.11. In collaboration with ArchSD and KCDC, the new multi-level healthcare composite building will be designed, funded and constructed. Various departments like SWD, Department of Health (DoH) and HA will provide the medical and community services for the elderly in Kowloon City. Proposal 9 will commence operation from 2031 (**Table 5.7.3**).

Table 5.7.3: Implementation Process of Multi-level Healthcare Composite Building
(Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Design and Tendering for Project	ArchSD	2 years	By 2026
	Public Consultation	KCDC Housing and Development Planning Committee	1 year	bY 2026
2	Funding	LegCo Panel of Financial Affairs	1 year	By 2027
3	Construction	ArchSD	3 years	By 2030
4	Community and Healthcare Service Provision	SWD, DoH and HA	N.A.	From 2031

**The proposal will be implemented upon the redevelopment of Ma Tau Wai Estate, which is estimated to be completed in 2025.*

Proposal 10: Institution-led Specialist Healthcare Building

Key Community Input

- 5.7.12. The public reflected that the current healthcare service provision from HA is insufficient. Long travelling time to the nearest hospital for specialist treatment and long waiting time for having follow-up consultation are the two major hurdles for the elderly in receiving medical support. Introducing affordable and professional private medical services is suggested as another measure to relieve the pressure of the public healthcare system.

Proposal Details

- 5.7.13. Collaboration with the Hong Kong Polytechnic University (PolyU) health-related departments is proposed to deliver good quality private healthcare services at a reasonable price.
- 5.7.14. PolyU health-related departments are renowned for their efforts in the research and training in diversified types of medical specialisms such as physiotherapy and optometry (**Table 5.7.4**). In view of the manpower resources supported by these undergraduate programmes, specialist clinics could be operated by these departments. While students could be benefited from early on-the-job training and attain pre-graduation practicum opportunities, the public can enjoy medical services at a cheaper rate, putting forward a mutual-benefiting scenario.

Table 5.7.4: List of Potential PolyU Departments Working in the Institution-led Specialist Healthcare Building
(Source: Study Team)

PolyU Departments or Institutions	Areas of Specialization
Department of Health Technology and Informatics	Radiography
	Medical Laboratory Science
Department of Rehabilitation Sciences	Physiotherapy
	Occupational Therapy
School of Nursing	Nursing
	Mental Health Nursing
School of Optometry	Optometry
Department of Applied Social Sciences	Social Work and Social Policy
	Applied Ageing Studies and Service Management
Institute of Active Ageing	Research on active ageing

- 5.7.15. **Specialist services targeting middle income elderly:** While Whampoa and Hung Hom have insufficient healthcare facilities, residents also have a comparatively higher income level, which lead to stronger interest in private medical services. Therefore, the new institution-led specialist healthcare building is proposed at Hung Hom Bay specifically to cater the medical demand of the middle-class community.
- 5.7.16. **Win-win situation among PolyU and the public:** With its locational proximity to PolyU, mutual benefits will be enjoyed by both the institute and the general public. For the general public, they can enjoy specialist care services offered by the placement students under medical professionals' supervision at a relatively low price, which is around 75% off compared to the market price of those professional medical services. For PolyU, the departments can utilize the building for academic research and educational purposes.
- 5.7.17. **Strengthen healthcare network:** The specialist healthcare buildings can provide one-stop services for the elderly, reducing the waiting time and pressure of patients and caregivers for making multiple medical trips. PolyU will be responsible for service provision and business management, including the operation of specialist clinics, the research centre and innovative medical products retailing according to the section (**Figure 5.7.3**). Apart from increasing the medical care services provision in Whampoa and Hung Hom, the proposal will also strengthen the medical network in Kowloon City, thus promoting age-friendly medical wellness.



Figure 5.7.3: Section of Institution-led Specialist Healthcare Building (Source: Study Team)

5.7.18. A plan amendment is required to rezone the site from the ‘Open Space’ zone to ‘G/IC’ zone. The development parameters table (Table 5.7.5) shows the proposed rezoning scheme. Since the rezoning exercise reduces the open space in Whampoa and Hung Hom areas, a rooftop garden will be designed in the new building to compensate for the loss of open space within the area. This will result in no net loss in open space provisions upon the completion of the Institution-led Specialist Healthcare Building.

Table 5.7.5: Development Parameters of Institution-led Specialist Healthcare Building
(Source: Study Team)

Site Area	About 7293 sq. meter
Plan	Approved Hung Hom Outline Zoning Plan S/K9/26
Current Zoning	Open Space
Applied Use	Government , Institution or Community (Rezoning is required)
Gross Floor Area	Around 32819 sq. meter (Non-domestic)
Plot Ratio	Around 4.5
No of Blocks	1 (Non-domestic)
Number of Storeys	5
Service Provision	4 Specialist Clinic, 1 research center, 1 market for eatery and retail
Open Space	Around 6564 sq. meter
Car Parking	80 public car parking spaces, 10 car parking spaces for disabled person
Loading and Unloading Bays	13 lay-bys for ambulances, 10 taxi/private car lay-bys, 2 lay-bys for MGVs/HGVs

Planning Benefits

5.7.19. Long travelling and waiting time for specialist clinic services are the two major hurdles for Whampoa and Hung Hom residents in acquiring the medical support. The newly introduced multi-level specialist healthcare buildings will increase the provision of specialist clinic services. Besides, it is mutually beneficial to the public and PolyU through the institutional cooperative development pathway. PolyU will be the service provider, providing relatively low-priced private medical services to mitigate the pressure of the public medical system. Ultimately, it enriches the medical network with more specialist healthcare services in Kowloon City.

Implementation Programme

5.7.20. PolyU will be responsible for the design, tendering, construction and management of the multi-level specialist healthcare buildings. The role of the government is mainly on rezoning application, funding and coordination with PolyU in delivering services to the public. Proposal 10 will commence operation by 2028 (Table 5.7.6).

Table 5.7.6: Implementation Process of Institution-led Specialist Healthcare Buildings (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Rezoning	PlanD	1 year	By 2021
2	Design and Tendering for Project	PolyU	2 years	By 2023
	Public Consultation	KCDC Housing and Development Planning Committee	1 year	By 2023
3	Funding	LegCo Panel of Financial Affairs: Funding	1 year	By 2024
4	Construction	PolyU	3 years	By 2027
5	Community and Healthcare Service Provision	PolyU	N.A.	From 2028

Proposal 11: Private-led Wellness Service

Key Community Input

- 5.7.21. The foremost concern of the public expressed in the engagement exercises is the long waiting time of public healthcare services. Some of the participants suggested the introduction of private medical services in diverting some elderly users to the private healthcare system as a solution to alleviate the pressure of the public healthcare system.

Proposal Details

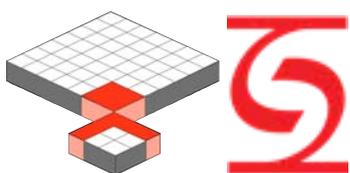
- 5.7.22. **Promotion of Preventive Healthcare:** Since the focus of the public healthcare services have little emphasis on preventative healthcare, a new centre targeting preventive healthcare services will be introduced to enrich the healthcare network by delivering more diverse healthcare support to the Kowloon City dwellers. The public will have a healthier lifestyle which can reduce the pressure on the public medical services system in the long term. Preventative services consist of measures taken for disease prevention, including the traditional Chinese medicine consultation, diet therapy, elderly yoga class, acupuncture and cupping.
- 5.7.23. **Wellness services targeting higher income elderly:** Understandably, the higher income group is more willing to pay for the preventative medical services (Xu et al., 2019). Since the Whampoa residents have higher income than the other sub-areas, retrofitting one of the under-utilized shopping malls into a private wellness services centre can release floor space for the concentration of preventive healthcare services. Therefore, it is suggested to retrofit Planet Square, a shopping centre which is opposite to the Hung Hom Market. The mall is also of close proximity to the Whampoa MTR station which could attract users of other districts.
- 5.7.24. **Purchase of private mall for revitalization:** Planet Square (approximately 2560 sq. meter) is an under-utilised shopping mall (marked with the map pin in **Figure 5.7.4**) with a significant number of empty stores without any pending rental agreement. The customer flow is also low despite its prominent location next to the Hung Hom Market. A retrofitting scheme will be delivered to redesign the shopping mall into floor plans that are suitable for providing wellness services targeting the higher-income elderly within the study area.



Figure 5.7.4: Location Map of Planet Square (Source: Study Team)

5.7.25. The government will follow the scheme of ***purchasing private non-domestic premises for the provision of welfare facilities***. They will also invite NGOs or other private service providers in offering suitable services inside the premises. Service price will be closely monitored by the government. Under this scheme, the Planet Square will be retrofitted into a new landmark in providing preventative healthcare services in Hung Hom and Whampoa.

Program to Purchase Premises for Provision of Welfare Facilities



The SWD starts to collaborate with the Government Property Agency (GPA) to purchase private premises for accommodating welfare facilities from 2020 (SWD, 2020). With funding approved by the Finance Committee of the LegCo, the government will purchase premises and provide services like Childcare Centres, Day Care Centres for the elderly and RCHE to help address the shortage of welfare premises. GPA will help SWD in identifying the suitable premises in different districts, like the commercial premises and revitalised industrial buildings in the 18 districts.

Planning Benefits

5.7.26. The private wellness services offered after retrofitting the Planet Square will be a proactive measure in addressing the shortage of welfare services in the district. It can also enhance the diversity of healthcare services for the population with different income levels. Furthermore, through introducing a Public-private partnership (PPP) model for the delivery of high quality private healthcare services, this proposal acts as a pilot scheme to encourage more initiatives in inviting the private sectors to help address the shortage of the public healthcare services.

Implementation Programme

- 5.7.27. In collaboration with the private service providers, they will be responsible for offering high quality, reasonably priced private preventative healthcare services. The role of the government is suitable premises identification and the funding of retrofitting projects for those selected premises. Through a successful PPP model, the private sectors can offer the best healthcare services for the high-income level population in Kowloon City. Proposal 11 will commence operation by 2028 (Table 5.7.7).

Table 5.7.7: Implementation Process of Purchase of Premises for Private-led Wellness Service
(Source: Study Team)

Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1 Acquisition of Planet Square	GPA	2 years	By 2022
2 Design and Tendering for Project	ArchSD	1 year	By 2023
Public Consultation	KCDC Housing and Development Planning Committee	1 year	By 2023
3 Funding	LegCo Panel of Financial Affairs: Funding	1 year	By 2024
4 Construction	ArchSD	1 year	By 2025
5 Private Preventative Healthcare Provision	NGOs (e.g. Lok Sin Tong) or Private Companies	N.A.	From 2025

Proposal 12: Dementia-friendly Park

Key Community Input

- 5.7.28. Concerns towards dementia friendly planning were raised during the Community Planning Workshop. It was mentioned that the attention should not only focus on dementia patients but also on the wellbeing of their caregivers. Dementia friendly planning and design should be taken into consideration in both creating a safe and enjoyable environment for all.

Proposal Details

- 5.7.29. **Synergy with healthcare network:** In view of the public comments, an inclusive dementia-friendly park is proposed near the Hung Hom Harbourfront. Formerly a bus terminus, the site is zoned as open space, and a portion of the site is currently used as coach parking spaces. The location of the park would synergise with the nearby proposed Institution-led Specialist Healthcare Building (Proposal 10), echoing with the LOHAS Wellness Precinct as mentioned in Proposal 1.
- 5.7.30. **Sensory stimulation for elderly:** Taking reference from international cases, the park will offer opportunities in stimulating the different senses of elderly and introduce iconic structures accompanied by a variety of landscape features. From the general design perspectives, internal

pathways would avoid cul-de-sac design to minimise confusion in navigation; vegetation would be more scattered to ensure clear vision and observation of all users, increasing the level of safety. Major entrances are shown in red arrows in the indicative plan (Figure 5.7.5), connecting with the nearby Whampoa Garden and waterfront sections, balancing between connectivity and enclosure for safety.

