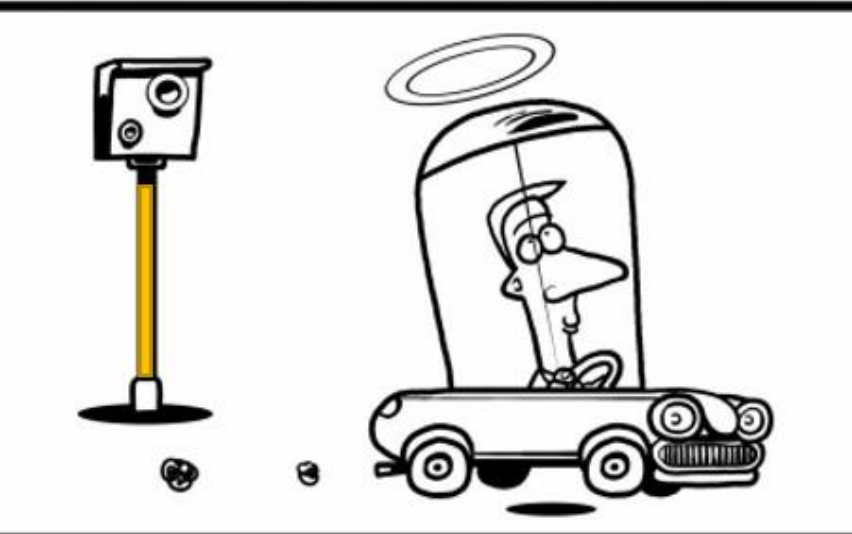


Automatic speed enforcement in Nordic countries – today and future

Vision Zero for Sustainable Road Safety in the Baltic Sea Region,
2-3 December, Riga

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The workshop Automatic speed enforcement in Nordic countries - today and future, 3-4.4.2019, Helsinki, Finland

Many thanks to the speakers in workshop:

Heikki Ihalainen, National Police Board of Finland

Dennis Pasterstein, National Police Board of Finland

Eva Lundberg, Swedish Transport Administration

Maria Kleemo, Swedish Police

Bjørn Brændshøi, Norwegian Public Roads Administration

Karoline Lundholt, The Danish Road Directorate

Fanny Malin, Technical research centre of Finland LTD

Anna Vadeby, VTI, Sweden

<http://www.nvfnorden.org/hemsida/utskott/nvf-workshop-om-automatisk-trafikkontrol-2019/>

1. TRAFFIC LAW



To maximise road safety effects, traffic law enforcement should, first and foremost, prevent violations that are related to the number or severity of serious and fatal accidents.

2. SPEED ENFORCEMENT

- unpredictable
- difficult to avoid
- mix of highly visible and less visible
- long period of time



3. SPEED CAMERAS

- accidents
- specific road sections and areas
- related to excess speed
- volume of traffic





SPEED CAMERAS (15.6.2019)	Denmark	Finland	Iceland	Norway	Sweden
Fixed stations	20	973 (143 cameras)	23 (16 cameras)	271	1800
Mobile units	82	26	2	No	15
Average speed control	No	No	No	Yes	No

Accident reduction:

- fatal accident -18 ... -32%
- severe injured about -20%
- studies differ widely in the reported effects

the

Mobile versus fixed speed cameras?



Visibility of cameras?



