Framework for Traffic Incident Management for Colombo Municipal Area

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Various locations of Colombo City are frequently affected by traffic congestion daily. This may be due to insufficient road capacity during peak hours. But other times it is due to various incidents that occur here and there. An incident that occurs during peak hours worsens the congestion.

Since congestion causes delays, wastage of human resources and fuel, increased rate of accidents, environmental pollution etc. improving the situation is utmost necessary.

Even though the importance of minimizing the congestion has been realized by relevant authorities, they are reluctant to implement any plans considering possibility of high cost involvement.

This study proposes a framework for managing traffic incidents with the available resources and existing institutional setup.

CCTV Cameras and Variable Message Signs

It is proposed to establish CCTV cameras at main junctions and Variable Message Signs just before and after the junctions along the main corridors, based on a criteria of selecting only main junctions, which provide another alternative route for the main corridor considered. As majority of the main junctions have already been equipped with CCTV cameras installed, only a few remaining junctions are to be fixed with cameras to cover the entire area. Vicinity of the city limits also taken into consideration for the incidents near to city limits.

Message sign boards proposed to be fixed are having three different sections to show permanent direction markings, variable messages displayed and indicator lights. Variable messages and indicator lights are controlled by the Traffic Operations Centre. These indicator lights gives approximate traffic condition of the proposed alternative routes.

Traffic Operations Centre

The Traffic Operations Centre gets the messages, analyzes it and displayed suitably in the display panel. The centre is already in operation for monitoring activities, even though the cost of establishing is not there, necessary expansion of the centre will be required. Since it is necessary to display fairly accurate details in the signboard, well trained officers with sufficient

traffic knowledge should be employed for this center. CCTV cameras will help to obtain real time updates.

The Traffic Police who is currently involving with incident management, with the coordination of the Colombo Municipal Council and other stake holders and with a minimum improvements or modifications to their institution, could undertake this in an efficient way. Initial investment for Variable Message Signs, CCTV cameras and modifications to Traffic Operations Centre and for other improvements would be required but small when compare with the losses due to congestion.

The system could be integrated with the agencies operating public car parks and an efficient parking management done. Parking also another main reason for the congestion. Gradually, private car park owners also could be entertained to display for the convenience for their customers.

Funds for Maintenance

Following Possible ways proposed 1. Fines imposed with the help of cameras. 2. Advertisements related to parking availability and other commercial activities.

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