- 5.7.31. **Sensory Oval:** Located in the north-western side of the park, the Sensory Oval, provides senses stimulus through quality plants and textures such as sand and pebbles pit. Water features would be designed to enhance the overall aesthetics and act as an iconic focal point for the park. Progressing towards the harbourfront, a vast grassland is designed for multi-purpose use, accommodating passive to semi-active recreational uses. Food & Beverage pavilions and inclusive playground are also features for creating an enjoyable experience for all.



Figure 5.7.5: Indicative Plan for Dementia-friendly Park (Source: Study Team)

Planning Benefits

- 5.7.32. It is anticipated that the park would be an inclusive open space for elderly as well as caretakers, providing open space with quality for the enjoyment of all. The park also capitalises on its location near to the waterfront, becoming a new activity node along the waterfront. As a variety of facilities will be provided in the park, it would also be a new recreational destination for the general public with dementia friendly planning and design embedded. Opportunities for intergenerational interactions can thus be fostered with the design features of the park.

Implementation Programme

- 5.7.33. The development of Dementia-friendly Park would be a short term proposal and is expected to be realised in 2025. LCSD will lead the implementation process in collaboration with ArchSD for detailed designs. Relevant stakeholders such as Hong Kong Alzheimer's Disease Association, Jockey Club Centre for Positive Ageing would be involved in the design process in developing the most suitable design schemes. Implementation details are demonstrated in Table 5.7.8.

Table 5.7.8: Implementation Process of Dementia-friendly Park (Source: Study Team)

	Actions	Implementation Agents	Duration	Target Year (Base Year:2021)
1	Overall Facilities Planning	LCSD	1 year	By 2021
2	Design and Consultation with Relevant Stakeholders	LCSD, ArchSD, KCDC, NGOs (e.g. Hong Kong Alzheimer's Disease Association)	1 year	By 2022
3	Funding	LegCo	1 year	By 2023
4	Construction	ArchSD	1 year	By 2024
5	Operation and Management	LCSD	N.A.	From 2025

5.8. Overall Implementation Programme

- 5.8.1. To summarize, the overall implementation programme for the 12 proposals is presented on **Figure 5.8.1** for reference, covering the planning, consultation, funding and construction processes in each proposal if applicable. The final implementation will be subject to the feasibility and resources available in reality. It is expected all proposals will be fully implemented by 2031.
- 5.8.2. The proposals could be divided into short term, medium term, and long term *based on the number of years required for full operation since 2021*. The list is shown as follows:

Short Term (within 5 years, by 2025)

- Proposal 1: Connected Waterfront (Green Sensory Pathway)
- Proposal 2: Circular Feeder Service
- Proposal 3: Pedestrian Priority Zones
- Proposal 7: Shared Spaces in GIC Facilities
- Proposal 12: Dementia-friendly Park

Medium Term (5 to 10 years, by 2030)

- Proposal 1: Connected Waterfront (Landscape Deck)
- Proposal 3: Universal Access and Design Improvement
- Proposal 5: Smart Environmental Monitoring App
- Proposal 6: Intergenerational Co-living Units
- Proposal 8: 5 Streets Cultural and Creative Incubator
- Proposal 10: Institution-led Specialist Healthcare Building
- Proposal 11: Private-led Wellness Service

Long Term (more than 10 years, by 2031)

- Proposal 1: Connected Waterfront (Redevelopment)
- Proposal 4: Green Corridor
- Proposal 9: Multi-level Healthcare Composite Building

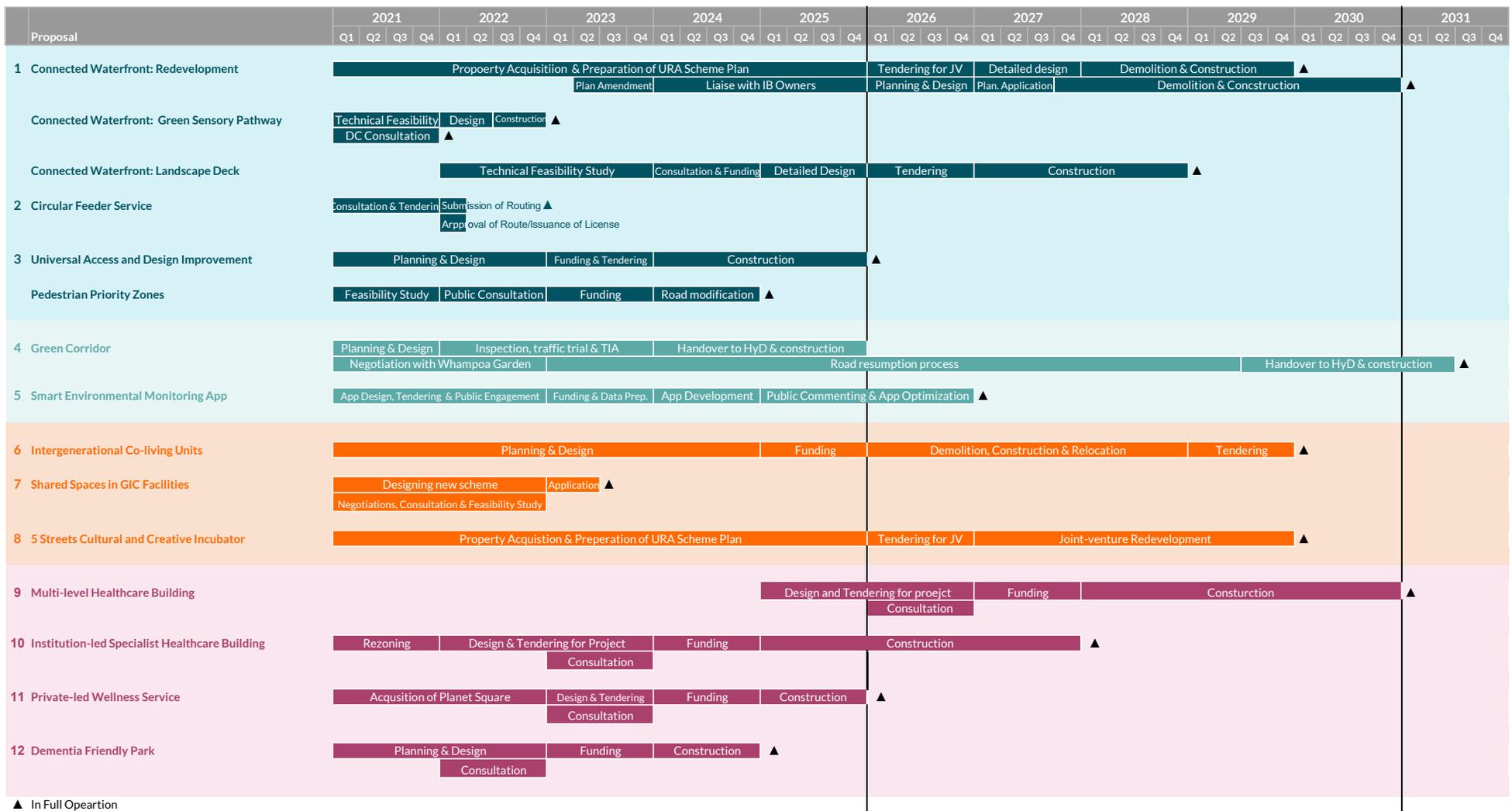


Figure 5.8.1: Overall Implementation Programme (Source: Study Team)

5.9. Preliminary Impact Assessment

Overall OZP Plan

- 5.9.1. Our proposal only required rezoning exercise from “Open Space” to “Government, Institution or Community” in Hung Hom for the implementation of the ‘Institution-led Specialist Healthcare Building’. In compensation of the loss of “Open Space” in the OZP, rooftop gardens will be constructed to maintain open space provision in the site. There will be no net loss in the area of open space even with rezoning exercises. The overall change in OZP Plan is shown as follow (Table 5.9.1):

Table 5.9.1: Overall OZP Plan (Source: Study Team)

Zoning	sq. meter	%	Net Change from AFCP	Change in %
Residential (Group A)	863241	16.0%	0	0
Residential (Group B)	398916	7.4%	0	0
Residential (Group E)	32030	0.6%	0	0
Open Space	1200479	22.2%	-1160	-0.20%
Commercial	168114	3.1%	0	0
Comprehensive Development Area	367561	6.8%	0	0
Government, Institution or Community	484728	9.0%	+1160	0.20%
Green Belt	9366	0.2%	0	0
Other Specified Uses	596485	11.1%	0	0
Others (Undetermined, URA, Major Road and Junction)	1275113	23.6%	0	0
Total:	5396058	100.0%		

Overall Land Use Budget

- 5.9.2. Through our proposals in the final AFCP, a large amount of floor area and open space area are created to support different activities (Table 5.9.2). Around 2,300 flats for different income levels and household sizes are provided to accommodate the increasing population in the Study Area. Over 10,000 sq. meters of commercial spaces are also planned to create a vibrant shopping experience with more diverse retail spaces, in which 2,560 sq. meter are reserved for preventive healthcare services. Over 45,000 sq. meter additional floor spaces of GIC facilities are ready for the ageing trend in Kowloon City. Quality of life among the elderly is expected to

improve significantly with more support. Over 60,000 sq. meter of open space are expected in 2030 through the connected promenade, green corridors and landscape deck. More socializing and exercising spaces, which improves social connectedness and the natural environment in the Study Area will be provided. Around 400 car parking spaces for different vehicles are provided to tackle the double-parking issues. Overall speaking, the newly created land area supports various activities and purposes, which achieve our vision in building an age friendly Kowloon City.

Table 5.9.2: Land Use Budget (Source: Study Team)

Land Use	Land Area (sq. meter)
Residential	38020 (2323 flats)
Commercial	11364
G/IC	45492
Open Space	61160
Car Parking & Loading & Unloading Space	7288 (445 parking space, 24 loading / unloading spaces, 26 ambulances lay-bys) (Public and Private Vehicle Parking)

Demographics

5.9.3. Under the KTD and our AFCP, 40% of population growth will be observed upon full completion in 2031. Around 25% of the total population will be elderly aged 65 or above (**Table 5.9.3**). It is necessary to improve the age friendliness in Kowloon City. A large number of services, including medical services, community care services, elderly employment opportunities etc., will be provided as illustrated in our plan by the additional land area. The projection method is detailed in **Appendix 7**.

Table 5.9.3: Projection of Population in the Site Area (Source: Study Team)

Current Population (as in 2020)	306467 persons
Expected Population (as in 2031)	436469 persons
- Population due to natural growth	434856 persons
- Population brought by our proposals	1613
Elderly (Aged 65+) proportion in 2031	25.15%

Transportation

5.9.4. Overall speaking, there will be no adverse traffic impact with the additional population in the future. As highlighted by TD (2020), bus routes serving the Kowloon City district still have sufficient capacity to accommodate the increasing population. Also, with the opening of Sung Wong Toi station and Kai Tak station along the Tuen Ma Line, MTR is expected to become the resident's primary transportation for inter-district commuting trips. It is assumed that the MTR can operate at around 87% capacity to provide efficient transit solutions for the additional

population in the future decades (**Table 5.9.4**). Under the combination of bus and MTR services, trips generated by the future population will be within the existing capacity without chances leading to any adverse traffic impact.

5.9.5. Also, illegal parking is another serious problem in Kowloon City that leads to the unsafe road traffic. As reported by the Hong Kong Police Force, from July to November in 2017, over 25,000 fixed penalty tickets were issued in the Kowloon City Police District (HKSAR, 2017). It reflected that the problem of illegal double parking is severe in the district. Additional car parking spaces, including private cars, LGV and loading/unloading spaces etc., are provided to alleviate the illegal parking issues (**Table 5.9.5**). These are located in the major point of interests of the Study Area. More vehicles are expected to park inside the underground parking areas rather than parking on the road, alleviating the illegal parking issues.

