

WEBINAR WILL
BEGIN AT 14:00

agilysis



MANAGING SPEED &
COMPLIANCE

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WEBINAR SUPPORT

- Please use the Q&A Section to ask questions – We will answer as many as we can
- This is being recorded and will be available to review shortly
- The PDF slides are also available



MANAGING SPEED & COMPLIANCE

- Speed and the Safe System
- Setting Speed Limits
- What is Compliance?
- International Compliance Levels
- Speed Management Tools (Poll)
- Effectiveness of Interventions
- Poll Results
- Integrated Speed Management Strategy
- Speed Compliance Dashboard

SAFE SPEEDS

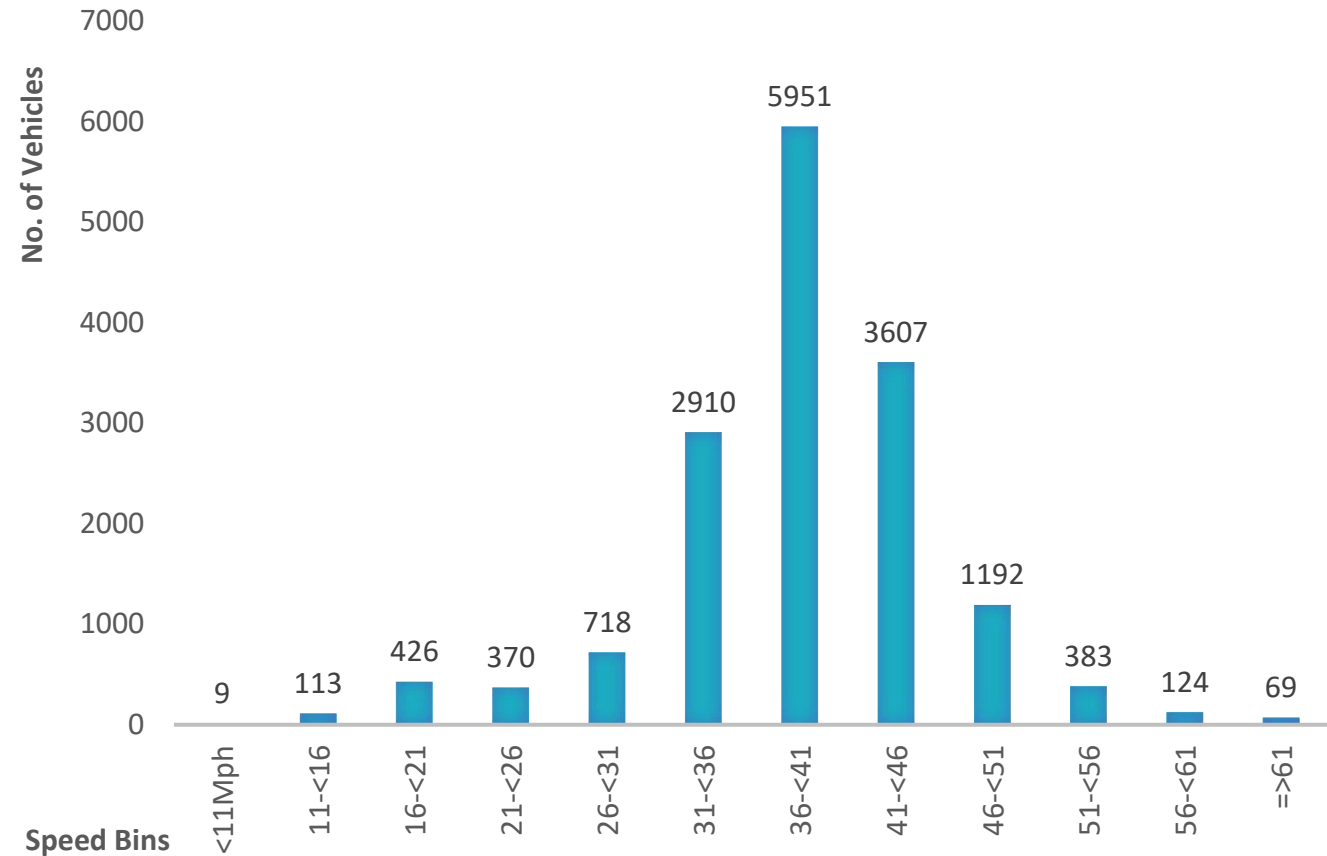
- Why do we need different speed limits?
- The 30 mph speed limit in built-up areas was introduced in 1930
- The 70 mph limit on previously unrestricted roads was introduced in 1965
- National Speed Limit in 1977



SAFE SPEEDS - SETTING LIMITS



- Historically, speed limits have been set in accordance with the prevailing speed of traffic
- Setting speed limits based on an assessment of the combined risk relating to the infrastructure, travel speeds, volume and mix of traffic by type (including vulnerable road users).



