

Examination of Estimates of Expenditure 2007-08  
**CONTROLLING OFFICER'S REPLY TO  
INITIAL WRITTEN QUESTION**

Reply Serial No.

ETWB(T)029

Head : Subhead (No. & title) :  
60 - Highways Department

Question Serial No.

1561

Programme : (4) Technical Services

Controlling Officer : Director of Highways

Director of Bureau : Secretary for the Environment, Transport and Works

Question :

The Highways Department has indicated that researches on new materials such as thermoplastic and acrylic anti-skid road surfacing materials are being conducted. Please provide information about:

- (a) the expenditure involved;
- (b) the merits of thermoplastic and acrylic anti-skid road surfacing materials;
- (c) the areas in which the application of these new materials is anticipated;
- (d) the areas in which the application of these new materials is unsuitable and the reasons; and
- (e) the difference between the unit costs of the road surfacing materials currently in use and the new materials.

Asked by : Hon. LAM Kin-fung, Jeffrey

Reply :

- (a) The Highways Department is carrying out an in-house study on using thermoplastic and acrylic materials as new alternatives in roads resurfacing. The cost of the study is about \$2 million.
- (b) At present, standard anti-skid materials are epoxy based, which require the wearing course of the asphalt pavements to be resurfaced before carrying out anti-skid works, in order to enhance the durability of the anti-skid materials. The above aims to evaluate the performances of two types of alternative anti-skid surface dressing materials, viz thermoplastic and acrylic, which can be directly laid on typical wearing course without road resurfacing. It is anticipated that the use of these new materials can minimise the disturbance to the public and reduce the construction waste to be generated by resurfacing works. The overall cost can also be reduced.

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- (c) and (d) The study focused on the advantages of applying the new materials on asphalt pavements. The application on concrete surfaces has not been included in our study. It is anticipated that we will apply the new materials on asphalt pavements where anti-skid works are required, such as on steep roads.
- (e) The unit costs of the new materials are about twice of that of the epoxy material currently in use. However, the additional material cost can be offset if resurfacing works can be dispensed with. The cost of the new materials may also be reduced if they are commonly used in roadworks.

Signature \_\_\_\_\_

Name in block letters WAI CHI SING

Post Title Director of Highways

Date 16 March 2007