Table 5.9.4: Transportation Impact (Source: Study Team)

Tuen Ma Line Capacity	273672 persons/day
Additional Population (compared 2020 and 2031)	130003 persons
Trip Generation per person (TD, 2011)	1.83
Additional Trips by additional population	237905
Tuen Ma Line Utilization Rate from Kai Tak Population	86.9%

Table 5.9.5: Parking Space Provision (Source: Study Team)

Type of Parking Space	Provision
Private Car	195(public)+ 216 (private) places + 15 (public for disabled) parking spaces
LGV	5 (private) + 14 (public) parking spaces
Loading / Unloading Area	7 (private) + 17 (public) parking spaces
Ambulance Lay-bys	26 (public) parking spaces

Medical Service

5.9.6. As there is a deficit of the medical service provision in Kowloon City, the final AFCP emphasises on the provision of medical health services across different neighbourhoods within the whole Study Area. These facilities can supplement the low GOPC to elderly ratio in Mau Tai Wai and Whampoa, strengthening the medical network in the Study Area. RCHE, day care centres, home-based CCS teams and other medical services are expanding in the district to respond to the ageing population trend. With the future development in Kai Tak and our proposals, there will be a surplus in 2030 to serve all the elderly even with the foreseeable increase in population (**Table 5.9.6**).

Table 5.9.6: Medical Services Provision (Source: Study Team)

Services	HKPSG Requirement	Current Provision (2020)	Deficit/Surplus (as in 2020)	Future Provision (2030)	Deficit / Surplus (as in 2030)
RCHE	21.3 subsidised beds per 1 000 elderly persons aged 65 or above	758 ⁽¹⁾	-494 (Requirement for site area: 1253)	2845 ⁽⁴⁾	+507 (Requirement for site area: 2338)
Day Care Centre	17.2 subsidised places per 1 000 elderly persons aged 65 or above	348 ⁽²⁾	-663 (Requirement for site area: 1011)	1982 ⁽⁴⁾	+94 (Requirement for site area: 1888)
Home-based CCS Team	17.2 subsidised places per 1 000 elderly persons aged 65 or above	554 ⁽³⁾	-457 (Requirement for site area: 1011)	1983 ⁽⁴⁾	+95 (Requirement for site area: 1888)

(1) Based on List of RCHE by SWD: [https://www.swd.gov.hk/storage/asset/section/633/tc/6.List_of_RCHEs_Providing_Subsidised_Places_for_the_Elderly_Q\(30.6.20\).pdf](https://www.swd.gov.hk/storage/asset/section/633/tc/6.List_of_RCHEs_Providing_Subsidised_Places_for_the_Elderly_Q(30.6.20).pdf)

(2) Based on List of DCU by SWD: [https://www.swd.gov.hk/storage/asset/section/616/en/List_of_DE_DCU\(Nov_2020\)_with_EHS_.pdf](https://www.swd.gov.hk/storage/asset/section/616/en/List_of_DE_DCU(Nov_2020)_with_EHS_.pdf)

(3) List of Home-based CCS Team: [https://www.swd.gov.hk/storage/asset/section/617/en/List_of_EHCCS_Teams_\(24_Sep_2020\).pdf](https://www.swd.gov.hk/storage/asset/section/617/en/List_of_EHCCS_Teams_(24_Sep_2020).pdf)

(4) Total NOFA of 36700 sq. meter will be provided in Kai Tak, the amount of future service provision is assumed for calculation.

Employment

5.9.7. Overall speaking, the Final AFCP could provide ample job opportunities to the Study Area, ranging from social welfare, health and medical, arts and culture, property management and service industries. While the increase in job opportunities will benefit the working class of all ages, special attention will be placed on encouraging third-age employment, especially in art and culture and property management sectors.

Table 5.9.7: Employment Assumptions (Source: Study Team)

	Employment Assumptions	Provision from AFCP	Employment Opportunities
RCHE	84.5 jobs / 200-place ¹	87 place	36.75
Day Care Centres for the Elderly	22.5 jobs/ 60-place ²	198 place	74.25
Home Based CCS Team	15.5 jobs/ 70-place ³	369 place	81.7
Clinic	5.8 Doctors/ clinic ⁴ 4 Pharmaceutical Staffs/ clinic ⁵ 21.6 Nurses/ clinic ⁶	5 clinics	157
Art and Culture Incubator	2-3 Workers/ 30 m ² (Based on the number of staff in JCCAC)	2150 m ²	143
Management Staff of Residential Development	6 Staff/ blocks	10 blocks	60

(Based on the staffing of
small to medium scale
residential development)

Management Staff of Open Space	Varies	3.34 ha	+
Retail & Services, Food & Beverage	Varies	1075 m ²	+
Total			553+

- (1) Based on the Notional Staffing Establishment advised by SWD: https://www.swd.gov.hk/storage/asset/section/2913/en/NSEs_of_EB_C&A.pdf
- (2) Based on the Notional Staffing Establishment advised by SWD: [https://www.swd.gov.hk/storage/asset/section/2913/en/NSEs_\(60_places_DE_\(28.8.2020\).pdf](https://www.swd.gov.hk/storage/asset/section/2913/en/NSEs_(60_places_DE_(28.8.2020).pdf)
- (3) Based on the Notional Staffing Establishment advised by SWD: [https://www.swd.gov.hk/storage/asset/section/2913/en/NSE_HCS_for_Frail_EPs_\(Eng\).pdf](https://www.swd.gov.hk/storage/asset/section/2913/en/NSE_HCS_for_Frail_EPs_(Eng).pdf)
- (4) Estimated based on the total number of doctors serving GOPC: https://www.fhb.gov.hk/cn/legco/replies/2018/lq180110_q08.htm
- (5) Based on the Notional Staffing Establishment advised by SWD: <https://www.info.gov.hk/gia/general/201007/14/P201007140267.htm>
- (6) Based on LCQ responses <https://www.legco.gov.hk/research-publications/chinese/1819ish05-healthcare-workforce-20181102-c.pdf>
- (7) Based on the number of staff in JCCAC

Open Space

5.9.8. In view of the significant deficit in Local Open Space (LO) even under the planned condition, the final AFCP emphasises on the provision of smaller scale open space with a dispersed spatial distribution to further enhance the coverage. These open spaces are distributed in the form of roadside pocket spaces, waterfront recreational spaces and rooftop gardens of the proposed development. Even with the increased population induced by the AFCP, it is proven that the plan has not induced extra pressure on the LO provision given the slight decrease in deficit from 20.98 to 18.69 when compared to the planned condition of the study area.

5.9.9. Although the LO deficit is still reflected from results below, it is important to note that the provision has not taken POSPD in future redevelopment projects into account. With the emerging redevelopment trend and emphasis on open space provision/ green roof, POSPD in these projects are expected to take up a significant proportion of LO, relieving the foreseeable deficit.

Table 5.9.8: Adequacy of Open Space Provision upon Promulgation of AFCP (Source: Study Team)

	HKPSG Standard	HKPSG Requirement ¹	Existing and Planned Open Space ²	Net Change from AFCP ³	Provision	Surplus/ Deficit
RO	No standard	N/A	78.74	0	78.74	N/A
DO	10 ha per 100 000 persons	43.6	74.6	0	74.6 ⁴	+31.00
LO	10 ha per 100 000 persons	43.6	21.37	+3.34	24.71	-18.89
Total		87.3	174.71	+3.34	178.05	

- (1) Calculated based on the population from Section 5.9.3.
- (2) Existing and Planned Open Space before incorporating the Final AFCP.
- (3) Proposed Open Space on planned "O" zones of Approved OZP will be excluded from calculation.
- (4) Half of RO are counted towards DO according to HKPSG Ch.3

6. Sustainability Impact Assessment (SusIA)

6.1. Selection Criteria

6.1.1. The final Sustainable Impact Variables (SIVs) and their corresponding indicators were derived from the baseline evaluation conducted in stage 1 and have consolidated across the preliminary SIVs identified by the team and the sub-consultants (e.g. Age0+ and Fellows). The selection of SIVs and their corresponding indicators is based on various criteria listed out as follows:

- **Comprehensiveness:** SIVs and Indicators should correspond to the three planning aspects (eg. physical, socio-economic and infrastructure and environment) stipulated in the *Study Brief requirements*;
- **Coherence:** SIVs and Indicators should align with the international and local policy agenda and objectives on sustainable development as well as the guidelines on age-friendliness ;
- **Reflective:** Indicators should respect and reflect the guiding planning principles derived from the SWOT analysis of the baseline evaluation and public engagement practices; and
- **Measurable:** Performance of the Indicators should be easily measurable and predictable at both the plan-making stage and plan-implementation stage for impact (positive/negative) forecast as well as for evaluation and monitoring purposes .

6.1.2. International and local guidelines on sustainability as well as age friendly have been referenced. In view of the main theme of the study, an age friendly community, the SIVs have been carefully selected against the local contexts, such as the opportunities and threats the study area is facing currently and in the future. **Table 6.1.1** shows the guiding documents of SIV the study has made referenced to.

Table 6.1.1: Guiding Documents of SIV in the Study (Source: Study Team)

Sustainability Guidelines

- Computer Aided Sustainability Evaluation Tool (CASET) - SUSDEV 21 (PlanD, 1997)
- United Nations Sustainable Development Goals (UNSDG)
- The Egan Review: Skills for Sustainable Communities (Egan, 2004)
- STAR Community Index

Age Friendly Guidelines

- Global Age friendly Cities: A Guide (WHO,2007)
- Measuring the Age friendliness of cities: A Guide to using core indicators (WHO, 2015)
- Active Ageing: a policy framework (WHO, 2002)
- Elderly friendly Design Guidelines (ArchSD, 2019)
- WHO Regional Office for Europe's Age-friendly environments in Europe: Indicators. Monitoring and assessments (WHO, 2018)
- CUHK Jockey Club Institute of Ageing's AgeWatch Index for Hong Kong: Topical Report on Enabling Environment (CUHK,2017).

6.2. List of SIV

6.2.1. This Study adopts an interdisciplinary, comprehensive and integrative approach in appraising the sustainability impacts with particular focus on the age friendliness of plans prior to implementation with great respect given to the unique local contexts. Therefore, further to and applying the above guidelines against the background of the study area, 26 indicators among 8 dimensions of SIVs are identified for subsequent SusIA of the Draft and Final AFCP as stated in **Table 6.2.1**. The eight SIVs include leisure & cultural vibrancy; society & social infrastructure; health; economy; land use & infrastructure; housing; transport; and environment.

