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## **Research on the Minimum Tangent Length of Roadway**

### **ABSTARCT**

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The minimum tangent length (between curves in same or opposite directions) of roadway horizontal alignment is one of the most important and primary indexes in the roadway geometric design. At present, there are no unique values for the lengths. They are different in different countries. In China, when the design speed is greater than or equal to 60km/h, the minimum length of the tangent between two curves in the same direction is  $6V$  meters ( $V$ -design speed in km/h), and in the opposite directions is  $2V$  meters. These two values are much greater than that of other countries. Based on the collection and analysis of relevant design specifications in some representative countries and driving simulation for the three-dimensional roadway models with varied tangents inside, this paper put forward the suggested values for the minimum tangent lengths of roadway horizontal alignment. The suggested tangent lengths are less than the existing values and are proved to able to meet the driving transit between alignment elements and to secure the traffic safety.

**Key Words:** tangent length; highway geometric design; driving simulation; roadway alignment

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