

A conceptual Model for Highway Speed Monitoring and Enforcement in Zimbabwe

Furusa Samuel Simbarashe, Mahlangu Gilbert, Mugoniwa Beauty, Giyane Maxmillan,

Rebanowako Tuarai George

Abstract:

Many African countries lack resources and sophisticated technology needed to monitor and enforce traffic speed regulations in highway. These countries rely on highway patrolling which is a manual technique used to oversee and enforce the traffic safety compliance on the roads. The technique seems to be woeful and inadequate, since police officers can be bribed and the equipment they use does not provide enough evidence to empower independent auditors to quiz why certain offenders were not ticketed. Because of the need to have an up-to-date technology to monitor and enforce highway speed regulation, the purpose of this study was to suggest for the adoption of a conceptual model for highway speed monitoring and enforcement that incorporates Automatic Number Plate Recognition (ANPR), GSM and back-end integration. Using various models in traffic monitoring and regulation, a conceptual model was designed in order to reduce corruption and speed related accidents in Zimbabwe. The proposed model is expected to improve highway speed monitoring and enforcement in Zimbabwe and other countries that are still lagging in this regard.

Key words: Conceptual model, enforcement, monitoring, speed enforcement, speed monitoring