

**DEVELOPMENT OF A TOOL FOR ROAD
CENTERLINE SELECTION AT CURVES AND
GUIDELINE FOR PLACEMENT OF RELATED
DANGER WARNING SIGNS**

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DECLARATION

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ABSTRACT

The main function of road signs and markings should be to guide the road user safely to the destination by optimizing the time consumed for the journey. Placing the right sign or marking at the right place in the right manner will increase the efficiency on the road. Inappropriate marking or sign will tend to lose the credibility over them and increase the impatience of drivers by reducing the efficiency and safety on road.

Current Method for marking road centerlines and placement of danger warning signs is based on the Regulations of Gazette Notification No.444/18 published on 13th March 1987. Until now, this method has been practiced for more than 25 years. Marked centerlines and fixed warning signs on roads show remarkable deficiencies when practice. When travelling along roads, it is understood that some of road signs are decreasing the efficiency due to deficiencies and errors of markings or signs. Some instances, it can be noted that centerlines on roads are marked on a tryout basis due to lack of proper guidance in the current method. Road condition has remarkably improved and Traffic volume has gone up, when compare with the situation at the time of introducing the current method.

After realizing the shortcomings of the current method, in year 2007, then the Ministry of Transport & Highways and the Road Development Authority (RDA) have been focusing attention to introduce a Revised Method for Traffic Signs and Markings (Proposed Method) which is in conformity with the stipulations given in the Vienna Convention. As a result, Revised Traffic Regulations are in the threshold of publishing as an Act. This will replace the Regulations that are currently in use. A manual called **The Manual on Traffic Control Devices** has already been prepared by Road Development Authority (RDA) for using in the future after coming in to effect of the above Revised Act.

This proposed method has been tried out on some of the national roads. However, further continuation on other roads was stopped due to legal impediments.

When examining the roads used for trying out the proposed revised method, it is understood that still there are some practical deficiencies. As an example, the manual discuss about the placing of continuous line at horizontal and vertical curves by maintaining the visibility distance S for different vehicle speeds. However, maintaining this S value seems to be difficult to practice at the design stage or at the site due to practical difficulties in measuring it.

This research will make an effort limited to road curves to discuss existing identified conflicts and shortcomings in the current method in marking centerlines at curves and placing of related warning signs since every road encounters large number of curves. Further, this will discuss provisions in proposed method for marking centerlines at curves and placing of related warning signs for the better understanding of the suitability of this method. In addition, this will discuss drawbacks of the proposed method in marking centerline. As solutions to these drawbacks, this research will try to put forward a methodology.

The methodology contains,

- A computer program as a tool to mark road centerlines at vertical or horizontal curves by maintaining the S value specified in the proposed method.
- Suggestions as a guideline for placement of danger-warning signs related to curves based on the proposed method.

DEDICATION

To my wife and children



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