

## The Impact of Lowering Speed Limit on Mobility and the Environment

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<b>Abstract</b>	<p>Speed limit is one of the traffic problems in developing countries due to the influence of speed on roadway safety. The actual speed is often higher than the legal speed limit indicating that many road users don't consider the speed limits seriously. Speed limits value should be posted to reflect the maximum speed considered to be safe and reasonable by the majority of drivers. One of the methods to determine the speed limit is 85th percentile. The aim of this research was to determine the impact of speed limit increases on mobility and the environment in urban areas. The results show that a large number of road users' drive above speed limits. There are 4.75% of pick-up and light truck users, 10% of passenger car users and 12.25% of motorcycle users exceed the speed limit. Reduced speed has a positive impact on accident severity and number of accidents. The results show that the effects of a 5 km per hour reduction in travel speed are greater at lowers speeds and reductions over 50 km per hour bring dramatic decreases in crash risk. Reduction in vehicle speed will be followed by the reduction in fuel consumption and vehicle operating cost of vehicle. Vehicle operating costs such as tire wear, lubricating oil, and spare parts that tend to increase with increasing the speed. Effect of the lowering speed limit was reduction in nitrogen oxides emission and carbon monoxide emission.</p>
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