



Speed Management and Enforcement

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Group



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Introduction

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Introduction

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Why is speed so important ?

"A 1% reduction in mean speeds leads to a 2% reduction in injury accidents, a 3% reduction in serious injury accidents and a 4% reduction in deaths." (Aarts, L. & van Schagen, I. (2006), based on Nilsson (1982))

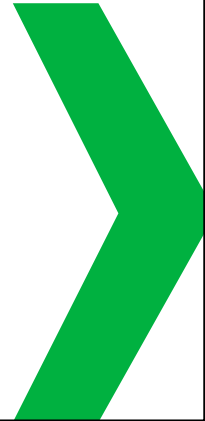
"It is estimated that speeding contributes to as many as one third of all crashes resulting in death, and is the most important contributory factor to road deaths and serious injuries." (ETSC 2008)

Introduction

Do you remember high school physics?

$$E_k = \frac{1}{2}mv^2$$

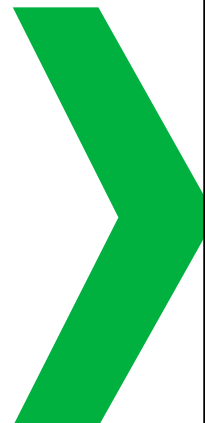
In which the kinetic energy of an object is equal to half the mass multiplied by the squared speed of that object.



Introduction

Key issues speed management

- Reduce the average speed across all road types in the network
- Focus on urban areas which have a high percentage of vulnerable road users (max 50 km/h)
- Special focus on residential areas where motorised vehicles should be seen as 'guests' (max 30 km/h)
- Speed management and road safety important contributors to higher quality of life and urban sustainability



Speed management measures

- Building or changing roads with traffic calming measures
- Matching the speed limit to the function of road
- Enforcing these speed limits
- Increasing the awareness of the dangers of speeding
- Promoting in-vehicle speed limiting technologies

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Traffic calming: Optical illusion markings



Traffic calming: Humps and plateaus



Traffic calming: Roundabouts



Traffic calming: Gateway treatments



Traffic calming: Road narrowing



Matching speed to road function: Speed limit changes



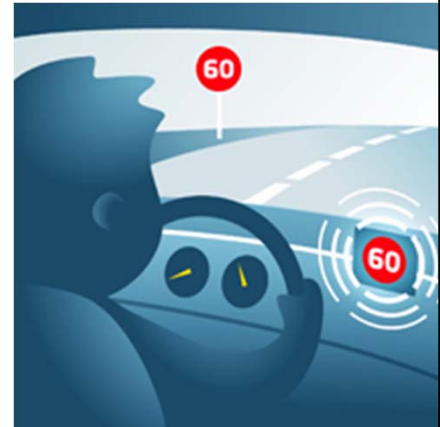
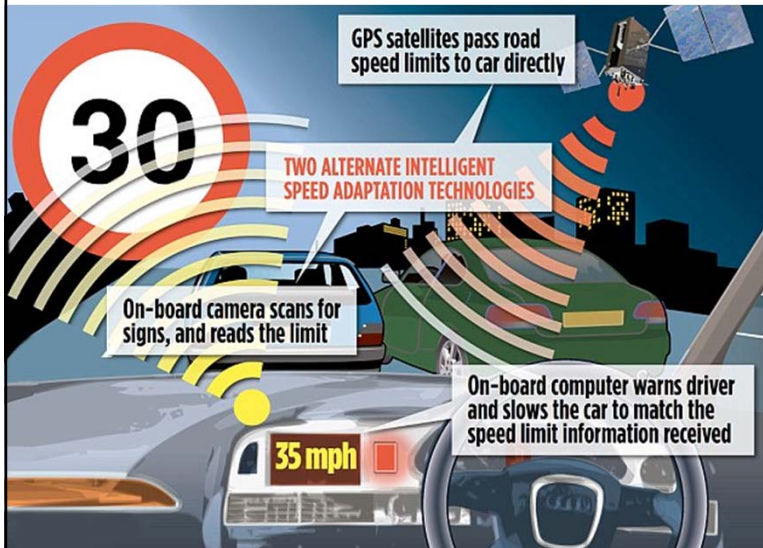
Creating awareness by publicity Campaigns



