

## Road Bridges of Hong Kong

Hong Kong's roads are among the most heavily used in the world, with over 1,400 road bridges (including culverts, which are directly supporting road structures) throughout the territory. The table as shown below presents some statistical information of bridges in Hong Kong. They play an important role in improving the mobility of transport especially in providing strategic linkages both within Hong Kong between the new towns and urban areas, and externally to link Hong Kong with mainland.

	No. of Bridges *
Hong Kong Island	d 191
Kowloon	233
New Territories	1,051
Total Number	1,475
* Including culv	erts, which are directly
supporting road	d structures
Longest Span	Tsing Ma Bridge
	Span Length: 1,377m



## Tsing Ma Bridge

In Hong Kong, most bridges cross over roads, some cross over stream, river, navigational channel, sea, nullah or even hilly terrain. They are normally constructed with concrete, steel or the composite of both and designed in accordance with "Structures Design Manual for Highways and Railways" published by the Highways Department. The bridges are designed to withstand seismic force although the risk of a major earthquake occurring in Hong Kong is small. The maximum vehicular height in Hong Kong is 4.6m. Thus, bridges crossing over another road are designed to 5.1m headroom to allow for 0.5m free clearance and to enable erection of temporary works underneath the bridges without closing the road underneath during maintenance and repair.

Apart from the deck, vehicular parapets and columns which are structural elements of the bridges, there are also other features or facilities on the bridges. Noise barriers or



## Kwai Chung Viaduct

enclosures and noise reducing surfacing are usually provided on the bridges adjacent to noise sensitive areas such as hospitals and residential buildings in order to alleviate noise nuisance. Emergency telephones and fire hydrants are also provided at suitable locations for emergency use in case of traffic accident occurrence.

The designs of new bridges have to be vetted for agreement by the Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) regarding the visual merit, soft landscape provisions, amenity value and environmental impact.

Highways Department is responsible for maintenance of these bridges. The maintenance teams regularly inspect the bridges and schedule the maintenance works which could in general be classified as rectification and preventive maintenance. The most appropriate maintenance works will then be formulated. Common maintenance works include vehicular parapets replacement, movement joints replacement, bridge deck repair or resurfacing and drainage clearing works to avoid flooding on bridges. These maintenance works are carried out by Highways term maintenance contractors under the supervision of Highways Department staff.