Table 6.2.1: List of Dimension and Indicators (Source: Study Team)

SIVs	Indicators	Description
Leisure & Cultural Vibrancy	Accessibility of Open Spaces	Reaching of open spaces and essential public services within walkable distance of 250-400m.
	Adequacy and variety of leisure, cultural and recreational facilities	Recreational facilities that promote an active lifestyle, interaction and cultural diversity
	Conservation	Conservation of heritage sites and cultural practices
	Intergenerational Interaction	Provision of community facilities for intergenerational interaction
Society & Social Infrastructure	Opportunity of lifelong learning	Provision of post-retirement learning opportunities
	Clear and efficient dissemination of information	Established channels of distributing information (for the use of wayfinding, community activities)
	Enhancement of social inclusion and community support	Increase in the community support programmes
Health	Adequacy and accessibility of health and medical services	Reaching of health and medical services on foot and by public transport
	Enhancement of the sense of community identify	Increase in social well-being of residents
Economy	Development of local business opportunities	Increase in the variety of business activities Retail and business activities within walkable distance
	Creation of job opportunities	Quantity and variability of working opportunities and other civic participation
	Age friendly retail and business spaces	Accessibility of retail spaces (Universal Design, Rest, Help-seeking)

Land Use and Infrastructure	Land use compatibility	Enhancement of interfaces between conflicting land uses to reduce nuisance.
	Management and Maintenance of local infrastructure	Institutional resources and coordination for effective infrastructure management
	Revitalization of local infrastructure	Optimizing the usage of underused/derelict local infrastructure via revitalization/rehabilitation
Housing	Management and maintenance	Cleanliness and Safety of corridors, stairways and facilities within the purview of the properties
	Adequacy and availability of housing	Reduction in population living in substandard housing
	“Ageing in place” support in residential neighborhood	Elderly-friendly housing design and environment supporting ageing in place and social interaction Accessible social and health services in residential neighborhood
Transport	Specialized elderly services	Availability of specialised transport services for the elderly
	Age-friendly public transport	Provision of Seating Areas and Shelter in public transport stops
	Public transport connectivity	Access to destinations within and outside the district
	Walkability (pedestrian safety and adaptability of walking environment)	Road safety for transportation facilities Universal design for pedestrian environment
Environment	Greenery provision and coverage	Tree Canopy Coverage and Green Coverage for shading in the Public Realm (including streets and open spaces)
	Vegetation type and biodiversity	Number of species in built-up areas
	Environmental quality (noise, air, water, thermal comfort)	Percentage of population exposed to excessive air pollution
		Percentage of population exposed to excessive noise
		Improvement of thermal comfort
Implementation of climate change adaptation and mitigation strategies (extreme weather management)		
Hygiene, sewerage, and waste management	Increase in resource recovery rate	
	Reduction in hygiene black spots	

6.3. Assessment Mechanism

6.3.1. The study has modified the SusIA Framework with reference to CASET and SUSDEV 21, that the sustainability impact of each indicator will be assessed individually based on three assessment criteria, with corresponding performance scores ranging from 0 to +2.

- +2 for significant improvement with joint/synergizing effect;
- + 1 for slight improvement with standalone effect; and
- 0 for no improvement.

Table 6.3.1: Scoring for Performance of Indicators (Source: Study Team)

Score	Description
+2	Significant Improvement, with joint/synergizing effect
+1	Slight Improvement, standalone effect
0	No improvement, remain as baseline scenario

6.3.2. In other words, each indicator weighs 2 points, while understanding each SIV might contain different numbers of indicators that might affect a fair comparison between them, thus, the overall performance of the SIVs will be presented in increment ratings that shows the level of improvement eg. +75% (see **Table 6.3.2** for an example). Please refer to **Appendix 8.** for the complete score breakdown of all indicators.

Table 6.3.2: Example of Assessment Result (Source: Study Team)

SIVs	Indicators	Scoring
Leisure & Cultural Vibrancy (4/8)	Accessibility of Open Spaces	+ 1
	Adequacy and variety of leisure, cultural and recreational facilities	+1
	Conservation	0
	Intergenerational Interaction	+2
Total		4 out of 8
Increment Rating		+50%

6.4. Results and Implications

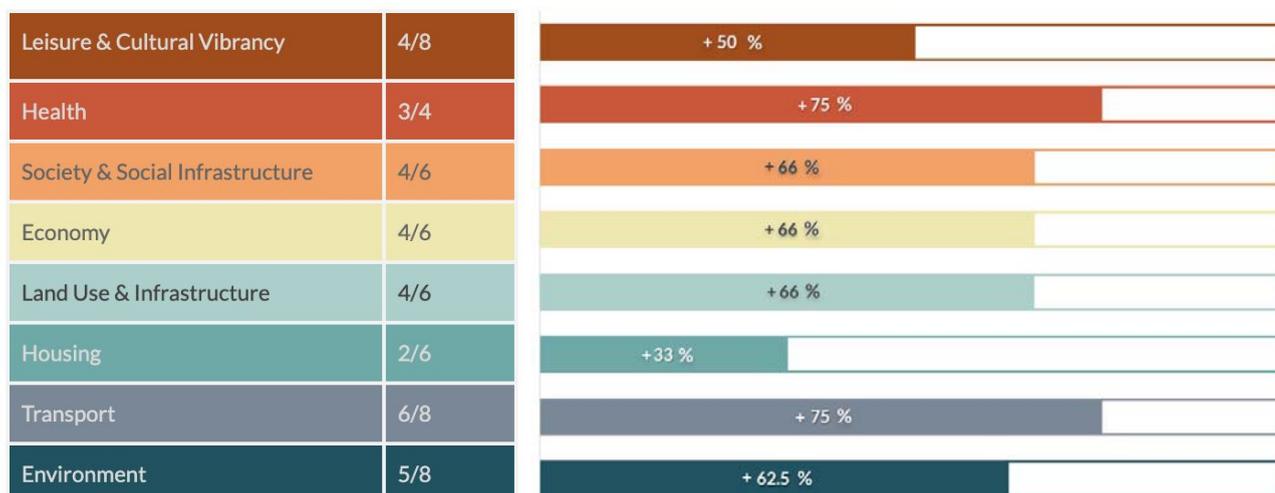


Figure 6.4.1: SusIA Result Overview (Source: Study Team)

- 6.4.1. As shown in the results of the SusIA above (see **Figure 6.4.1**), the strategies and corresponding proposals the Study Team suggested have greatly improved the sustainability in relevance to age-friendliness of the study area. With that, the proposals are contributing towards the actualization of our planning vision, to plan and design for an age-friendly Kowloon City. Among the eight dimensions, Health and Transport aspects have seen the greatest improvement, with +75% each. The study team has observed a deficit in medical facilities in terms of the types of these facilities available along with their spatial distribution across the district. Therefore, extra attention has been placed on the variety of medical and healthcare services and facilities to be provided in the district to cater for different needs of the population, for example, the first of its kind dementia healthcare centre in Ma Tau Wai and a private-led wellness centre for the higher income group in Whampoa.
- 6.4.2. Meanwhile, the high score of 4/6 (75%) achieved in the Transport dimension is well-justified by the careful treatment of the physical connectivity by enhancing both the intra-district connectivity among the sub-areas and the inter-district connectivity of Kowloon City district to others regardless one is on foot or by vehicles. It can be highlighted by the proposed connected waterfront and the circular feeder service.
- 6.4.3. Besides, other SIVs have achieved a well-performing rating generally, with Society and Social Infrastructure, Economy and Land Use and Infrastructure obtaining a +66% improvement, respectively. Also, an improvement of +62.5% is observed for Environment and a +50% improvement for Leisure and Cultural Vibrancy. The high incremental ratings observed for these SIVs is credited to the thorough consideration of related weaknesses in the AFCP that have been explicitly explained in detail in previous chapters. In particular, the proposed intergenerational co-living units accompanied by the abundant amount of soft social programs, shared space in GIC facilities, and the 5 streets cultural and creative incubator are believed to be contributing towards a high rating for Society and Social Infrastructure. Whilst, the incubator, private-led wellness services and the multi-level healthcare composite buildings are responsible for the provision of local business opportunities, thus contributing to the high rating in Economy.

- 6.4.4. On the other hand, a relatively lower rating is observed for Housing (+25%), which includes indicators relating to adequacy and availability of housing, property management and maintenance and “ageing in place” support. The study team fully acknowledged the importance of housing towards planning for an age-friendly community, however, there are inherited constraints in the housing dimension for large-scale housing redevelopment schemes that require further exploration in order to be addressed. For instance, due to the historical background and land use pattern of the study area, solving the inadequacy of housing stocks and improving the building conditions have to be comprehensively studied due to great uncertainties and a lot of stakeholders involved. Yet, the Study Team is confident in improving the Housing variable in the district upon further investigation jointly with other disciplines.
- 6.4.5. Overall speaking, it can be concluded that the Final AFCP prepared has performed well in terms of sustainability especially encompassing the theme of age-friendly according to the adopted SusIA framework.

7. Conclusion and Way Forward

7.1. Conclusion

- 7.1.1. In September 2020, IC Planning Consultant was commissioned by the Department of Urban Planning and Design, HKU, to provide consultancy service regarding the study titled “**Planning for an Age Friendly Kowloon City**’.
- 7.1.2. Under the vision of creating an age friendly, sustainable, smart and liveable community, a final AFCP of 4 strategies and 12 proposals is put forward in this study, aiming to foster the development of an age friendly community such that residents can live with autonomy, health and well-being, social connectedness, sense of security and resilience as they age. The four strategies are namely, **Interconnected Web**, **Integrative Environment**, **Intergenerational Cohesion** and **Independent Wellness**.

7.2. Way Forward

- 7.2.1. The proposed final AFCP has laid out clear strategies and implementation plans for Kowloon City District to move towards an age friendly community. At the same time, through the study process, the Study Team has identified areas which continuous improvements are required; or review have to be initiated from higher institutional level in order for a comprehensive strategy to be formulated. The identified future directions are outlined below.
- 7.2.2. **Hinterland Connectivity:** Under the proposed AFCP, waterfront connectivity with the hinterland will be greatly improved via the setting up of *green corridors* and *universal access and design improvement*. Despite the substantial improvement on the walking environment, in view of the current poor conditions, continuous improvements on the pedestrian network is required. The proposed street-scale interventions can be extended to other streets in enhancing walkability and connectivity with the waterfront.
- 7.2.3. **Delivery of Medical Services:** As mentioned in the SusIA, the health aspect shows substantial improvements in the proposed AFCP. Yet, given the rising trend of ageing population, continuous efforts have to be made in refining the healthcare system and the mode of service delivery. Apart from addressing the GOPC provision in the Mau Tau Wai area, the Study Team has several initiatives on delivering the *first dementia wellness centre* and expanding the *preventive healthcare market*. The Study Team believes that a combination of centralised and dispersed healthcare service would be worth further exploration to meet the future demands in healthcare.
- 7.2.4. **Affordable and Inclusive Housing:** From the SIA, there is room for future improvement in the housing perspective. It is anticipated that with increasing redevelopment projects to be carried out, the quality of housing can be immensely enhanced. However, during the redevelopment process, thoughts have to be made to avoid the risk of residents displacement. In the proposed AFCP, efforts have been made in providing affordable and inclusive housing options through the *intergenerational co-living units*. It is recommended that relevant institutional bodies should take a more proactive approach to further study the co-housing model, to identify other potential areas to provide other diverse and inclusive affordable housing options.

7.2.5. The findings of the Study provide the foundations for further technical studies and design. The follow-up works such as feasibility studies are recommended to be carried out for all proposals. The pursuit of an age friendly community is a long term and continuous process with joint efforts across all levels of institutions and the community. The proposed final AFCP will be a suitable way in kick starting the long term vision of realising an age friendly community.

