

# **Maintenance of High Speed Roads**

High Speed Roads(HSR) are the Expressways and the Trunk Roads connecting to these Expressways. They are designated to carry large volumes of free flowing traffic and provide strategic links between major population centres. The existing road length of the HSR network is approximately 270km. Expressways within Tsing Ma Control Area and Toll Area of Route 3 Country Park Section are maintained by the Tsing Ma Control Area Operator and a franchisee respectively.

The annual expenditure on HSR maintenance is in the order of \$230 million. At present, maintenance works are implemented under two contracts managed by the HSR Section of Highways Department (HyD). One contract caters for HSR works in New Territories West and Kowloon West, while the other takes care of HSR in New Territories East, Kowloon East and Hong Kong Island.

The HSR Section is responsible for the inspection and maintenance of the network and associated facilities. Inspections are carried out by HyD term contractor in a daily cycle for safety inspections and 6-monthly cycle for detailed inspections. The daily inspections are to identify defects likely to create a danger or serious inconvenience to the public and the 6-monthly inspection are to establish programmes of routine maintenance tasks not requiring urgent execution. Besides, HSR roadside slope inspections and necessary maintenance operations are generally carried out twice per year.

Because of the high operating speed on the HSR network, all maintenance activities are subject to a set of stringent safety requirements detailed in the Code of Practice for the Lighting, Signing and Guarding of Road Works. Unless the works are of an emergency nature to maintain road safety, all maintenance works with lane closure are carried out outside the busy traffic hours in accordance with a Lane Working Time Schedule. The Schedule specifies the number of lanes permitted to be closed in each section of the highway during different hours of the day and on different days of the week. Thus all maintenance works are carried out under extremely tight working programmes and within limited hours. Maintenance activities on HSR are mainly divided into the following categories:



在快速道路進行維修工程 Preparation work on High Speed Road

## Pre-scheduled cyclic lane closures

The entire network is divided into road segments which will be closed for routine minor maintenance operations generally in a 6-monthly cycle. The operations include localised small scale road repairs, cleansing and / or replacement of road furniture, clearing of the road drainage system and trimming of vegetation.

#### Major road maintenance works

Such works usually include resurfacing - replacing the top defective layer of the road pavement by a new layer of material of the same thickness; rehabilitation - replacing the top defective layer of the pavement by thicker layer of material to extend the service life of the pavement; and reconstruction - replacing the entire pavement from the top down to the soil level.

### Road cleansing

To maintain the network in a clean and tidy condition, road sweeping and patrol lorries for picking up rubbish on the roads is arranged on a daily basis.

## Other emergency works

To maintain road safety on the network, emergency repairs of potholes and removal of spilled oil, carcass and debris on the pavement in car accidents need to be carried out immediately and be completed as quickly as possible.