In-vehicle technologies

Intelligent Speed Adaptation

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Speed enforcement

Introduction

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- Rising motorisation: maintaining enforcement levels
- Limits to manual police enforcement
- Speed management requires 24/7/365 approach
- Use valuable police resources for 'non-automatable' tasks
- Georgian authorities and NGOs fully aware of need for automated enforcement



Speed enforcement

Objectives

- Secure strong political, administrative and public support for automated enforcement
- Create an enforcement environment with a high subjective chance of apprehension
- Avoid and counter any link with 'revenue generation' and 'taxes'
- Actively communicate road safety reasons, benefits and results of enforcement

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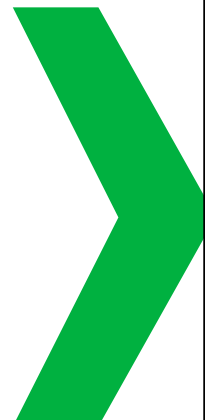
Two enforcement models

- **Government buys enforcement and back office equipment and manages and executes ticket issuance and fine collection process.**
- **Government sets PPP criteria and leaves enforcement operation up to a private party with violation confirmation by the police.**

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STATEMENT OF POLICY

by the International Road Federation

“Public Private Partnerships in Traffic Enforcement”

July 2, 2015

In most countries traffic enforcement cameras and other equipment are purchased, owned, and operated by government organizations. The past two decades have seen a wide-ranging wave of privatizations and introduction of public private partnerships (PPP) in formerly government-owned or controlled activities, including traffic enforcement. Implementing this concept requires a set of principles and good practices presented in this IRF policy statement.

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Public Private Partnerships in Traffic Enforcement

A White Paper from the International Road Federation

White Paper
www.IRFnews.org

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02

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PPP - Public party

- Easy on constrained budgets
- No or minimal investment, alternative use of capital
- Better on police resource allocation
- Improves enforcement integrity
- Violator pays for road safety
- Safer roads and intersections
- Better quality of life for its residents (noise, pollution, barrier effects)

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PPP – Private party

- Main investor
- Operation funded with collected fines
- Discussions with private parties on hardware, software and operational scope of project, public – private cut
- Define late, non-payment, legal and court procedures
- Privacy and private party staff authorisations
- Road safety objectives and camera rotation

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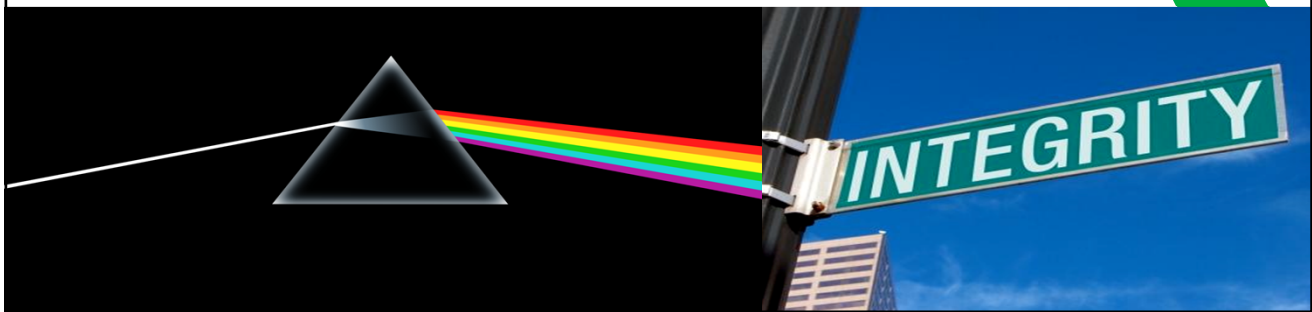


PPPs in Traffic Enforcement

IRF's Guiding Project Principles

- Transparency
- Integrity

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Key preparations, issues & actions

- Political and administrative commitment
- Government authority, police and private parties
- Administrative scope: municipal, regional, national
- Study and identification of high-risk spots and road sections