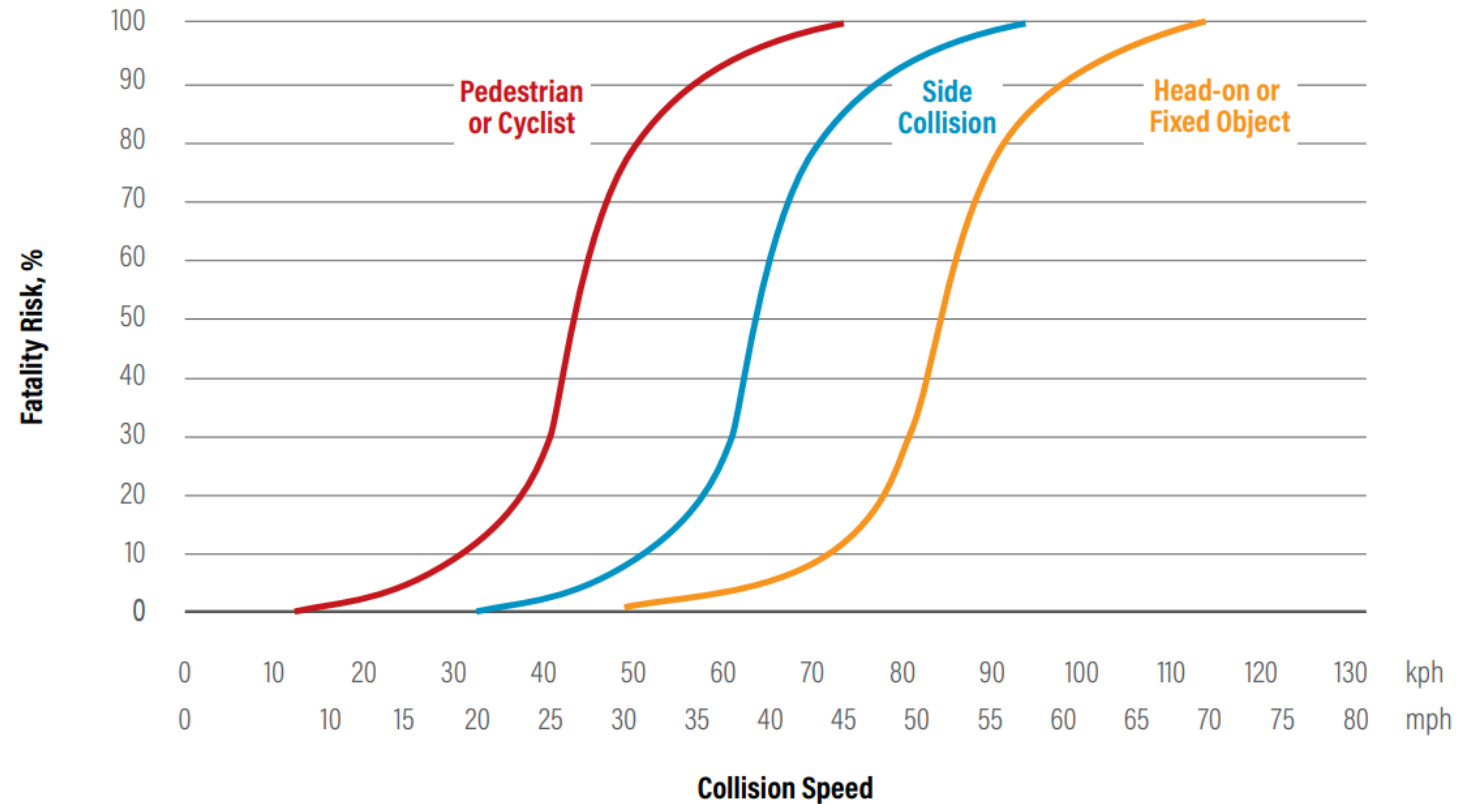
- What does OECD / ITF's 2016 publication '*Zero Road Deaths and Serious Injuries*' have to say?
- In the section on 'managing speeds through speed limit setting and compliance it says:

Speed limits should be set in accordance with scientifically robust findings on human behaviour and performance, as well as human biomechanical tolerance limits. Conversely, it is not acceptable, given the current state of knowledge about the critical role of speed, to set speed limits based on popular opinion or by adopting the 85-percentile speed at which drivers choose to travel.

SAFE SPEEDS - SETTING LIMITS



Setting speed limits based on the safe system principles, meaning that speed limits are set to ensure that when crashes do occur, the resultant crash forces are survivable by most people



Source: Wramborg (2005).

WHAT IS COMPLIANCE?



- For Safe System KPIs:
 - Compliant drivers are those travelling at or below the posted speed limit
 - **30mph or less in a 30mph limit**
- But from an enforcement perspective, not all non-compliant drivers are the same:
 - **31 to 34mph in a 30mph limit** – non-compliant but not a focus of enforcement
 - **35mph to 42mph in a 30mph limit** – definitely non-compliant but receive different disposal than ‘higher end’ speeders (Speed Awareness, if appropriate)
 - **42mph to 49mph in a 30mph limit** – Fine and penalty points
 - **Over 50mph limit** – ‘higher end’ speeders – straight to court

DIFFERENT TYPES OF COMPLIANCE



- NPCC Speed Enforcement Guidance (2018)

Targeting means making sure that enforcement action is directed primarily at those whose behaviour poses the greatest risk/highest harm (particularly to others), often at identifiable locations or in identifiable circumstances.

