## ABSTRACT

Very few studies have been done in the past on impact of road geometry on driver behaviour at microscopic level. In this thesis an attempt is made to study the impact of changes in road width on driver behaviour quantified in terms of the acceleration noise in real world conditions. Acceleration Noise is used as a parameter indicator of driver behaviour. Acceleration noise is computed from the position versus time data and related to road width. The study is conducted on an eighteen kilometer stretch of twoway, two-lane roadway with no lane marking or median barrier using a high precision differential GPS (dual frequency geodetic quality Leica SR530 GPS).

Keywords: Driver behaviour, Road width, Acceleration Noise and GPS.