References

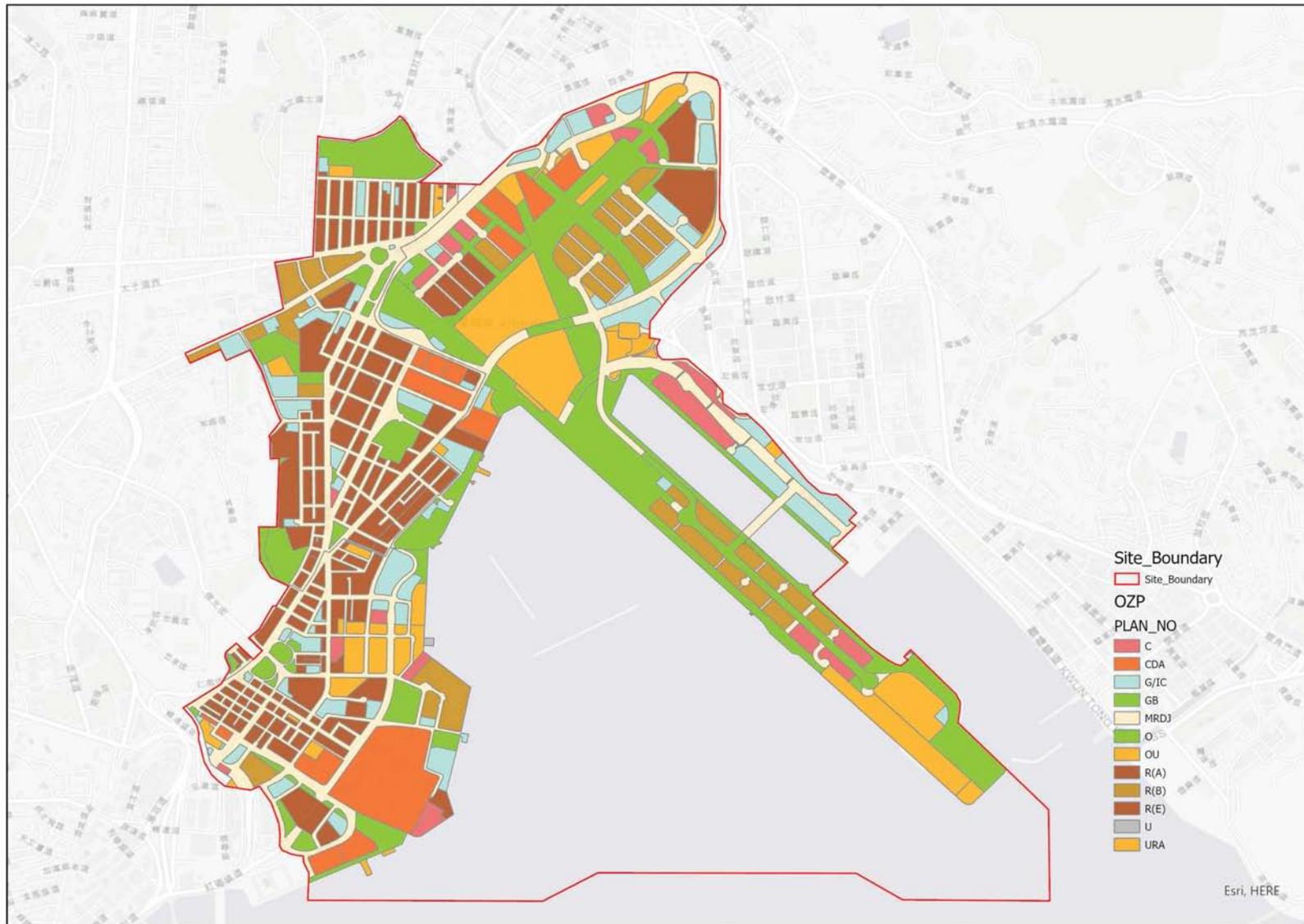
- Age 0+ (2020), *Baseline Review and Evaluation Report*, Hong Kong, The University of Hong Kong.
- Antiquities and Monuments Office (2018), “Assessment of 1,444 Historic Building”,
<https://www.amo.gov.hk/en/built2.php>, (last accessed on 30 November 2020).
- Belfast Office of the First Minister and Deputy First Minister, Belfast (2005), *Ageing in an inclusive society: a strategy for promoting the social inclusion of older people*, Belfast.
- Boldy, D., Grenade, L., Lewin, G., Karol, E., & Burton, E. (2011), “Older people's decisions regarding ‘ageing in place’: A Western Australian case study”, *Australasian Journal on Ageing*, Vol. 30, No. 3, pp. 136-442.
- Bridger, J.C. and Luloff, A.E. (1999), “Toward an interactional approach to sustainable community development”, *Journal of rural studies*, Vol. 15, No. 4, pp.377-87.
- Buildings Department, Hong Kong Special Administrative Region (2008), *Design Manual: Barrier Free Access 2008*, Hong Kong.
- Census and Statistics Department (2017), “Hong Kong Population Projections 2017-2066”,
<https://www.statistics.gov.hk/pub/B1120015072017XXXXB0100.pdf>, (last accessed on 18 October 2020).
- Census & Statistics Department. (2019), “Population and Household Statistics Analysed by District Council District”, <https://www.statistics.gov.hk/pub/B11303012019AN19B0100.pdf>, (last accessed on 3 December 2020).
- Centre of Design (2020), “The Portland Memory Garden”,
<https://www.centerofdesign.org/pages/memorygarden.htm>, (last accessed on 3 December 2020).
- Chui, E. (2008), “Ageing in place in Hong Kong—challenges and opportunities in a capitalist Chinese city”, *Ageing International*, Vol. 32, No. 3, pp.167-82.
- Crews, D. E. and Zavotka, S. (2006), “Aging, disability, and frailty: Implications for universal design”, *Journal of Physiological Anthropology*, Vol.25, No.1, pp. 113-8.
- CUHK Jockey Club Institute of Ageing (2017), *AgeWatch Index for Hong Kong: Topical Report on Enabling the Environment*. Hong Kong: The Hong Kong Jockey Club.
- DURF (2014), “Study on Urban Renewal Plan for Kowloon City – Final Report (in Chinese only)”,
[https://www.durf.org.hk/pdf/20140812_KC_DURF_FinalReport\(portrait\)_tc.pdf](https://www.durf.org.hk/pdf/20140812_KC_DURF_FinalReport(portrait)_tc.pdf), (last accessed on 3 December 2020).
- Egan, J (2004), *The Egan Review: Skills for Sustainable Communities* Oce of the Deputy Prime Minister, London.
- Fellows (2020), *Baseline Review and Evaluation Report*, Hong Kong, The University of Hong Kong.
- Fisk, M.J. (1986), *Independence and the Elderly*, London: Croom Helm.
- Garland, E. (2017), “Learning from Intergenerational Housing Projects in the USA”,
https://www.housinglin.org.uk/_assets/Resources/Housing/OtherOrganisation/Garland-E-Report-2017-Final.pdf, (last accessed on 30 November 2020).
- Henderson Land (2019). “Sustainability and CSR Report 2019”,
https://www.hld.com/en/pdf/investor/annual/2019/CSR_E.pdf, (last accessed on 1 December 2020).
- HK01 (2018), “【暑假殺到】27人爭一個位 這種康體活動竟然咁搶手”, <https://bit.ly/36sP73c>, (last accessed on 1 December 2020).

- Hong Kong Housing Society (2020), “Chun Seen Mei Chuen”,
https://www.hkhs.com/en/housing_archive/id/11, (last accessed on 28 November 2020).
- Jones, B. and Hayden, J. (2009), “Innovation in an Age-Integrated Society”,
https://www.researchgate.net/publication/307546899_Innovation_in_an_Age-Integrated_Society, (last accessed on 3 December 2020).
- Lam, C.Y. and Fong, B.Y. (2020), “Ageing in place”-social and health implications in Hong Kong”,
CAHMR Working Paper Series, No. 1, pp. 1-10
- Legislative Council (2019), “Review of Assessment Mechanism for Hillside Escalator Links and Elevator Systems Proposals”,
https://www.legco.gov.hk/yr19-20/english/panels/tp/tp_hel/papers/tp_hel20191113cb4-105-1-e.pdf, (last accessed on 28 November 2020).
- Lui, C.W., Everingham, J.A., Warburton, J., Cuthill, M. and Bartlett, H. (2009), “What makes a community age-friendly: A review of international literature”, *Australasian journal on ageing*, Vol. 28, No. 3, pp.116-21.
- Ministry of Manpower (2020), “Tripartite Guidelines on the Re-employment of Older Employees”,
<https://www.mom.gov.sg/-/media/mom/documents/employment-practices/guidelines/tripartite-guidelines-on-re-employment-of-older-employees.pdf>, (last accessed on 1 December 2020).
- MTR (2013), “Shatin to Central Link”,
<https://www.mtr-shatincentrallink.hk/en/project-details/alignment.html>, (last accessed on 28 November 2020).
- Mustaquim, M. M. (2015), “A Study of Universal Design in Everyday Life of Elderly Adults”,
Procedia computer science, Vol. 67, pp. 57–66.
- Planning Department (1997), “SUSDEV 2021 Study”,
https://www.pland.gov.hk/pland_en/p_study/comp_s/susdev/ex_summary/final_eng/ch1.htm, (last accessed 1 December 2020).
- Planning Department (2019), “Hong Kong Planning Standard and Guidelines Chapter 8: Internal Transport Facilities”,
https://www.pland.gov.hk/pland_en/tech_doc/hkpsg/full/pdf/ch8.pdf, (last accessed on 1 December 2020).
- Planning Department (2020), “Hong Kong Planning Standard and Guidelines Chapter 3: Community Facilities”,
https://www.pland.gov.hk/pland_en/tech_doc/hkpsg/full/pdf/ch3.pdf, (last accessed on 1 December 2020).
- Portland Gov (2020), “Portland Memory Garden”,
<https://www.portland.gov/parks/portland-memory-garden>, (last accessed on 3 December 2020).
- Reis, P.F., Moro, A.R.P., Bins, E., Fernandes, C., Vilagra, J., Peres, L., Junior, O.F. and Merino, E.A.D. (2012), “Universal design and accessibility: an approach of the influence of muscle strength loss in the risk of falls in the elderly”, *Work*, Vol. 41, No. 1, 374–9.
- Roseland, M. (2000), “Sustainable community development: integrating environmental, economic, and social objectives”, *Progress in Planning*, Vol. 54, No. 2, pp.73-132.

- Shafique, A (2018), “Co-living and the Common Good”,
<https://www.thersa.org/globalassets/pdfs/reports/rsa-co-living.pdf>, (last accessed on 30 November 2020).
- Social Welfare Department (2020), “SWD commences programme to purchase premises for provision of welfare facilities”,
<https://www.info.gov.hk/gia/general/202009/29/P2020092900357.htm?fontSize=1>, (last accessed on 1 December 2020).
- Special Employment Credit (2020), “Re-employing Older Employees”,
<https://www.sec.gov.sg/Pages/More-Information-on-SEC.aspx>, (last accessed on 1 December 2020).
- Tam, V., Fung, I., Tsang, Y., and Chan, L. (2018), “Development of a Universal Design-Based Guide for Handrails: An Empirical Study for Hong Kong Elderly”, *Sustainability*, Vol. 10, No.11, p.4233.
- The Council on Ageing of Ottawa (2020), “Old Adult Plan 2020-2022”.
<https://ottawa.ca/en/older-adult-plan>, (last accessed on 2 December 2020).
- The Government of the Hong Kong Special Administrative Region (2017), “LCQ8: Combat illegal parking in Kowloon City, To Kwa Wan and Hung Hom”,
<https://www.info.gov.hk/gia/general/201711/15/P2017111400689.htm?fontSize=1>, (last accessed on 3 December 2020).
- The Government of the Hong Kong Special Administrative Region (2018), “The Chief Executive’s 2018 Policy Address”, <https://www.policyaddress.gov.hk/2018/eng/pdf/PA2018.pdf>, (last accessed on 28 November 2020).
- Transport Department (2020), “Bus Route Planning Programme 2020-2021 of Kowloon City District (Chinese version only)”,
https://www.td.gov.hk/filemanager/en/util_uarticle_cp/2020-21_kowloon_city_rpp.pdf, (last accessed on 3 December 2020).
- Tung Wah Group of Hospitals (2016). “Launch of Mobile App – CHEERS Cum Professional Staff Training on Dementia Care”,
<https://www.tungwah.org.hk/en/press-release/launch-of-mobile-app-cheers-cum-professional-staff-training-on-dementia-care/>, (last accessed on 1 December 2020).
- World Health Organization (2002), *Active ageing: A policy framework (No. WHO/NMH/NPH/02.8)*, World Health Organization.
- World Health Organization (2007), “WHO Global Age-friendly Cities: A Guide”,
https://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf, (last accessed on 18 October 2020).
- World Health Organization (2015), “Measuring the age-friendliness of cities: a guide to using core indicators”,
<https://www.who.int/ageing/publications/measuring-cities-age-friendliness/en/>, (last accessed 30 November 2020).
- World Health Organization (2018), “Age-friendly environments in Europe: Indicators, monitoring and assessments (2018)”,
<https://www.euro.who.int/en/health-topics/Life-stages/healthy-ageing/publications/2018/age-friendly-environments-in-europe-indicators,-monitoring-and-assessments-2018>, (last accessed 25 November 2020).

