

LCQ4: Repair works for road surfaces

Following is a question by the Hon Lam San-keung and a reply by the Secretary for Transport and Logistics, Mr Lam Sai-hung, in the Legislative Council today (March 27):

Question:

I have received complaints from members of the public about the poor conditions of road surfaces in various districts. After repeated inspections recently, it is found that the situation is very serious, and instances such as cracked and uneven road surfaces abound, seriously affecting the safety of road users. In this connection, will the Government inform this Council:

- (1) of the number of complaints received by the Highways Department (HyD) about the poor conditions of road surfaces in the past year;
- (2) of the criteria adopted by the authorities for determining whether road surfaces are in need of repair, and the average number of days intervening between the discovery of problems and the completion of repairs; and
- (3) whether the HyD has recorded the road sections which are more susceptible to damage for the purpose of stepping up inspections; if the HyD has, whether the HyD can provide the detailed distribution of such road sections; if the HyD has not, of the reasons for that?

Reply:

President,

The Highways Department (HyD) is responsible for the maintenance and repair of public roads and ancillary road facilities under its purview. The HyD engages road maintenance contractors through term contracts to carry out regular inspections and maintenance works to keep the roads in a serviceable condition while safeguarding the safety of road users.

To provide quality road maintenance services to the public, the HyD has been striving to use innovative technology and digitise workflow in the maintenance of public roads. In particular, the HyD will start adopting an artificial intelligence system in the middle of this year to automatically identify road cracks and other road defects, such as faded road markings, through analysing photos of road surfaces collected during inspections, so as to arrange for appropriate maintenance works. The HyD will also use small unmanned aircrafts to survey the condition of highway structures (including bridges, internal structure of tunnels, etc.) and slopes which are difficult to reach to enhance the efficiency and safety of inspection work.

Furthermore, the HyD will launch a vehicle-mounted mobile laser scanning and imaging system from the end of this year to early next year. The system can accurately record the undulations of the road surface and identify potholes, thereby assisting in road maintenance work.

In addition, the HyD has implemented the Digital Road Maintenance Management System since end 2022 to digitise the inspection and supervision processes so as to enable HyD's staff to manage the road inspection and maintenance work carried out by its road maintenance contractors in a more efficient manner. The system is currently in use in six road maintenance contracts and the target is to digitise most of the inspection and supervision processes of all road maintenance contracts within 2024.

In consultation with the HyD, the reply to the various parts of the Hon Lam's question is as follows:

(1) In 2023, the HyD received about 3 400 cases of damages on the surface of public roads requiring repair.

(2) Common types of road defects include potholes, cracks, rutting, etc. Apart from regular inspections of all public roads in Hong Kong to identify damages that pose danger or inconvenience to the public, the HyD also receives reports from the public on defects in road surfaces or ancillary road facilities. For damages that may cause road safety problems (for example, accidents may occur when vehicles hit potholes at high speed), the HyD will arrange contractors to carry out repairs as soon as possible. The HyD will, in accordance with its performance pledge, complete the repair of potholes within 48 hours upon receipt of reports.

For other damages that do not pose immediate danger to road safety (such as cracks and rutting), the HyD will formulate appropriate plans and schedules for repair and maintenance having regard to factors such as wear and tear of the roads, traffic flow and the surrounding environment, as well as the inconvenience that may be caused to the public (such as arranging for temporary traffic diversion measures involved in the repair works). For example, larger scale and preventive road resurfacing works will be carried out at an appropriate juncture to further improve the overall condition of the road surface.

The time required for different road maintenance works varies. The HyD will flexibly adjust the processing time having regard to the factors such as circumstances of the case, the scope of repairs required and site constraints, so as to ensure prompt completion of the road maintenance works concerned. According to the works records, all repair works for potholes could be completed within 24 hours in the past year.

(3) According to the HyD's records, road sections with more damages are generally located on expressways which are busier, or at junctions of carriageways, in front of stop line at traffic lights and near bus stops, etc. The HyD has been paying special attention to these road sections. Upon discovery of defects during regular inspections or upon receipt of reports from the public, the HyD will promptly arrange for temporary repair works. It will also prioritise the arrangement and completion of large-scale resurfacing works for these road sections, taking into account the various factors mentioned in Part 2. Taking 2023 as an example, the HyD has completed resurfacing works for some road sections of Fanling Highway, Island Eastern Corridor, San Tin Highway, Lung Cheung Road, Kwun Tong Bypass, Repulse Bay

Road and Tai Tam Road, etc, which have more defects.

Thank you, President.