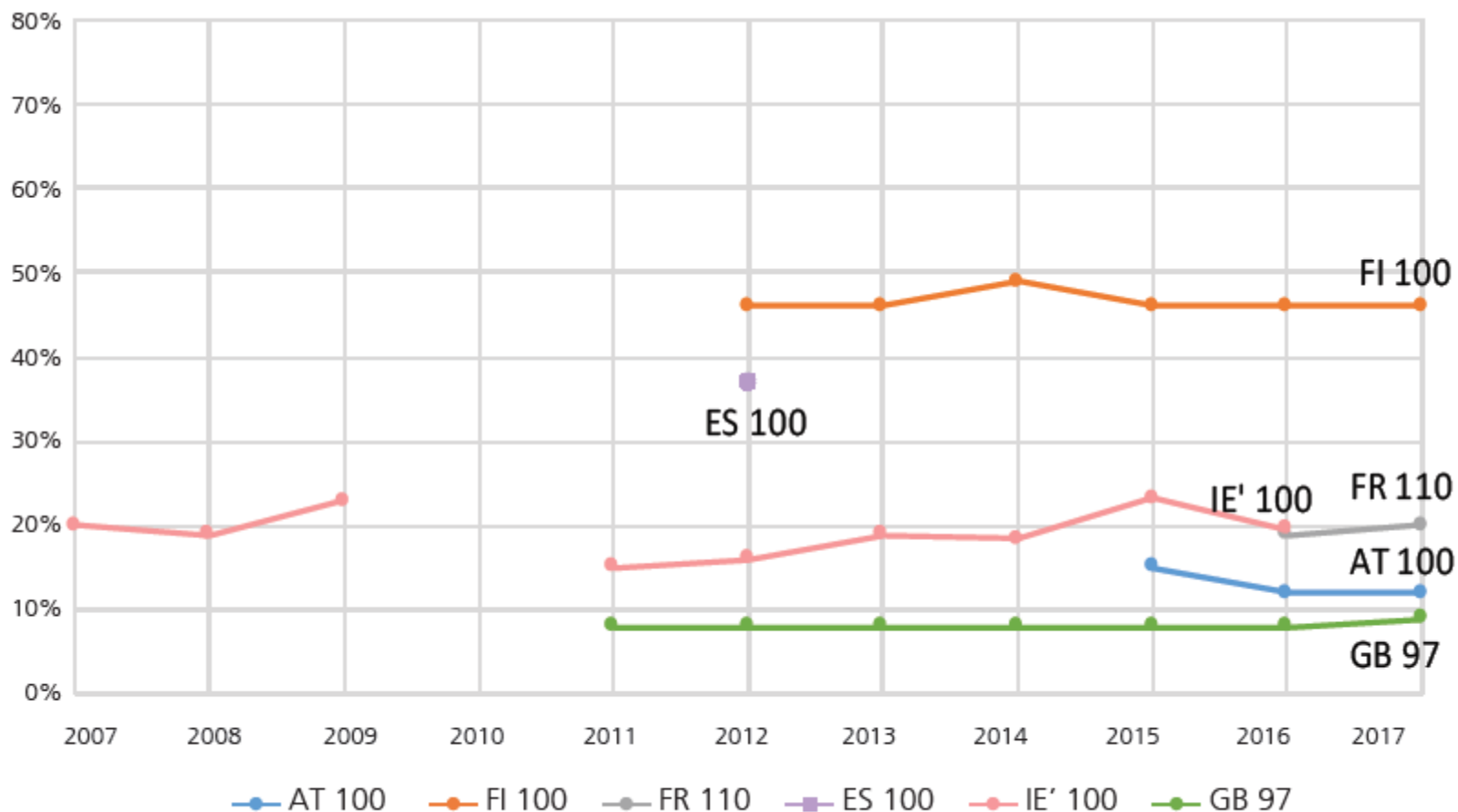
Targeting needs to take full advantage of a wide range of information sources, including academic research, to develop a greater level of understanding of what the problems are and how to resolve them, so that enforcement action be focused and prioritised.

- Geographical approach – identifying locations or home areas
 - Offence data
 - Speed data
 - Offender postcodes
- Investigative psychology – predicting the characteristics of offenders
 - Segmentation: Fylan's Sleepy, Dopey, Grumpy and Happy
 - Sleepy and Dopey – 'lower end' speeders – knowledge deficit?
 - Grumpy and Happy – 'higher end'/habitual speeders – attitudinal

- Typological approach – assigning offenders to different categories, based on location
 - 52mph at 3.15pm outside an urban school
 - 73mph at 3.15am on a motorway
- Influences on speeding behaviour
 - Attitudes
 - Norms
 - Personality
 - Self-identity
 - Intention