- World Health Organization (n.d.), “Age-friendly Programme in Ottawa”,
<https://extranet.who.int/agefriendlyworld/resources/age-friendly-case-studies/ottawa/>
, (last accessed on 2 December 2020).
- Xu, Y., Zhang, T. and Wang, D. (2019), “Changes in inequality in utilization of preventive care services: evidence on China’s 2009 and 2015 health system reform”, *International journal for equity in health*, Vol. 18, No. 1, p.172.

Appendix 1 Outline Zoning Plan of the Study Area



Appendix 2 Extract of Questionnaire Survey Results

Building Condition

Question 2: Regarding the residential building you are living in, how would you rate the following statements?

The building is in good hygiene.

		Good Hygiene					Total
Housing Type		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	
PRH	PRH	3 (3%)	19 (18.8%)	66 (65.3%)	5 (5%)	8 (7.9%)	101
	Subsidised Housing	0 (0%)	4 (15.4%)	20 (76.9%)	0 (0%)	2 (7.7%)	26
	Private Housing (Tenement Building)	5 (6%)	26 (31.3%)	28 (33.7%)	2 (2.4%)	22 (26.5%)	83
	Private Housing (Others)	0 (0%)	16 (13.9%)	77 (67%)	12 (10.4%)	10 (8.7%)	115
	Others	1 (33.3%)	1 (33.3%)	0 (0%)	0 (0%)	1 (33.3%)	3
Total		9 (2.7%)	66 (20.1%)	191 (58.2%)	19 (5.8%)	43 (13.1%)	328

There is sufficient universal access (e.g.ramps/lifts/floor climbers).

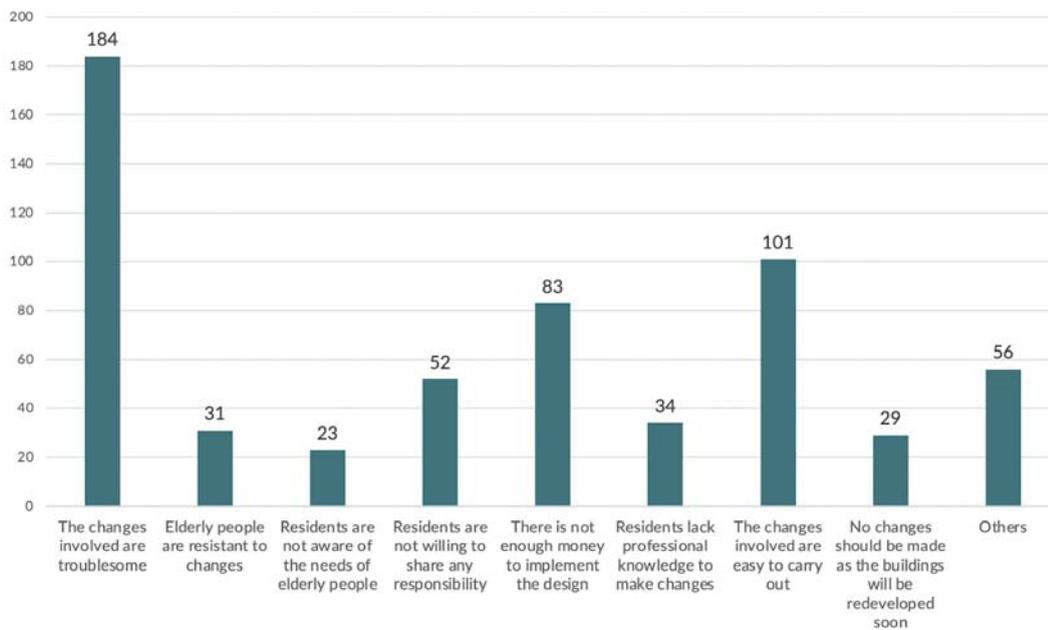
		Sufficient Universal Access					Total
Age Group		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	
18-24	18-24	2 (8.3%)	3 (12.5%)	3 (62.5%)	3 (12.5%)	1 (4.2%)	24
	25-34	0 (0%)	2 (16.7%)	6 (50%)	1 (8.3%)	3 (25%)	12
	35-44	4 (26.7%)	2 (13.3%)	5 (33.3%)	2 (13.3%)	2 (13.3%)	15
	45-54	2 (10%)	4 (20%)	9 (45%)	2 (10%)	3 (15%)	20
	55-64	5 (9.1%)	5 (9.1%)	30 (45%)	7 (12.7%)	8 (14.5%)	55
	65+	13 (6.4%)	14 (6.9%)	108 (53.5%)	28 (13.9%)	39 (19.3%)	202

Total	26 (7.9%)	30 (9.1%)	173 (52.7%)	43 (13.1%)	56 (17.1%)	328
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The building facilities are well-maintained and are in good condition.

		Facilities Well Maintained					Total
		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	
Age Group	18-24	0(0%)	7 (29.2%)	10 (41.7%)	3 (12.5%)	4 (16.7%)	24
	25-34	1 (8.3%)	1 (8.3%)	8 (66.7%)	0 (0%)	2 (16.7%)	12
	35-44	0 (0%)	1 (6.7%)	4 (26.7%)	2 (13.3%)	8 (53.3%)	15
	45-54	1 (5%)	6 (30%)	7 (35%)	3 (15%)	3 (15%)	20
	55-64	3 (5.5%)	10 (18.2%)	26 (47.3%)	5 (9.1%)	11 (20%)	55
	65+	3 (1.5%)	36 (17.8%)	109 (54%)	24 (5.4%)	71 (21.3%)	202
Total		8 (2.4%)	61 (18.6%)	164 (50%)	24 (7.3%)	71 (21.6%)	328
		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	Total
Housing Type	PRH	1 (1%)	8 (7.9%)	69 (68.3%)	12 (11.9%)	11 (10.9%)	101
	Subsidised Housing	1 (3.8%)	1 (3.8%)	16 (61.5%)	0 (0%)	8 (30.8%)	26
	Private Housing (Tenement Building)	19 (22.9%)	11 (13.3%)	14 (16.9%)	6 (7.2%)	33 (39.8%)	83
	Private Housing (Others)	4 (3.5%)	10 (8.7%)	73 (63.5%)	24 (20.9%)	4 (3.5%)	115
	Others	1 (33.3%)	0 (0%)	1 (33.3%)	1 (33.3%)	0 (0%)	3
Total		26 (7.9%)	30 (9.1%)	173 (52.7%)	43 (13.1%)	56 (17.1%)	328

Question 3: Why do you think carrying out modifications related to age-friendly design in residential buildings is difficult?



Streetscape and Infrastructure

Question 4: Regarding the street environment in your neighbourhood, to what extent do you agree with the following statements?

Signages are clear and sufficient.

Signages are clear

		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	Total
Age Group	18-24	0(0%)	3 (12.5%)	15 (62.5%)	3 (12.5%)	3 (12.5%)	24
	25-34	0 (0%)	2 (16.7%)	6 (50%)	1 (8.3%)	3 (25%)	12
	35-44	1 (6.7%)	5 (33.3%)	7 (46.7%)	0 (0%)	2 (13.3%)	15
	45-54	0 (0%)	9 (45%)	10 (50%)	0 (0%)	1 (5%)	20
	55-64	1 (1.8%)	19 (34.5%)	31 (56.4%)	1 (1.8%)	3 (5.5%)	55
	65+	2 (1%)	84 (41.6%)	93 (46%)	4 (2%)	19 (9.4%)	202
Total		4 (1.2%)	122 (37.2%)	162 (49.4%)	9 (2.7%)	31 (9.5%)	328

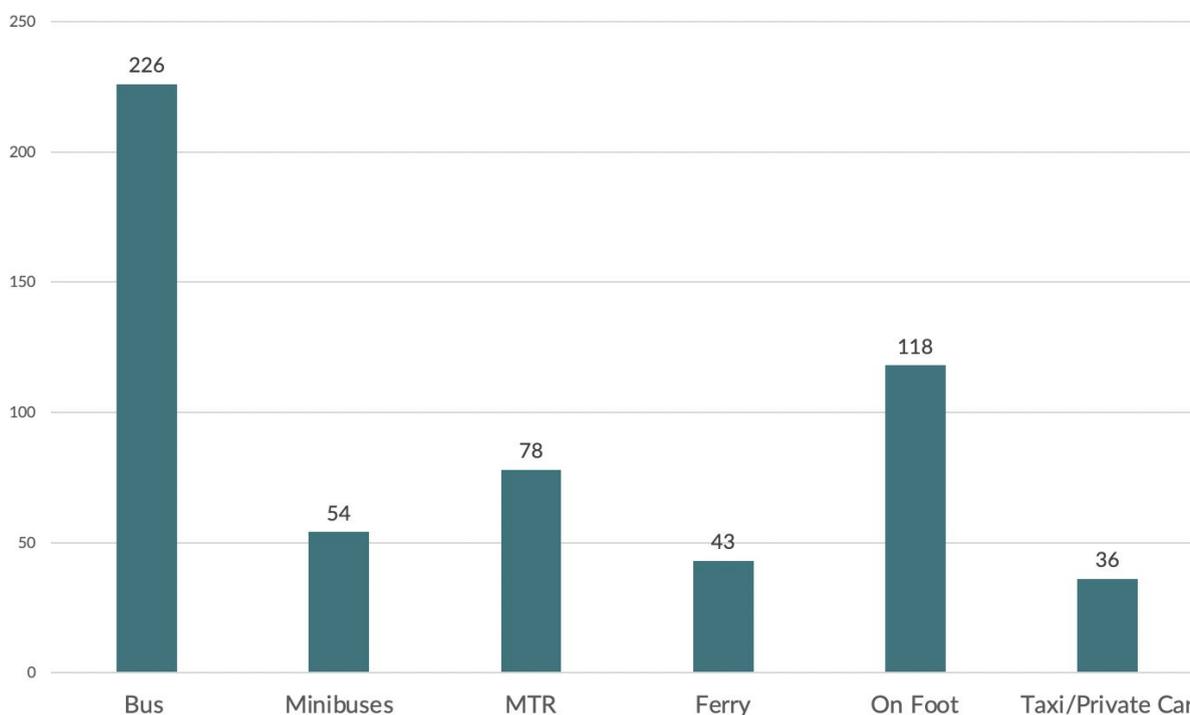
Environmental Quality & Resource

Question 8: How often do you use the open spaces in the neighbourhood?

		Frequency to go to Open Space					
		Everyday	At least one per week	At least once a month	Less than once a month	Never	Total
Age Group	18-24	0(0%)	7 (29.2%)	5 (20.8%)	6 (25%)	6 (25%)	24
	25-34	0 (0%)	5 (41.7%)	1 (8.3%)	3 (25%)	3 (25%)	12
	35-44	2 (13.3%)	7 (46.7%)	2 (13.3%)	1 (6.7%)	3 (20%)	15
	45-54	4 (20%)	4 (20%)	5 (25%)	2 (10%)	5 (25%)	20
	55-64	21 (38.2%)	23 (41.8%)	0 (0%)	4 (7.3%)	7 (12.7%)	55
	65+	123 (60.9%)	55 (27.2%)	6 (3%)	6 (3%)	12 (5.9%)	202
Total		150 (45.7%)	101 (30.8%)	19 (50.8%)	22 (6.7%)	36 (11%)	328

Transportation

Question 13: How often do you use the open spaces in the neighbourhood?



