

## Traffic Calming Measures at Rural Roads in Dhofar

**Authors :** Mohammed Bakhit Kashoob, Mohammed Salim Al-Maashani, Ahmed Abdullah Al-Marhoon

**Abstract :** Traffic calming measures are different design features or strategies used to reduce the speed of a traveling vehicle on a particular road. These calming measures are common on rural roads of Oman. Some of these measures are road speed limits, vertical deflections, horizontal deflections, and road signs. In general, vertical deflections such as rumble strips, road studs (cat's eye), speed tables, and speed humps are widely used. In this paper, as vehicle speeding is a major cause of road traffic crashes and high fatalities in Oman, the effectiveness of existing traffic calming measures at current locations on rural roads is assessed. The study was conducted on the rural roads of Dhofar Governorate, which is located in the south of Oman. A special focus is given to the calming measures implemented on the mountain roads of Dhofar. It is shown that vertical deflection calming measures are effective in reducing vehicle speed to 20 to 40 kph, depending on the vertical deflection type and spacing. Calming measures are also proposed at locations with a high probability of traffic crashes based on the number of traffic crashes at these locations, road type, and road geometry.

**Keywords :** road safety, rural roads, speed, traffic calming measures, traffic crash

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