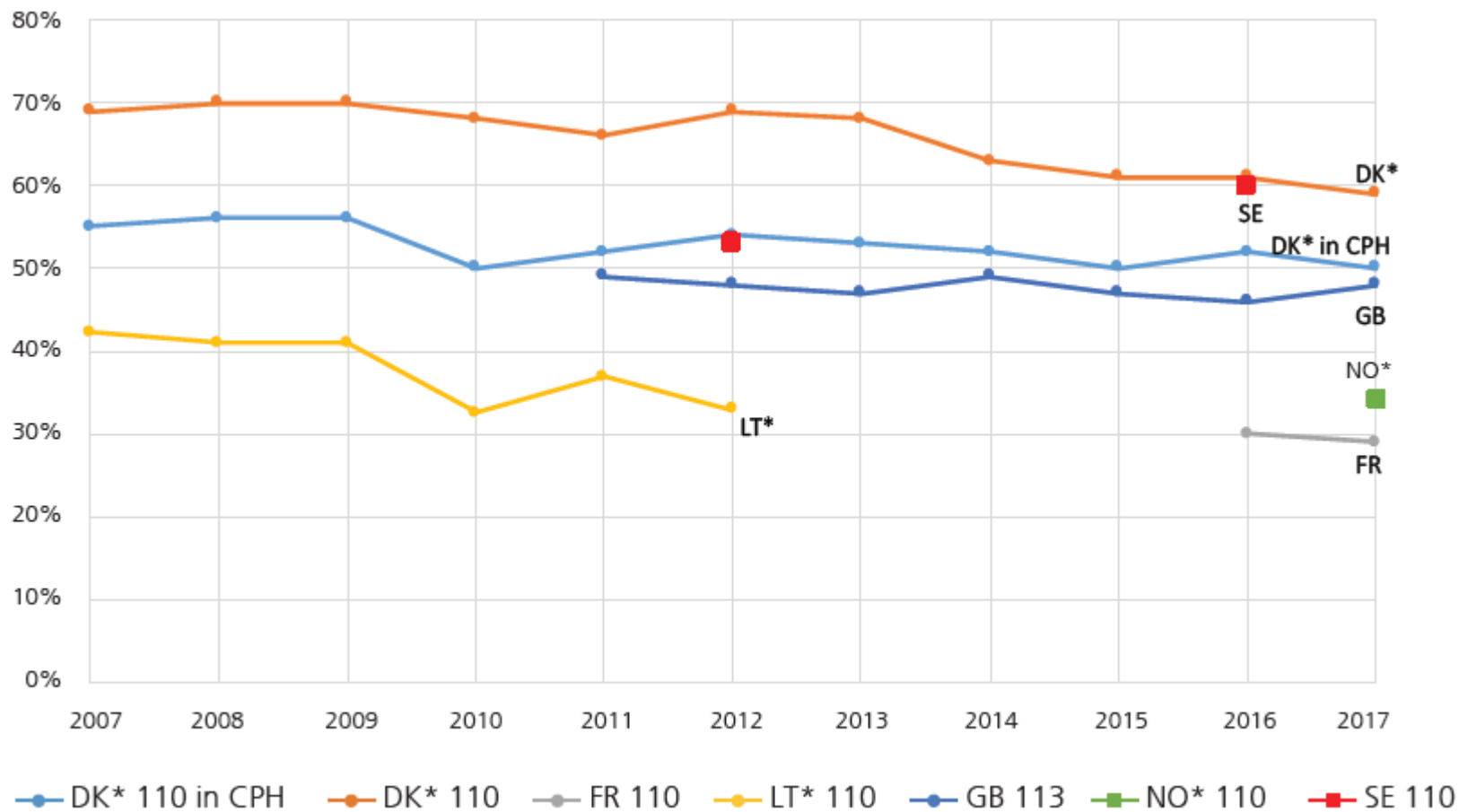


INTERNATIONAL COMPLIANCE EXAMPLES



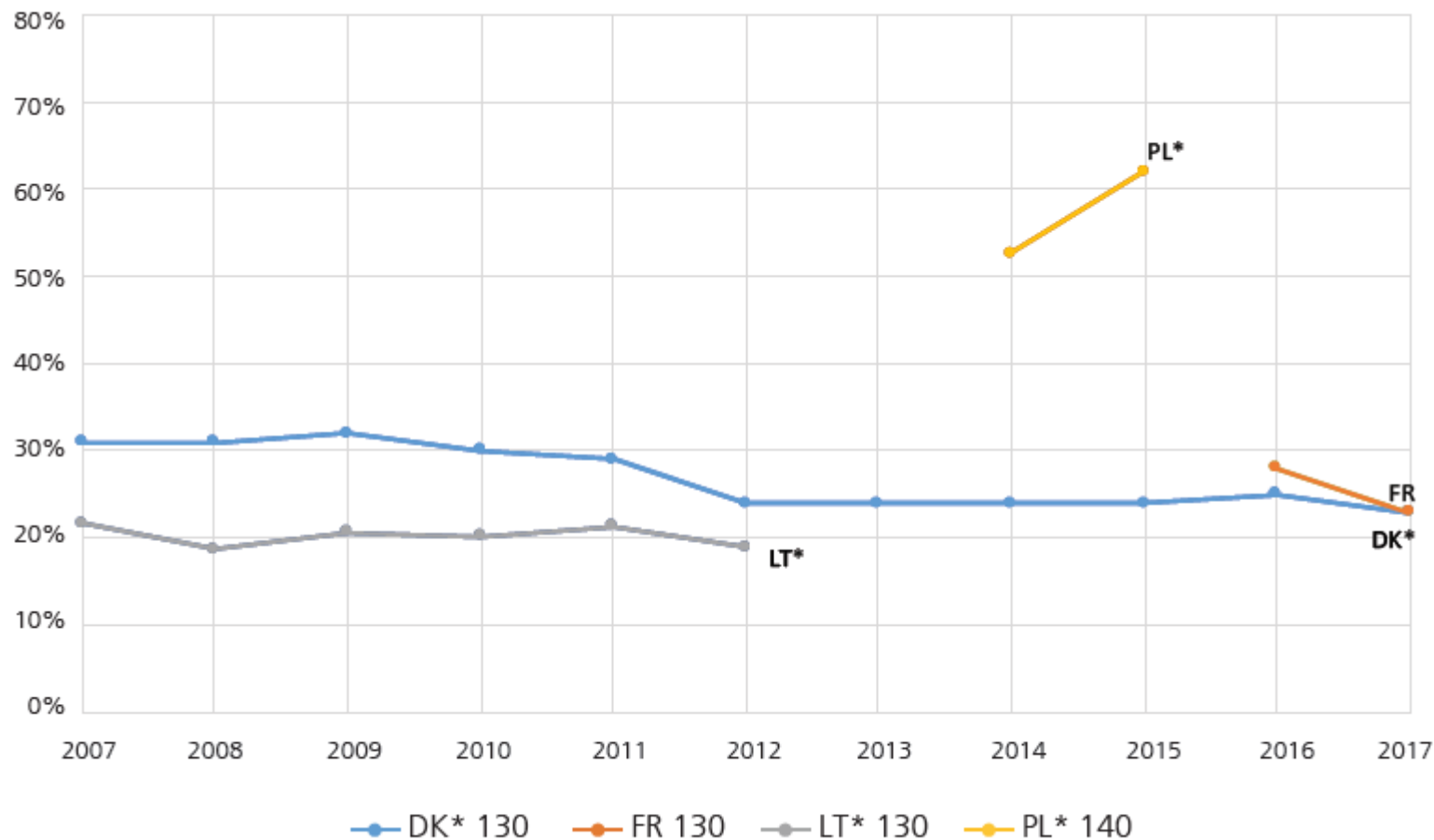


INTERNATIONAL COMPLIANCE EXAMPLES





INTERNATIONAL COMPLIANCE EXAMPLES



SPEED MANAGEMENT TOOLS

- Wheelie bin stickers
- Posters
- Speed Indicator Devices
- Vehicle Activated Signs
- Community Speedwatch



SPEED MANAGEMENT TOOLS



- Handheld Enforcement (with vehicle stop)
- Mobile Camera Van
- Permanent Speed Camera
- Telematics Devices
 - Open
 - Closed
- Intelligent Speed Adaptation

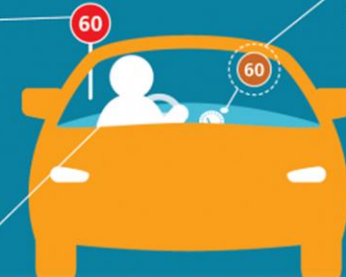


1. Car receives position information via GPS and current speed limit from a digital map. Can also be combined with video camera sign recognition.

2. Speed limit is displayed on the dashboard.

3. Car helps driver not to speed when speed limit is reached.

