

## **NOTE FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **Supplementary Information on 25TC - Replacement of Conventional Traffic Signals with Light Emitting Diode (LED) Traffic Signals in Hong Kong**

#### **INTRODUCTION**

In considering PWSC(2007-08)87 on 25TC “Replacement of Conventional Traffic Signals with LED Traffic Signals in Hong Kong” at the Public Works Subcommittee meeting on 20 February 2008, Members requested the Administration to provide the following information –

- (a) the number of LED modules to be installed under each of the three phases of the replacement project (i.e. for road junctions on Hong Kong Island, in Kowloon and in the New Territories);
- (b) the annual savings of energy charge and/or maintenance cost achieved from the pilot scheme under which LED signals had been introduced to 150 road junctions since 2004; and
- (c) the anticipated annual savings in this regard after the completion of each of the three phases of the proposed replacement project.

#### **THE ADMINISTRATION’S RESPONSE**

2. The estimated numbers of LED modules to be installed under Phases 1, 2, and 3 are 16 000, 26 800 and 33 200 respectively. In addition, 4 000 LED modules are to be procured and installed taking account of the anticipated growth of signalised road junctions and nominal wastage (e.g. due to traffic accidents).

3. The annual savings of energy charge achieved from the pilot scheme under which LED signals have been gradually introduced to 150 road junctions since 2004 are \$14,000, \$95,000, \$260,000 and \$510,000 for 2004, 2005, 2006 and 2007 respectively. Savings in maintenance cost is mainly due to the avoidance of conventional lamp bulb replacement during preventive maintenance sessions. As conventional lamp bulbs are relatively inexpensive items, overall savings in maintenance cost are therefore insignificant compared with energy savings.

4. The anticipated annual savings of energy charge after completion of Phases 1, 2, and 3 are \$1.6 million, \$4.28 million and \$7.6 million respectively. The anticipated savings in maintenance cost are insignificant.

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Transport and Housing Bureau  
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