

Method for Recording Lateral Position of Vehicles

F. H. GREEN

Research Engineer, Joint Highway Research Project
Purdue University

SYNOPSIS*

With the trend in new construction toward multiple lanes and wider pavements, and with extensive programs of pavement widening already under way, additional information is needed on the lateral placement and speed of cars.

Widening existing pavements increases the hazards caused by existing narrow bridges. Data, including the rate of deceleration and multiple lateral-placement readings to show the path of approaching vehicles, should be obtained in order that proper use may be made of signs and other safety devices. By the use of an electrically-operated motion-picture camera mounted on the bridge, these data can be recorded simultaneously.

To obtain lateral placement data at locations other than bridges, the camera, mounted on and concealed back of an existing road sign, records the measurement at a single location along the pavement. Car and truck classification, number of axles on trucks, and other pertinent information are included with this record. The use of this new method has three distinct advantages: accuracy, ease of changing location, and the absence of visible equipment to distort normal driver reaction.

With slight modification of the procedure, night readings can also be taken with the same equipment, both for the multiple readings at narrow bridges, and the single readings on open highways.

* Reprints of the complete paper, which appeared in the *Highway Research Board Proceedings*, 1946, may be secured from the Joint Highway Research Project, Purdue University. Since it has been printed already, it is omitted here in the interest of economy.