Community Identity

Question 23: Please rate your level of agreement to the following statements.

I am eager to interact with neighbours of different generations.

I am eager to interact with neighbours of different generations.

		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	Total
Age Group	18-24	0 (0%)	3 (12.5%)	8 (33.3%)	13 (54.2%)	0 (0%)	24
	25-34	0 (0%)	2 (16.7%)	2 (16.7%)	8 (66.7%)	0 (0%)	12
	35-44	0 (0%)	1 (6.7%)	7 (46.7%)	6 (40%)	1 (6.7%)	15
	45-54	0 (0%)	1 (5%)	4 (20%)	13 (65%)	2 (10%)	20
	55-64	0 (9%)	5 (9.1%)	12 (21.8%)	34 (61.8%)	4 (7.3%)	55
	65+	6 (3%)	17 (8.4%)	41 (20.3%)	128 (63.4%)	10 (5%)	202
Total		6 (1.8%)	29 (8.8%)	74 (22.6%)	202 (61.6%)	17 (5.2%)	328

There are sufficient opportunities in the community for me to interact with neighbours of different generations.

There are sufficient opportunities in the community for me to interact with neighbours of different generations.

		1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)	Total
Age Group	18-24	2 (8.3%)	8 (33.3%)	10 (41.7%)	4 (16.7%)	0 (0%)	24
	25-34	0 (0%)	7 (58.3%)	2 (16.7%)	2 (16.7%)	1 (8.3%)	12
	35-44	1 (6.7%)	5 (33.3%)	3 (20%)	6 (40%)	0 (0%)	15
	45-54	2 (10%)	4 (20%)	7 (35%)	6 (30%)	1 (5%)	20
	55-64	0 (0%)	16 (29.1%)	11 (20%)	27 (49.1%)	1 (1.8%)	55
	65+	14 (6.9%)	53 (26.2%)	43 (21.3%)	79 (39.1%)	13 (6.4%)	202
Total		19 (5.8%)	93 (28.4%)	76 (23.2%)	124 (37.8%)	16 (4.9%)	328

Appendix 3 Roadshow Questionnaire Respondent Profile

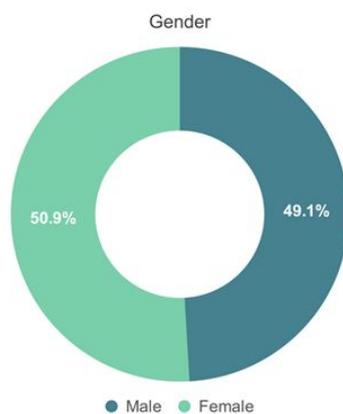


Figure 3.1: Gender Distribution

	n	Percentage
Male	161	49.1
Female	167	50.9
Total	328	100

Table 3.1: Gender Distribution

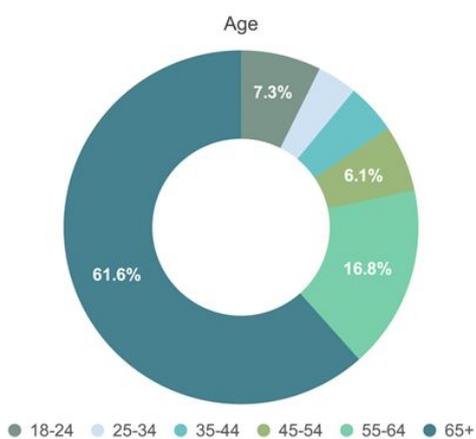


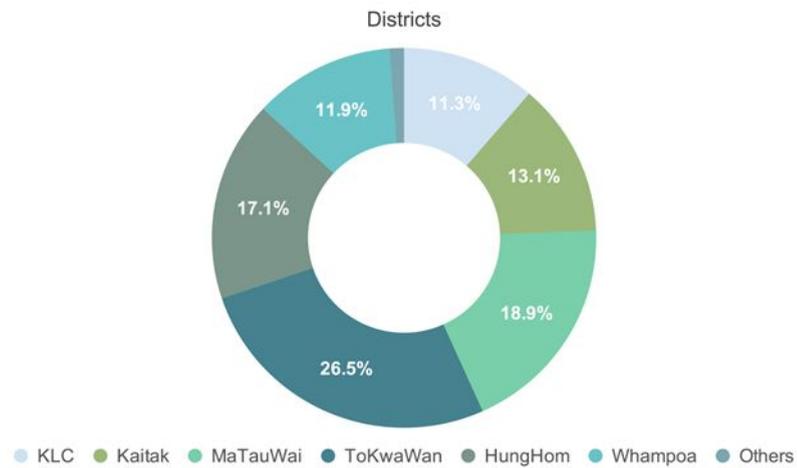
Figure 3.2: Age Distribution

	n	Percentage
18-24	24	7.3
25-34	12	3.7
35-44	15	4.6
45-54	20	6.1

55-64	55	16.8
65+	202	61.6
Total	328	100

Table 3.2: Age Distribution

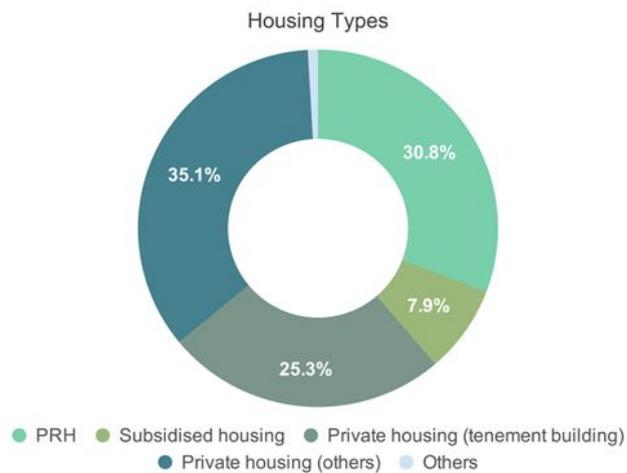
Figure 3.3: Districts



	n	Percentage
KLC	37	11.3
Kai Tak	43	13.1
Ma Tau Wai	62	18.9
To Kwa Wan	87	26.5
Hung Hom	56	17.1
Whampoa	39	11.9
Others	4	1.2
Total	328	100

Table 3.3: District Distribution

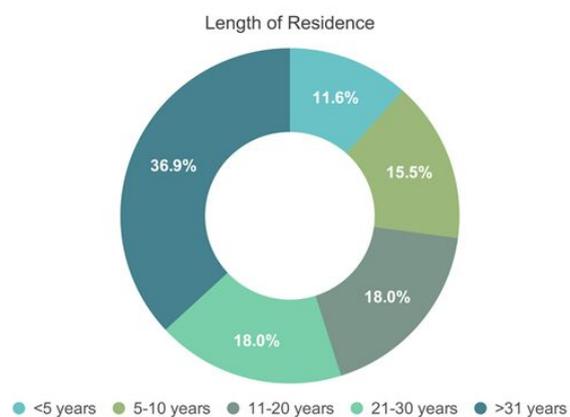
Figure 3.4: Housing Types



	n	Percentage
PRH	101	30.8
Subsidised Housing	26	7.9
Private Housing (Tenement Building)	83	25.3
Private (Others)	115	35.1
Others	3	0.9
Total	328	100

Table 3.4: Housing Types

Figure 3.5: Length of Residence



	n	Percentage
<5 years	38	11.6
5 – 10 years	51	15.5
11 – 20 years	59	18
21 – 30 years	59	18
>31 years	121	36.9
Total	328	100

Table 3.5: Length of Residence

Appendix 4 List of Interviewees

Sector	Interviewee	Identity
Academics	Dr. LOU Wei Qun, Vivian	Director, Sau Po Centre on Ageing Associate Professor, Department of Social Work and Social Administration, HKU
	Dr. Kevin Ka-Lun Lau	Research Assistant Professor, Architecture, CUHK CUHK Jockey Club Institute of Ageing
	Representative from Research Institute*	Anonymous
Professional	Mr. Stephen Tang	Founding Member and Former President of The Hong Kong Institute of Urban Design (Planner-Architect)
	Ms Johanna Cheng	District Planning Officer, Kowloon, Planning Department, HKSAR Government
	Ms. Karen Lee	Planner Assistant Project Manager, Jockey Club Design Institute of Social Innovation
Local Stakeholders	Mr TSANG Kin-chiu	Kowloon City District Council Member (Ma Tau Wai) Vice Chairman, Social Services Committee
	Dr. Ka-lun KWAN*	Member of Kowloon City District Council (Whampoa East)
	Mr. Kwan Siu-Lun	Community officer of 紅土家, Architect

**Interviews conducted by other sub-consultants*

Appendix 5 Work Programme

Tasks	Duration (Weeks)	Week															
		03-Sep	07-Sep	14-Sep	21-Sep	28-Sep	05-Oct	12-Oct	19-Oct	26-Oct	02-Nov	09-Nov	16-Nov	23-Nov	30-Nov	07-Dec	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Stage 1 Baseline Review and Evaluation Report																	
1-1	Reconnaissance of the Study Area	3															
1-2	Baseline survey and site visit	3															
1-4	Conduct Interviews for Baseline Review and Evaluation	3															
1-5	Roadshow Preparation	2															
	Roadshow and Questionnaire Survey (29-Sep - 4-Oct)	1															
1-6	Data Analysis of Roadshow and Questionnaire Survey	1															
1-P	Preparation of Baseline Review and Evaluation Presentation	6															
	Baseline Review and Evaluation Presentation (8-Oct)	-															
1-R	Preparation of Baseline Review and Evaluation Report	7															
	Submission of Baseline Review and Evaluation Report (19-Oct)	-															
Stage 2 Age Friendly Community Plan																	
2-1	Formulation of Planning Principles	2															
	Preparation of Overall Development Concept Plan	2															
2-P1	Preparation of Draft Age Friendly Community Plan Presentation	4															
	Draft Age Friendly Community Plan Presentation (12-Nov)	-															
2-2	Preparation of Community Workshop	2															
	Community Workshop (21-Nov)	-															
2-3	Evaluation and Synthesis of Input and Opinions	1															
2-4	Revision of Draft Age Friendly Community Plan	1															
2-P2	Preparation of Final Age Friendly Community Plan Presentation	3															
	Final Age Friendly Community Plan Presentation (26-Nov)	-															
2-R	Preparation of Final Report	2															
	Submission of Final Report (3-Dec)	-															

▼ Milestone

Appendix 6 Team Structure and Profiles

IC Planning Consultant is a multi-disciplinary firm with extensive international and local experience in master planning, urban design and community engagement. With our promising track record of engaging over 50,000 stakeholders over the past 20 years, our team is empowered with a strong social network and a better sense of local aspirations. Actively engaged in government, private sector and civil society projects, we have established a comprehensive set of community engagement tools that constantly keep up with the changing public expectations. Our team consist of the following expertise:



Ms. Vivian LEE – Chief Town Planner (FHKIP, MHKIUD, RPP, LEED AP)

Ms. Lee is the chief town planner of IC Planning Consultant and she has more than 20 years' experience in the planning industry. She has been involved in numerous planning studies, including both public and private sectors and she specialises in master planning projects. Ms. Lee is currently the fellow of the Hong Kong Institute of Planner and she is also a LEED accredited professional.

Ms. Gloria TSE – Senior Town Planner (MHKIP, CILHK, MRTPI, BEAM PLUS)

Ms. Tse has more than 10 years planning experience in Hong Kong and the UK. She specialises in housing and transportation issues, such as the living condition of the elderly in Hong Kong. Ms. Tse has also participated in a lot of international planning competitions. She now leads IC Planning's planning team and tries to provide professional planning advice to the study team.