Driver can override system by pushing harder on accelerator.



- Please provide your answers to the two questions:
 - Which tools reduce speeds?
 - Which tools achieve compliance?

EFFECTIVENESS OF INTERVENTIONS



- Study produced 15 years ago using various speed survey datasets
- Not peer-reviewed, published on the Partnership website and archived by me 😊
 - Spatial effect of speed cameras
 - Loaded vs Unloaded
 - Mobile Cameras
 - SID

Thames Valley Safer Roads Partnership
Research Report

University of Reading
Damian Poulter and Frank McKenna

March, 2005

EFFECTIVENESS OF INTERVENTIONS

- Spatial effect of speed cameras

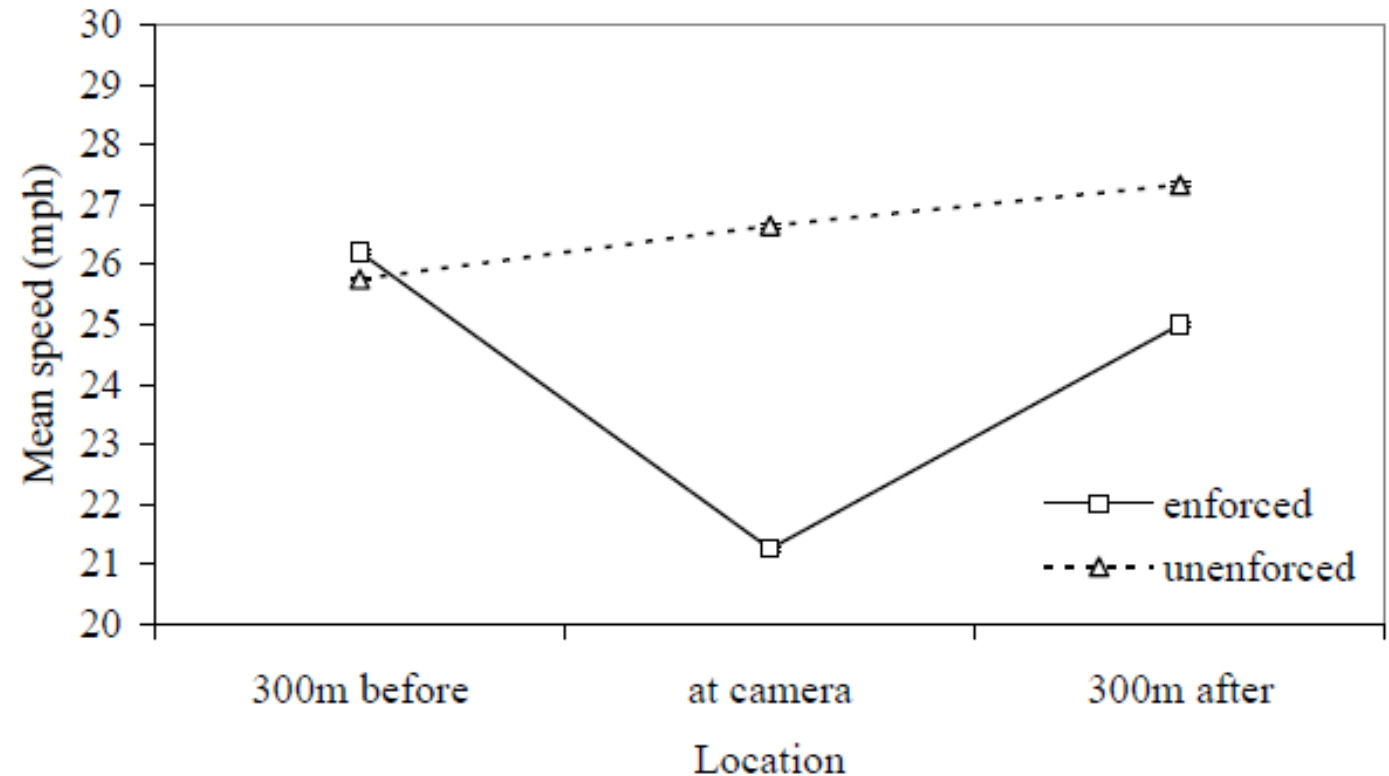


Figure 1.1 Mean speed 300m before, at, and 300m after camera for all drivers in the enforced and un-enforced direction

