



Footbridges and Subways of Hong Kong

In the past, footbridges in Hong Kong were provided mainly for pedestrian traffic along steep terrains or over streams. However with the rapid increase in population and economic development in Hong Kong since the 1960's, there was a need to grade separate vehicular and pedestrian traffic by footbridges and subways to improve the road safety and traffic flow capacity. The first grade separated footbridge across Leighton Road near Victoria Park was constructed in 1963 and the subways at Kowloon City Interchange constructed in 1972.

Footbridges and subways allow a continuous flow of pedestrians through junctions without the need to wait at the kerbside to cross and also reduce traffic congestion. In the 80's footbridges and subways evolved from simple crossings to interconnected systems of elevated or underground pedestrian walkways. The elevated walkway along Connaught Road at Central District is a successful example. The Government is now planning to construct similar walkway systems in the busiest districts of Hong Kong including Wanchai, Mongkok and Tsuen Wan.

The total number of footbridges and subways in the territory has already exceeded 1,100, and is still increasing rapidly. Some statistics are shown in Table 1. The longest and oldest footbridge and subway are shown in Table 2.



位於分域街橫跨告士打道的行人天橋

Footbridge across Gloucester Road at Fenwick Street

Table 1: Number of Footbridges & Subways as at December, 2008

| | Footbridge nos. | Subway nos. |
|---------------------|-----------------|-------------|
| Hong Kong Island | 164 | 22 |
| Kowloon | 114 | 57 |
| New Territories | 415 | 350 |
| Total Number | 693 | 429 |

The Government gives serious consideration at planning stages to choice of structural form, layout and finishes to encourage people to use footbridges and subways. All newly constructed footbridges have cover to protect the pedestrian from sun and rain. Ramps are provided for the aged and disabled unless the site constraints make them

Table 2: Longest and Oldest

| | Footbridge | Subway |
|---------|--|--|
| Longest | Hillside Escalator, Link in Central Length: 800m | Subway at junction of Austin Road and Canton Road Length: 490m |
| Oldest | Bowen Road Footbridge (along the hill side, completed in 1942) | Subway across the junction of Upper Albert Road, Caine Road and Glenealy (completed in 1967) |

impractical. Escalators involve very high recurrent energy and maintenance costs and are therefore provided where the pedestrian flow is high. Lifts incur very high recurrent maintenance costs and have much limited capacity and provided only for very special circumstances.

Not only the structural form of footbridges and subways change over time, the materials chosen also change. For example, the old footbridges along Bowen Road were constructed of masonry stone. In the 60s, quite a number of footbridges were constructed of timber. Due to the high maintenance cost, they have now been replaced by steel and concrete footbridges. At present, most footbridges and all subways are constructed of concrete, because they are more suitable to the local humid climate. Steel has not been widely used due to its maintenance liabilities and higher costs. However steel is the most viable alternative for long span footbridges.

Footbridges and subways are usually located at prominent positions and their aesthetics have direct impact on our city's appearance. Design of all footbridges and subways focus very much on aesthetic aspects including landscaping to enhance their aesthetics. Greater emphasis on appearance in recent years has also given impetus to the development of chromatic schemes with different colours. The Government has set up the "Advisory Committee on the Appearance of Bridges and Associated Structures" which is responsible for vetting these aesthetic designs.

It could be anticipated in the coming years, Hong Kong will become a modern metropolitan city where the vehicular and pedestrian traffic are mostly segregated. With the various footbridges and subways, pedestrians would enjoy much more freedom and leisure to walk along without interfering with the vehicular traffic.



位於跑馬地穿過體育路的行人隧道

Forecourt Subway across Sports Road at Happy Valley