(只有英文版)

Annex A
附件一

Facilitating Provision of Pedestrian Links by the Private Sector in Areas outside Kowloon East

The Evaluation Mechanism

Street Walkability Test

- The test primarily looks at pleasantness of the existing pedestrian experience at the ground level using three key components of walkability - safety, comfort (including amenities) and convenience. On safety, we would assess if the existing at-grade facilities are sufficient to allow pedestrians to walk safely and whether any factors such as lack of crossing or a traffic black spot would be relevant in making pedestrians feel unsafe walking along. On comfort, we would assess if the ground-level environment such as availability of street furniture and shades are sufficient for pedestrians to enjoy the walk. On convenience, we would assess directness and convenience of the existing connection and whether a long detour would be required if no crossing is currently available. In general, a proposed pedestrian link would be more favourably considered if street-level walkability is undesirable and significant improvements are difficult to be made at-grade.

Area-wide Connectivity Test

- The benefits of an individual link to improve overall pedestrian access and walkability of a wider area are measured under the test. Links located at a strategic location within the basic area for town planning (a Planning Data Zone (PDZ)) could generate spill-over benefits not just for the immediate neighbourhood but in a broader area. The proposed link, which situates in PDZ(s) that has a higher population and employment or connects to hot links and junctions[1], is likely to be more frequently used by pedestrians. A link that would help form a direct access to a transport hub would further benefit commuters.

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[1] The five largest developments in the PDZ that the proposed link is located are first identified, to be followed by the identification of the five largest developments in an adjacent PDZ with the highest number of population and employment, as well as transport hubs such as MTR station(s) within the PDZ. Then pedestrian routes among these spots would be plotted. The nodes and intersections that most routes overlap are hot links and junctions.

Network Impact Test

- If the proposed pedestrian link is connected to a well-established pedestrian network (including elevated or underground links), the test would measure the impact to the connectivity and complexity of the network[2] in order to select proposals that would render the network more comprehensive, direct and convenient. The test would assess whether the link would help enhance circulation and convenience by forming more internal circuits and alternative routes within a network. If the proposed pedestrian link involves adding a new branch to an existing network, we would assess whether it could help expand the network in terms of total length and complexity.

People-oriented Test

- The test measures the benefits of a proposed link from people-oriented aspects. It would assess potential volume of pedestrians in the PDZ concerned who are going to directly benefit from the proposed link. Pedestrian links connecting to destinations such as hospitals, schools, social welfare facilities serving groups in need would be accorded with priority to bring potential benefits to children, the elderly and those physically challenged. Support from the neighbourhood and relevant District Council would be essential in passing the test.

Overall Assessment

- A proposal that **passes three or more of the four tests** would be favourably considered to proceed as an eligible case for premium wavier. Such proposal would be more likely to bring in overall public benefits either because significant improvements to the existing at-grade situation are not practical; it is more likely to be used by daily commuters in a wider area; it could bring substantial enhancement to an established pedestrian network; and/or the link is people-oriented and supported by the neighbourhood.

- A set of variables to be assessed under the evaluation mechanism is at the **Appendix**.

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[2] There are established academic theories such as the Graph Theory (Kansky, 1963; Leung, 1980; Loo, 1998) to measure the connectivity of transport network that could be applicable to evaluate a pedestrian network. The test would make reference to key elements of the Graph Theory.

