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Development of a driving cycle for Sri Lanka

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A driving cycle is a speed time profile which represents the driving characteristics of a selected area. This can be of use to legislative and non legislative purposes such as development of emission standard, determination of fuel consumption, etc. Established driving cycles cannot be used in Sri Lanka as the traffic constituents, driver behaviour and road conditions vary from the conditions of those countries. Hence the objective of the research is to develop methodology and standard driving cycle(s) which represent urban and rural conditions in Sri Lanka and to establish emission standards in future based on such cycle(s).

To achieve the objectives, it is necessary to collect and analyse the on road speed-time data on selected routes which will represent the driving patterns of urban or rural conditions. Due to the restrictions of time and resources, our study was limited to urban conditions and to light vehicles; a sample driving cycle was developed based on the data collected on the Galle Road, section from Katubedda to Fort using on board method, during different times and days of the week. This study would facilitate further studies on development of driving cycles for other conditions and this could be of great use for traffic engineering studies and sustainable development.