EFFECTIVENESS OF INTERVENTIONS

- Loaded vs Unloaded (n=2)

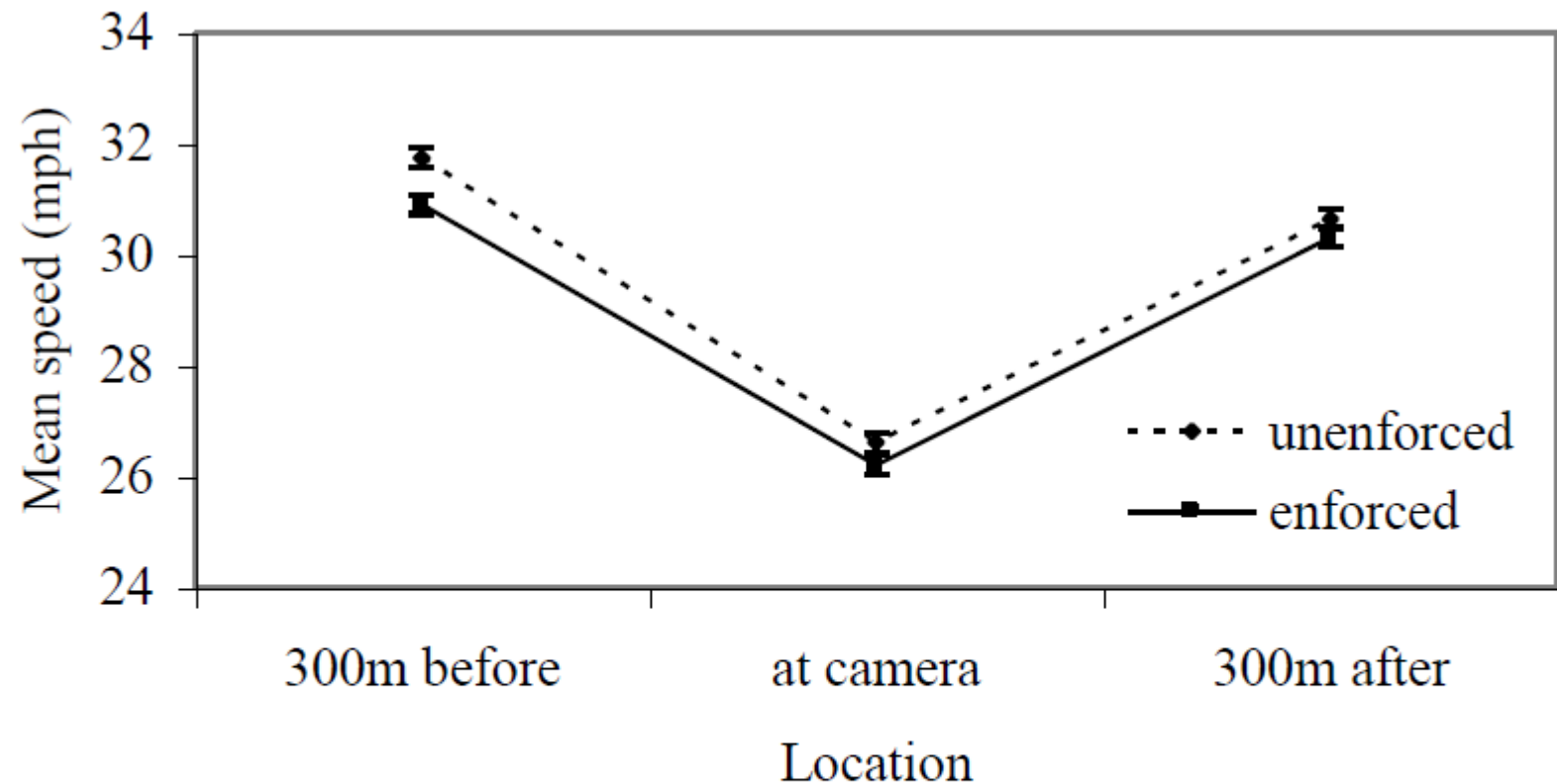


Figure 2.1 Speed at 300m before, at, and 300m after loaded and unloaded fixed safety cameras

