

Thesis Title	Evaluation of Effectiveness of Traffic Control Devices at Highway Work Zones
Thesis Credits	12
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Degree of Study	Master of Engineering
Department	Civil Engineering
Academic Year	1999

Abstract

The objective of this study was to evaluate the effectiveness of traffic control devices at highway work zone. The National Highways No.2 (Mittrapap) was selected as an area for a case study. The traffic control devices for this study were classified into four types as follows: 1) the Department of Highways (DOH) Standard for Thailand, 2) an equivalent Standard to the Manual on Uniform Traffic Control Devices (MUTCD), 3) the modified MUTCD Standard with longer taper and 4) the modified DOH Standard with an overhead sign. Each type of traffic control devices was installed at highway work zone. Traffic data including traffic volumes, spot speed and number of vehicles in closed lane were detected. The effectiveness of each type of control devices was compared using two different ways: 1) percentage of vehicles in closed lane at 10, 40, 70, 100 and 150 metres from taper and 2) average spot speed of vehicle in each lane.

It was found that the modified DOH Standard with an overhead sign performed most effectively, following by the modified MUTCD Standard with longer taper, the equivalent Standard to the MUTCD, and the DOH Standard, respectively. The result can be used as a guideline for developing traffic control at highway work zone in Thailand.

Keywords : Traffic Control Devices / Closed Lane / Work Zone / Spot Speed