

## SECTION 8 - CONCERN OVER ENVIRONMENT

In support of the Chief Executive's policy address in 1999 on environmental improvements, Transport Department is actively participating in this aspect which includes identification of environmental improvement measures by the Third Comprehensive Transport Study (CTS-3), conversion of diesel to liquefied petroleum gas (LPG) taxis, exploring alternative fuel buses, rationalization of franchised bus fleet, controlling bus numbers, improving vehicle emission, stepping up vehicle maintenance and implementing pedestrian schemes.

### Environmental Improvement Measures by CTS-3

CTS-3 was completed in September 1999 and it had mapped out the broad future transport development framework for Hong Kong. CTS-3 came at a time when the community had become more aware of the impact of transport development on the environment. In this connection a Strategic Environmental Assessment was carried out as part of CTS-3 to address, inter alia, the future air and noise situations. Based on the findings of the Strategic Environmental Assessment, CTS-3 has proposed a number of measures to address the future air and noise situations. The relevant CTS-3 recommendations which would help improve the environment can be accessed at the Transport Department Home Page at <http://www.info.gov.hk/td/>.

### LPG Taxis

The one-year trial conducted in 1997/98 has confirmed that LPG taxis are technically suitable to operate in the local environment. An incentive scheme to encourage taxi owners to switch to LPG taxis, including cash grants and no duty on auto LPG, is being launched with a view to converting all diesel taxis to LPG taxis by 2006. LPG refilling stations and maintenance facilities are being provided in phases to support the conversion programme. As at 1 June 2000, over 800 LPG taxis are operating on roads.

### Alternative Fuel Buses

A six-month trial of alternative fuel public light buses, organized by Environmental Protection Department (EPD) with the assistance of Transport Department, commenced in June 2000 and will be completed by the end of the year. The trial fleet will include LPG and electric light buses. Based on the outcome of the trial, the Government will work out a scheme to introduce alternative fuel public light buses.

Consultants have also been appointed for a 9-month feasibility study on the possibility and suitability of introducing trolley bus system in Hong Kong. The study commenced on 27 March and will be completed by end December 2000.

### Rationalization of Franchised Bus Fleet & Controlling on Bus Numbers

The public is concerned about the heat and air pollution generated from buses, particularly in the business districts where there may be a large concentration of buses. To ensure efficient use of the existing bus fleet, we are scrutinizing the franchised bus companies' five-year development plans very carefully. There will be no growth in the fleet

of Citybus and New World First Bus (NWFB) in Year 2000 and their fleet have been capped at 961 and 730 respectively. For Kowloon Motor Bus (KMB), about 160 additional buses will be required in Year 2000 to meet the population growth in the New Territories. This is roughly a 4% increase of its existing fleet. Buses on Hong Kong Island have been diverted to serve the growth in demand in the New Territories. NWFB started to operate two routes in Tseung Kwan O in February 2000 by redeploying 22 buses from Hong Kong Island. Redeployment will continue to meet further growth in Tseung Kwan O. Similar bus redeployment exercises will be pursued to meet expansion opportunities in the future.

Twenty bus routes, involving 140 bus trips per peak hour, have been diverted to avoid the congested traffic spots in Central and Causeway Bay since end 1998. Bus stops are also being rationalized to reduce stopping of buses and enhance efficiency of the services. The rationalization of bus stops in Central, Wan Chai, Causeway Bay and North Point on Hong Kong Island has reduced over 2,000 stoppings per peak hour. A similar exercise for Kowloon has cut out about 1,120 stoppings in Kwun Tong and along Nathan Road per peak hour. In addition, the schemes implemented in the town centre areas in Tsuen Wan, Yuen Long and Tai Po have reduced about 220 stoppings per peak hour.

Five low-demand bus routes were cancelled in 1999 and early 2000. During the period, the service frequency of 19 Hong Kong Island routes and 12 cross-harbour routes was reduced to match with the passenger demand. In addition, short-working and amalgamation arrangements were implemented to improve service efficiency. The above service adjustment measures have reduced about 900 bus trips passing through Central per day.

Eight bus-bus interchange schemes are planned. The Kwun Tong Road scheme involving seven KMB routes was implemented on 26 March 2000. The remaining schemes at Admiralty, Wan Chai Ferry Pier, Causeway Bay, Tin Shui Wai, Tate's Cairn Tunnel, Western Harbour Crossing and Eastern Harbour Crossing are planned for implementation by end 2000. Such schemes are developed to encourage more efficient use of existing bus resources and reduce the need to increase the number of buses.

A total of about 500 ex-China Motor Bus pre-Euro old buses were taken out of the road and replaced by Euro II new buses from September 1998 to March 2000 by NWFB. A total of 475 older pre-Euro buses belonging to the five franchised bus companies and accounting for 20% of all the pre-Euro buses, will be scrapped and replaced gradually by Euro II buses over the next year or so.

### Improving Vehicle Emission

In order to improve air quality, a number of measures are being taken to improve emissions of vehicles.

The franchised bus companies have committed to fit diesel catalysts on the entire fleet of 1906 pre-Euro buses by end 2000. Up to May 2000, 807 of these buses have been retrofitted with diesel catalysts. Diesel catalyst trials for heavy diesel vehicles are underway and will be completed by November 2000. Subject to the outcome, funding will be sought for fitting 30,000 older heavy diesel vehicles with diesel catalyst. Trials on particulate traps have been completed and funds have been sought for retrofitting about 42,000 pre-Euro light diesel vehicles of less than 4 tonnes with particulate traps within the year 2001.

NWFB and KMB are working on the introduction of Ultra Low Sulphur Diesel (ULSD). NWFB has launched a trial on the use of ULSD in their buses jointly with EPD. The findings of the trial indicated that using ULSD would result in less emission of pollutants. KMB is also carrying out an in-house study on the use of ULSD and methods to evaluate the performance of using ULSD in their vehicles.

#### Stepping Up Vehicle Maintenance

In September 2000, we shall carry out more comprehensive smoke tests to all vehicles during their annual inspection programme. We shall also complete the installation of a dynamometer in Kowloon Bay vehicle examination centre for smoke testing for about 10% of vehicles called into the centre.

#### Implementing Pedestrian Schemes

Pedestrian schemes are proposed for selected areas of Causeway Bay, Mong Kok and Tsim Sha Tsui. These pedestrian schemes are intended to improve the overall pedestrian environment through beautification of the area and discouraging access of non-essential vehicles to improve the air quality. The schemes also aim to minimise the conflict between pedestrians and vehicular traffic and hence reduce the occurrence of traffic accidents and pedestrian casualties. Footpaths will be widened to improve pedestrian circulation and streetscape will be beautified with coloured block paving so as to distinguish the pedestrianised areas from other traffic streets.

A step-by-step approach would be adopted in implementing the schemes starting from 2000. The pedestrian scheme at Russell Street in Causeway Bay was opened to the public on 7 April 2000, turning it into the first full-time pedestrianised street with enhanced streetscape. Further pedestrian scheme in Causeway bay, Tsim Sha Tsim and Mong Kok would be implemented towards the end of 2000. Once pedestrian schemes prove to be operating successfully, they will serve as models for implementing similar schemes in other areas of Hong Kong. We are currently studying the feasibilities of introducing pedestrian schemes in Central, Wanchai, Jordan and Sham Shui Po.