Appendix to Annex A

Variables under the Evaluation Mechanism to Assess Pedestrian Links Proposed by the Private Sector Outside Kowloon East		
Dimension	**Variable**	**Description / Explanation**
1. Street Walkability Test		
A. Safety		
I. Pavement	a. Pavement Surface	Conditions of the surface would not only affect our comfort of walking but may become potential hazard to health causing falls.
	b. Pedestrian Guardrail or Buffer	This variable considers whether there is any guardrail or buffer which serves as a separation for pedestrians and the degree of protection from vehicular traffic that they provide.
	c. Lighting	Street lighting is important for keeping the streets bright for pedestrians to walk safely. Adequate street lighting prevents pedestrians from falling into road hazards (such as temporary works on pavements) and to walk safely at night without the fear of violence or crime.
II. Crossing Facilities	a. Audible Pedestrian Signals	Audible Pedestrian Signals are considered as a variable for safety as its presence will indicate to people where it is safe for them to cross to road, the duration of the safe crossing time, and whether there is a need for them to hurry up in crossing a road.
	b. Refuge Island	A refuge island provides an intermediate stop at wide crossroads with multiple traffic lanes for pedestrians to wait before completing the road crossing.
III. Vehicular Road	a. Street Parking	The risk of pedestrians in crossing a road would increase if there are vehicles parked on either side or both. The safety hazard is particularly serious if there are light goods vehicles and heavy commercial vehicles parked on the streets no matter if legally or illegally.
	b. Number of vehicle-pedestrian crashes last year	This variable would help to identify whether the locations are dangerous to pedestrians. TD's data on whether the junction concerned is a traffic black spot is adopted as an indicator for this variable.
IV. Design	Vacant or Derelict land	Vacant land in this context refers to land that are deserted at the moment. This impacts the desire of pedestrians to travel along due to its lack of vibrancy, pedestrian flow, stores and etc, where pedestrians might also fear for crime or violence with little security or management in the neighbourhood.
V. Perception	Safe from Street Crime	Perceived safety/ security from crime is a key for pedestrian safety. An environment with elements of clean streets, high level of safety and vibrancy would encourage pedestrian flows. If the environment is perceived as unsafe for pedestrians to walk on, such as dirty and crime-filled streets, it would discourage pedestrians from walking through the path.
VI. Destinations/ Activities	Mixed-Land Use	Mixed land used can encourage street vibrancy, which makes pedestrians feel safer knowing that there are other pedestrians around acting as natural surveillance from crime.
B. Comfort		
I. Pavement	Effective Pavement Width	Pedestrian prefer a walking environment with comfortable pavement width. This would encourage people to travel on foot rather than to take public transport for short distance trips. When there are many physical obstructions (e.g. electricity pillar) on the road, the useful pavement width will be reduced and this will affect people's willingness to walk.
II. Design	a. High-quality public space	A high-quality public space in this context refers to designing an area that enables pedestrians to enjoy walking and to conduct various activities that contribute to the social capital of a local community/neighbourhood. High-quality public space typically includes playgrounds and resting areas.
	b. Shop Fronts/Amenities	The design of shop fronts along a street can lead to vibrancy of the neighbourhood and pedestrians will not have to walk along a wall or multiple building entrances only. Many may like to purchase drinks and/or take a stop before they continue their journeys. Such possibilities will help make people’s journeys more comfortable and less tiring.
	c. Street Furniture	Street furniture can include benches, shades, litter bins, bicycle racks and different forms of arts. Good street furniture would encourage pedestrians to walk more and in a comforting manner.