EFFECTIVENESS OF INTERVENTIONS

- Mobile cameras

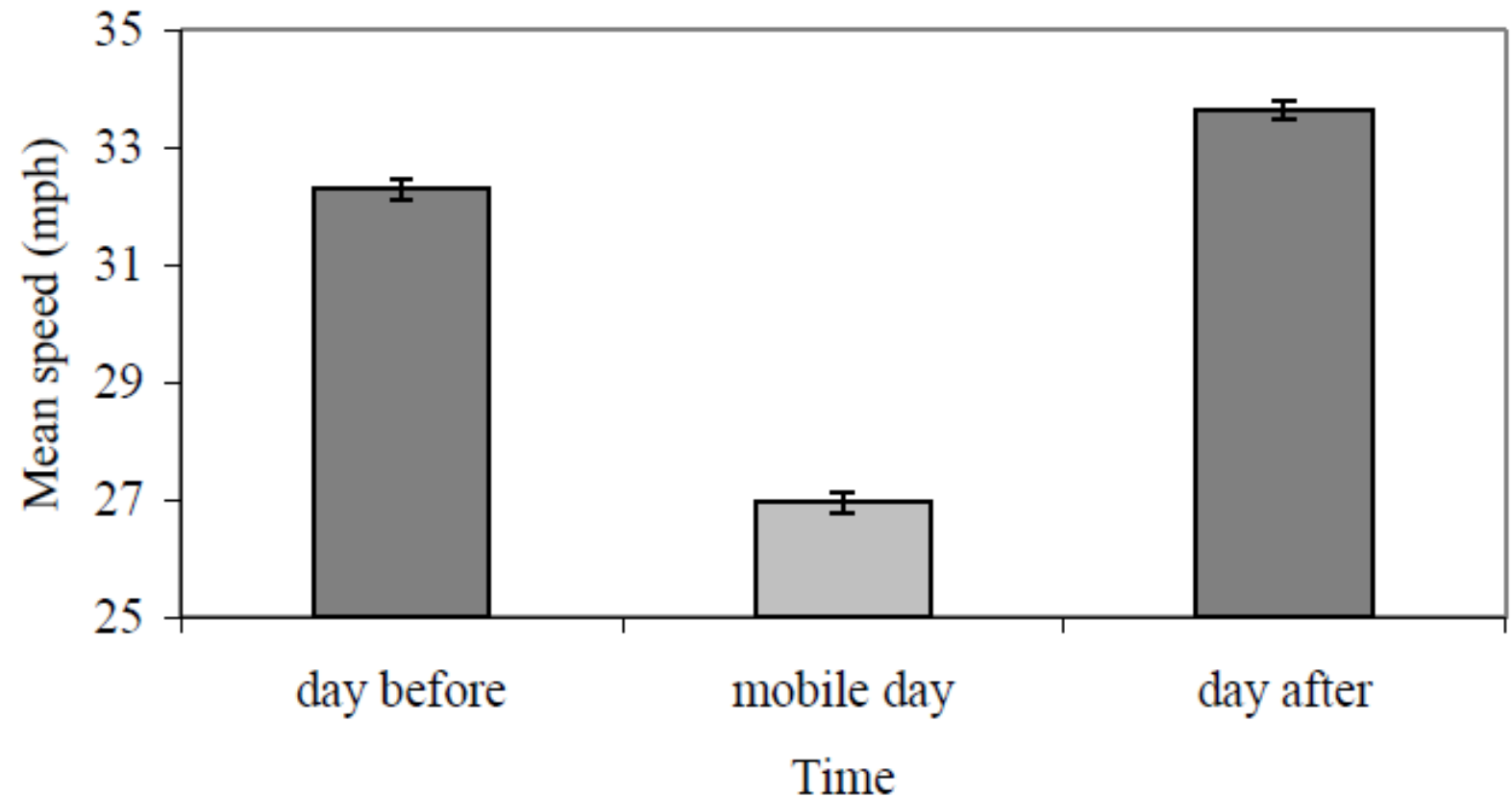


Figure 3.1 Mean speeds as a function of day

EFFECTIVENESS OF INTERVENTIONS

- Mobile cameras

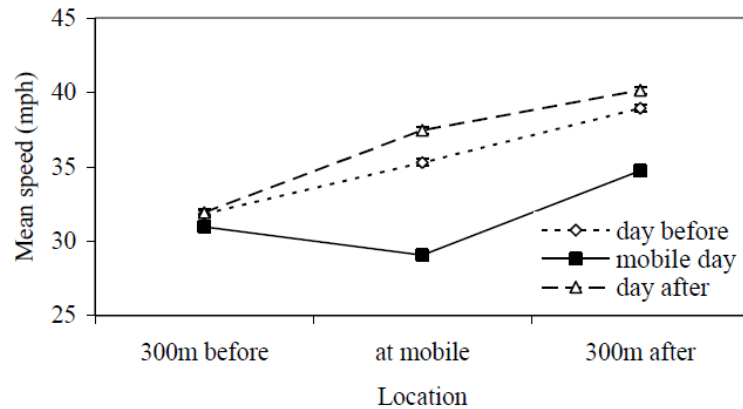


Figure 3.3 Mean speed from 300m before, to at mobile camera, to 300m after at the same time on the day before, the day of, and day after mobile enforcement.