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Key preparations, issues & actions

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- Road safety study with action plan
- Actions: infra changes, campaigns, signage, etc.
- Enforcement cameras option for other speeding issues
- Define the public-private partitions and tasks in the process
- Confirm compliance with preconditions



Preconditions

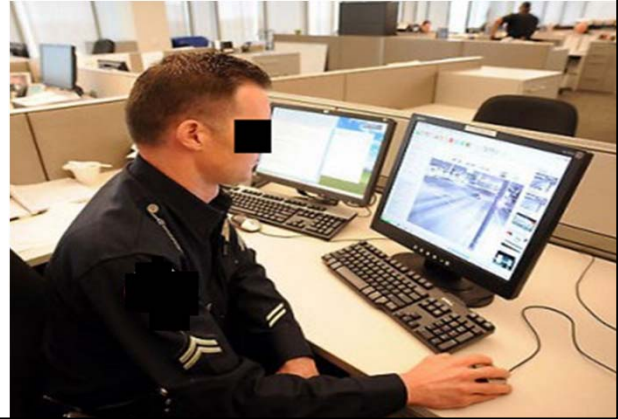
- Wide political and administrative commitment
- Police cooperation, thus public party agreement
- Suitable legal and regulatory framework
- Accurate vehicle and drivers license database
- Access by private party to such data
- License plate issuance, presence and quality
- Sufficient fine levels
- Strict & enforceable fine collection conditions



Safeguards, checks and balances



- **Ultimate control and approval of violations only by police or authorised official**



Safeguards, checks and balances



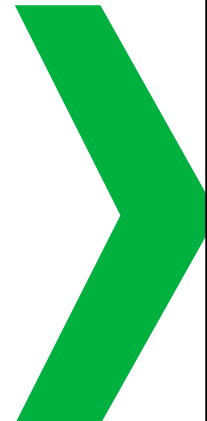
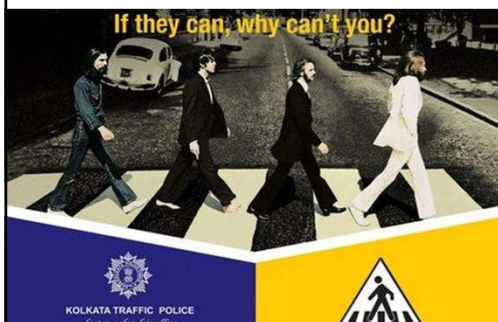
- **Independent type approval and regular verification of accuracy and overall performance**



Safeguards, checks and balances



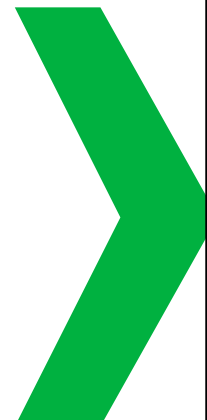
- Surplus fine revenue to be reinvested into road safety projects



Safeguards, checks and balances



- Longer term contract with capped revenue
- Maintain lower financial incentive to continue to issue tickets beyond cap



Transparency and Integrity

- Transparency and integrity defining elements of PPP success
- Early stage publicity about enforcement PPP plans
- Objective: road safety, saving lives, QoL, never revenue driven
- Inform public about safeguards, private party caps, surplus fine allocation, etc. to create and maintain support

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Transparency and Integrity

- Internet access to review e.g. photo, video, violation data, approvals
- Integrity: type approval, annual verification, authorising officer code
- Inform: why, where and results of enforcement
- **No effective enforcement without publicity**

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Conclusions

- Reducing average vehicle speed has huge road safety benefits
- Infrastructure adaptations
- Matching speed to road function
- Raise awareness through publicity
- Manual and automated enforcement
- Consider IRF PPP enforcement model
- Speed reduction enhances Quality of Life

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მადლობა ყურადღებისთვის.

Please refer to the IRF 'Statement of Policy', White Paper 16-02 and IRF Webinar on Public Private Partnerships in Traffic Enforcement on the IRF website:

www.irfnews.global

Contact and further information:

IRF Road Safety Enforcement Subcommittee or contact me at

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