Variables under the Evaluation Mechanism to Assess Pedestrian Links Proposed by the Private Sector Outside Kowloon East		
Dimension	**Variable**	**Description / Explanation**
III. Perception	Pleasantness	Pleasantness in this context may refer to the attractiveness of the natural landscape or any other human-made factors, such as being able to see a famous architectural building from a good angle, that are relevant to the pedestrian experience. For instance, beautiful scenery overlooking the Victoria Harbour in Hong Kong will enhance the pleasantness of the walking environment.
C. Convenience		
I. Pavement	a. Clear Directional Signs	It is often associated with pedestrian facilities along the pavement. The aim of these signs is to serve as a direct guide for pedestrians walking to their destinations with convenience instead of confusion. Moreover, clarity of the signs is also an important component of providing clear directions, such as its colour and design that is easily read by tourists as well as the older population and individuals with decreasing or limited visual ability.
	b. Continuity and Obstructions	The overall convenience of pavements in this context refers to elements like continuity, degree of obstruction and presence of road works.
II. Crossing Facilities	Traffic Cycle Time	A long red light and a short greenlight for pedestrians would have negative impact on walkability. If there is no traffic signal at a crossing, pedestrians might choose to jaywalk; and having to cross such facilities would be undesirable to the elderly and persons with disability. The variable refers to the friendliness of the road-crossing facilities.
III. Vehicular Roads	Width of Vehicular Roads	This variable affects the duration it takes for pedestrians to cross a road. A wider width of the crossroad would mean longer travelling time for pedestrians.
IV. Design	Directness and Connectivity (Detour)	Street design such as street network connectivity affects pedestrians' convenience greatly. If a road is designed with little detour, it could achieve directness and better connectivity for pedestrians to walk to different potential destinations.
V. Destinations/ Activities	Distance between Major Attractions	This measures whether the proposed link is in proximity to major attractions of the district, such as the Victoria Harbourfront or big urban parks.

Variables under the Evaluation Mechanism to Assess Pedestrian Links Proposed by the Private Sector Outside Kowloon East		
Dimension	**Variable**	**Description / Explanation**
2. Area-wide Connectivity Test		
I. Local Activity Nodes	a. Major Population Node	Ranking of the Planning Data Zone (PDZ) where the proposed link is located among all the adjoining PDZs in terms of total population.
	b. Major Employment Node	Ranking of the PDZ where the proposed link is located among all the adjoining PDZs in terms of total employment.
	c. Major Attraction (e.g. Town Hall, major performance arts venues, harbourfront, etc.)	Whether the proposed link is connected to major attractions including town halls, major arts performance venues and key corridors towards the waterfront.
II. Transport Hub	Transport Hub	Whether one or more than one transport hubs is/are connected to the proposed link.
III. Hot Spots in Local Pedestrian Flows	a. Hot Pedestrian junction	This means whether the proposed link would connect to junctions which pedestrian routes overlap the most.
	b. Hot Pedestrian Link	This means whether the proposed link would connect to links which pedestrian routes overlap the most.
3. Network Impact Test		
I. Complexity	a. Change in circuits	Measuring the change in possible circuits to be achieved in the network.
	b. Change in sophistication	Measuring the level of sophistication of a network and is particularly useful for evaluating whether the network is becoming a tree shape without any circuit formed.
	c. Change in significance	Measuring the significance of the circuit formed.
II. Connectivity	a. Change in average length	Measuring the change in average length of each link. Negative change is preferable as it would shorten the walking distance of pedestrians along the network.
	b. Change in distance of two destinations on the network	Measuring the change in average length of diameter. Diameter is the maximum number of links involved when travelling any two destinations within the network.
III. Alignment with existing planning	Alignment on the existing Outline Development Plans (ODPs)	This is to consider whether the proposed link aligns with the existing Outline Development Plans (ODP). The idea is that if the proposed link could align with previous planning outcome, it may still bring some public good and planning merits.
4. People-oriented Test		
I. Potential users in PDZs	Total Population & Employment Size	The sum of the total number of population and employment size of the PDZs where the proposed links connects to.
II. Vulnerable users	a. Hospitals/ Clinics / Rehabilitation Centres / Other Social Welfare Facilities	Whether there is any hospital, clinic or rehabilitation centre in the local neighbourhood.
	b. Kindergartens and Schools / Open Space	Whether there is any kindergarten, primary or secondary school, educational institution and public open space in the local neighbourhood.
	c. Elderly Home/Community Centres/other Social Welfare Facilities	Whether there is any major elderly home, community centre and other social welfare facilities within the local neighbourhood.
III. Encouraging Transit	Transit passenger	Whether the proposal link will actively encourage transit in the neighbourhood, for example, between bus station to MTR station or public transport interchange.
IV. Local sentiment	Neighbourhood support	Whether there is neighbourhood support for the proposed link.