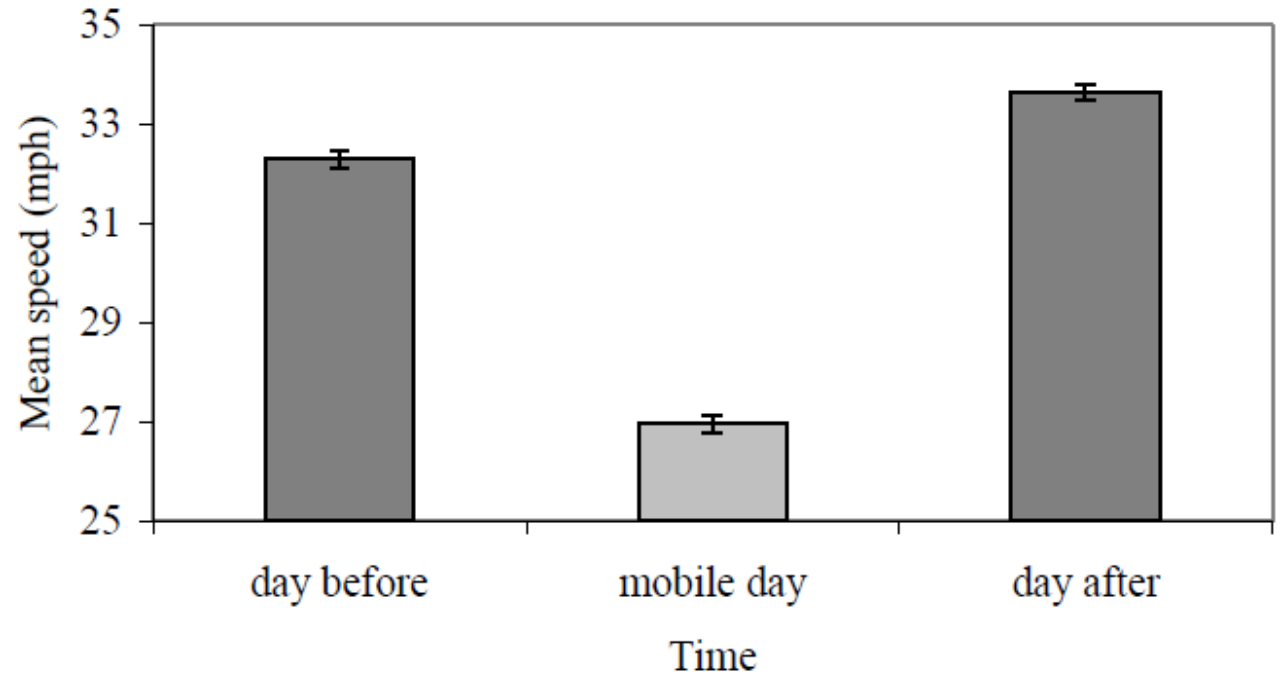


Figure 3.1 Mean speeds as a function of day

- Temporary SID

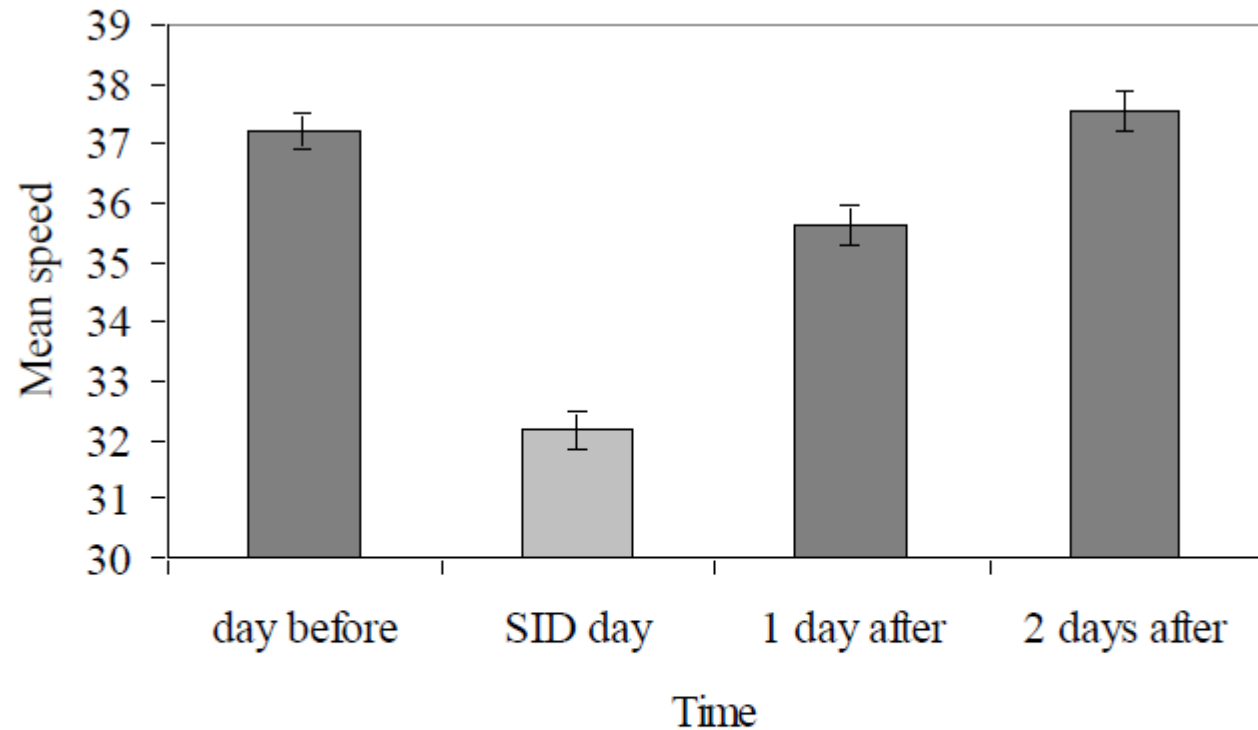


Figure 4.3 Mean speeds during the same time period on the day before SID deployment, during SID deployment, and the day after SID deployment at a rural site.

Results!

INTEGRATED SPEED MANAGEMENT STRATEGY





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