Ms. Anson YING – Senior Policy Specialist (FHKAG, FHKASC, MHKIP, RPP)

Ms. Ying is the senior policy specialist of the study team. She is a fellow of the Hong Kong Association of Gerontology. She specialises in community planning. Before joining IC Planning, Ms. Ying had worked in elderly-specific NGO for more than 10 years. She is the team leader of the engagement division of the study. Her valuable advice will be useful in holding community activities.

Mr. Cyrus TAM – Senior Building Surveyor (MHKIS, MRICS, MCIQB, MISHP)

Mr. Tam is a senior building surveyor of IC Planning. He has been involved in many large-scale building projects, such as urban renewal as well as new development area projects in Hong Kong. He is also a member of the Hong Kong Institute of Surveyors. He is now the team leader of the technical division of the study. Mr. Tam specialises in programming and geoinformatics. His knowledge can greatly enhance the efficiency of the study.

Mr. David CHENG – Gerontologist (MHKIP, MHKAG, MHKASC)

Mr. Cheng is a gerontologist. He is a member of the Hong Kong Association of Gerontology. He has more than 5 years of experience in working in Sau Po Centre on Ageing. Mr. Cheng has done a lot of research related to the elderly and he also has many experiences to contact with the local residents directly. With his help, the study can understand the needs of the elderly from a professional perspective.

Ms. Leslie LEI – Urban Designer (MHKIP, MHKIUD, MHKILA, MRTPI)

Ms. Lei is an urban designer of IC Planning. She is a member of the Hong Kong Institute of Planners and Hong Kong Institute of Designers. She has both working experience in mainland China and Hong Kong. She specialises in place making and design. She is the champion of several international urban design competitions. Ms. Lei wants to design a community that is friendly for all age groups.

Mr. Isaac WONG – Town Planner (MHKIP, MHKIUD, CILHK)

Mr. Isaac Wong is a town planner of IC Planning. He has over 5 years of experience in town planning. He specialises in transport planning and spatial mobility. His successful projects include the enhancement of connectivity of housing estates to open space. He is also a member of the Hong Kong Institute of Planners. His knowledge can help the study team to understand how to improve the accessibility of the elderly to nearby recreation spaces.

Mr. Don CHU – Sustainability Consultant (MHKICON, MIHBC, MRICS)

Mr. Chu is a sustainability consultant. He is a member of the Hong Kong Institute of Architectural Conservations and Institute of Historic Building Conservation. He is professional in different sustainability indicators. He is also familiar with GIS applications. Mr. Chu is interested in issues about making balance between development and conservation.

Appendix 7 Population Projection

Overall Population

Methodology

- The population of 2016 is based on the population of Kowloon City District Council Constituency Area as provided by 2016 Population By-census.
- A simple formula is used (Figure 1) in projecting the population of our study area. The growth rate (Planning Department, 2019; Census and Statistics Department 2020) is identified from the population projection figures of the Kowloon City District from 2016 to 2031 (Table 1).
- Also, as the real population of the Kai Tak development is still uncertain, the projected population of 134000 according to the legislative council document will be used in the calculation (Legislative Council, 2017). The projected population of Kai Tak consists of three district council constituency areas: G12, G13 and G14. Therefore, the population for G12 and G13 will be projected with the formula in Figure 1, while the new Kai Tak Development area G14 will be using the projected population for the legislative council documents deducting the G12 and G13 population in the condition of 2031. Also, as we do not have the real schedule of Kai Tak development, the exact finishing time for all residential areas are still uncertain. Therefore we assumed that all the residential areas will be built and fully utilized in 2025. The population of Kai Tak will be projected by the same growth rate as formulated in Table 1.

Population in Year_i = Population of the District Council Constituency Area * (1+ Growth rate_i)

Figure 1 Formula for projected population

Key Assumptions

1. There is no population living in G14 until 2025.
2. All the residential development in Kai Tak will be finished in 2025.
3. The projected population of G12, G13 and G14 will equal to 134000 in 2025. The population will increase / decrease according to Table 1 starting from 2025.
4. The population projection of Kowloon City by the Planning Department is assumed to be correct. No sudden changes like large scale immigration or emigration will be observed from 2016 to 2031.
5. Condition in 2031 only considers the Kai Tak New Development and our proposed development in the future. Other redevelopment or residential development projects in the Study Area will have no significant impact on the population.
6. Projections from the Planning Department will be used in the period of 2016-2028, while the projections from the Census Department will be used in the period of 2028-2031, and both projections account for all the population changes due to other proposed development in the period of 2016-2031.
7. COVID-19 or other natural incidents in the period of 2016-2031 will not lead to sudden population increase / decrease in the site area.

Table 1: Growth rate projection
Population growth rate from 2016 to 2020

2016 Usual Population	418732
2020 Usual Population	429400
Growth Rate	2.5%

Projection growth rate from 2020 to 2031

Growth rate from 2016 to 2028 in KLC	9.2%
Adjusted growth rate from 2028 to 2031 in KLC	1.7%
Adjusted growth rate	11.0%

Table 2: Population project in existing condition and planned condition

District Council Constituency Area	2016	2020	2030
G1	20024	20534.14977	22226.09738
G2	22251	22817.88686	24698.00703
G3	20493	21015.09844	22746.67467
G4	15489	15883.61195	17192.37027
G5	15881	16285.5989	17627.47965
G11	15268	15656.98155	16947.06626
G12	16141	16552.2229	17916.0726
G13	14913	15292.93725	16553.02588
G14	0	0	103137.3469
G15	15652	16050.76469	17373.29585
G16	15691	16090.75829	17416.5848
G17	14837	15215.001	16468.66794
G18	19490	19986.54509	21633.37185
G19	17762	18214.52098	19715.33868
G20	22196	22761.48563	24636.95852
G21	18933	19415.35445	21015.11694
G22	14235	14597.6639	15800.46425
G23	19597	20096.27112	21752.13895
Total Population	298853	306466.8528	436469.0784

Elderly Population

Methodology

- The population of 2016 is based on the population of Kowloon City District Council Constituency Area as provided by 2016 Population By-census.
- Elderly population that is calculated in Table 2 are the population that aged over 65 and are always living in the Study Area.
- Mortality rate will be extracted from the Census and Statistics Department (2020), corresponding to the respective year of projection. It is assumed that the mortality rate of the population in Kowloon City is the same as the mortality rate of the Hong Kong population. The mortality rate of males and females are different and are extracted from the Hong Kong Population Projection (Census and Statistics Department, 2020).
- With respect to the projection, a 5-years interval of age group will be used in the projection. For the population from the Kai Tak NDA, it will be incorporated into the figure starting from 2025 and projected to the year of 2031.
- A simple formula (Figure 2) will be used to calculate the population of a certain age interval and gender.

Population in Year_i of certain age interval and gender = Population of the District Council Constituency Area as in 2016 of certain age interval and gender * (1+ mortality rate of certain age interval and gender)⁵

Figure 2 Formula for projected population

Assumption:

- The population of Kai Tak is assumed to have the same population structure as the population of Kowloon City in 2016 as illustrated by the 2016 Population By-census.
- There will be no difference in the mortality rate in Kowloon City when compared to the overall mortality rate of Hong Kong.
- There will be no major events like Covid-19 that will lead to a huge population increase / decrease in the mortality rate projection from Census and Statistics Department (2020).
- There will be no significant injection of elderly population into Kowloon City. The elderly population will not increase / decrease significantly by the newly injected population. The major component of the elderly population of the Study Area is assumed to be already captured in the 2016 Population By-census. The only major injection of population is from the Kai Tak NDA that will lead to elderly population change.
- The life expectancy of males is 81.3, while the life expectancy of females is 87.3. Therefore, the population that aged over 90 is assumed to be passed away within the five-years interval. In other words, the life expectancy of the population is assumed to be less than 95.

Table 2: Elderly population in the Study Area in 2031

Age	Male	Female
65-69	15028.29498	18477.53303
70-74	13832.36168	15514.23478
75-79	9845.867175	10773.29426`

80-84	7634.790462	7943.045583
85-90	3131.219841	3745.037311
90+	1652.892444	2184.811191
Total	51125.42657	58637.95688

Table 3: Summary Table of Population in the Study Area in 2031

Population in 2031	436469
Elderly Population in 2031	109763
Percentage of elderly population	25.15%

Reference:

Census and Statistics Department (2020), “Hong Kong Population Projections 2020-2069”,
<https://www.censtatd.gov.hk/hkstat/sub/sp190.jsp?productCode=B1120015>, (last accessed on 3 December 2020).

Legislative Council (2016), “Updated background brief on Kai Tak Development”,
<https://www.legco.gov.hk/yr16-17/english/panels/dev/papers/dev20170626cb1-1165-7-e.pdf>,
(last accessed on 3 December 2020).

Planning Department (2019), “Table 1 : Projected Population by District Council District, 2019-2028”,
https://www.pland.gov.hk/pland_en/info_serv/statistic/wgpd19/csv/Tables_18%20based_Table_1.csv, (last accessed on 3 December 2020).

Appendix 8 Detailed Sustainability Impact Assessment

SIVs	Indicators	Description	Rating
Leisure & Cultural Vibrancy	Accessibility of Open Spaces	Reaching of open spaces and essential public services within walkable distance of 250-400m.	+1
	Adequacy and variety of leisure, cultural and recreational facilities	Recreational facilities that promote an active lifestyle, interaction and cultural diversity	+1
	Conservation	Conservation of heritage sites and cultural practices	0
	Intergenerational Interaction	Provision of community facilities for intergenerational interaction	+2
Society & Social Infrastructure	Opportunity of lifelong learning	Provision of post-retirement learning opportunities	0
	Clear and efficient dissemination of information	Established channels of distributing information (for the use of wayfinding, community activities)	+2
	Enhancement of social inclusion and community support	Increase in the community support programmes	+2
Health	Adequacy and accessibility of health and medical services	Reaching of health and medical services on foot and by public transport	+2
	Enhancement of the sense of community identify	Increase in social well-being of residents	+2
Economy	Development of local business opportunities	Increase in the variety of business activities Retail and business activities within walkable distance	+1
	Creation of job opportunities	Quantity and variability of working opportunities and other civic participation	+2
	Age-friendly retail and business spaces	Accessibility of retail spaces (Universal Design, Rest, Help-seeking)	+1
Land Use and Infrastructure	Land use compatibility	Enhancement of interfaces between conflicting land uses to reduce nuisance.	+1
	Management and Maintenance of local infrastructure	Institutional resources and coordination for effective infrastructure management	+1
	Revitalization of local	Optimizing the usage of underused/derelict local	+2

	infrastructure	infrastructure via revitalization/rehabilitation.		
Housing	Management and maintenance	Cleanliness and Safety of corridors, stairways and facilities within the purview of the properties	0	
	Adequacy and availability of housing	Reduction in population living in substandard housing	+1	
	“Ageing in place” support in residential neighborhood	Elderly-friendly housing design and environment supporting ageing in place and social interaction	+1	
Transport		Accessible social and health services in residential neighborhood		
	Specialized elderly services	Availability of specialised transport services for the elderly	+2	
	Age-friendly public transport	Provision of Seating Areas and Shelter in public transport stops	+1	
	Public transport connectivity	Access to destinations within and outside the district	+2	
Environment		Walkability (pedestrian safety and adaptability of walking environment)		
		Road safety for transportation facilities	+1	
		Universal design for pedestrian environment		
	Greenery provision and coverage	Tree Canopy Coverage and Green Coverage for shading in the Public Realm (including streets and open spaces)	+1	
	Vegetation type and biodiversity	Number of species in built-up areas	+1	
	Environmental quality (noise, air, water, thermal comfort)		Percentage of population exposed to excessive air pollution	+1
			Percentage of population exposed to excessive noise	
		Improvement of thermal comfort		
		Implementation of climate change adaptation and mitigation strategies (extreme weather management)		
Hygiene, sewerage, and waste management		Increase in resource recovery rate	+2	
		Reduction in hygiene black spots		