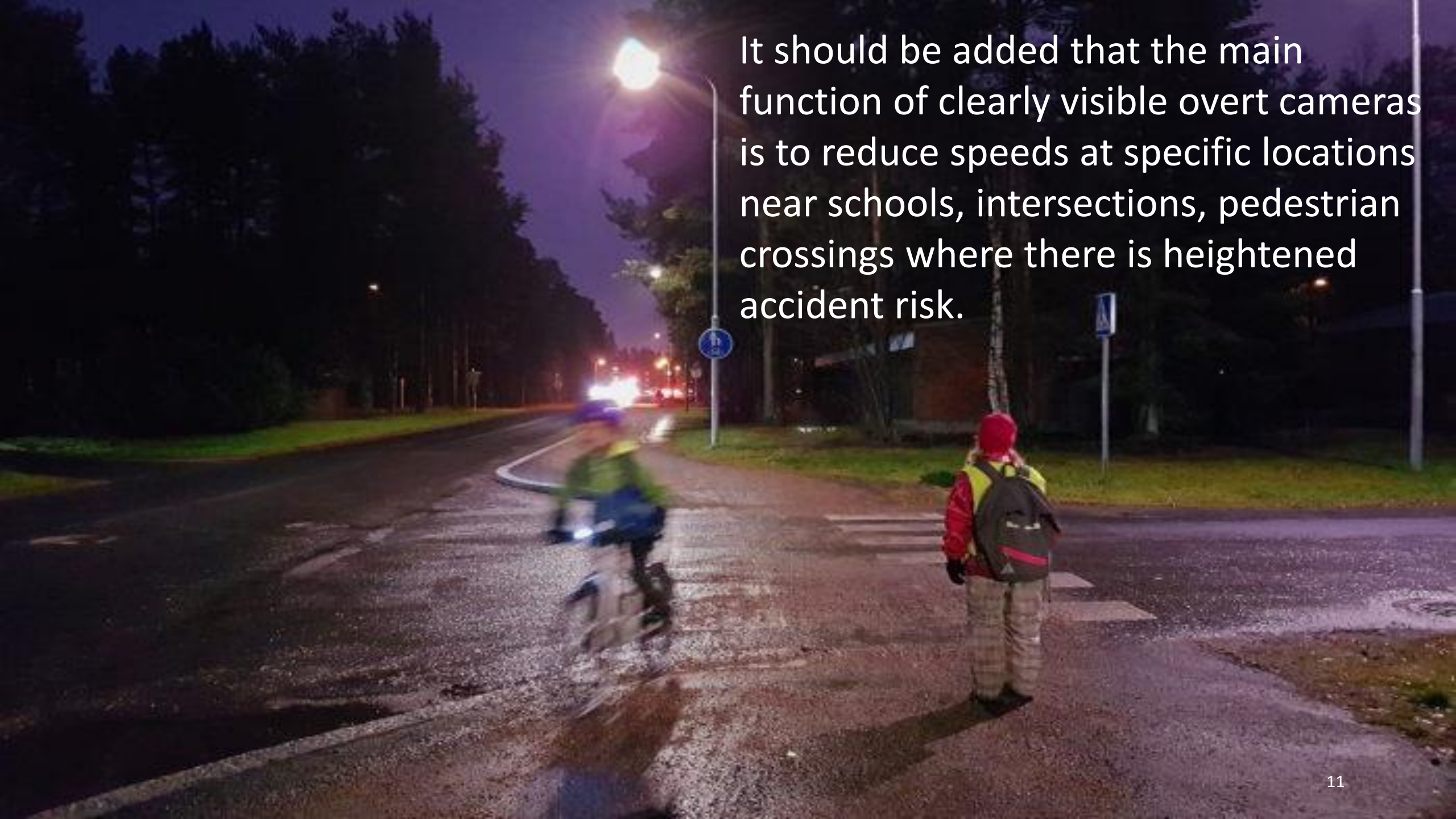
**Yes, no hidden
cameras**

**Yes, mobile units
sometimes hidden**

Visibility?

**Yes, mobile units
sometimes hidden**

**Yes, no hidden
cameras.**



It should be added that the main function of clearly visible overt cameras is to reduce speeds at specific locations near schools, intersections, pedestrian crossings where there is heightened accident risk.

Average speed control

Warning light

Flashes yellow if you have been speeding. Pictures of those that have been driving legally are automatically deleted.

Second measure point

A new picture is taken of all vehicles and average speed is calculated.

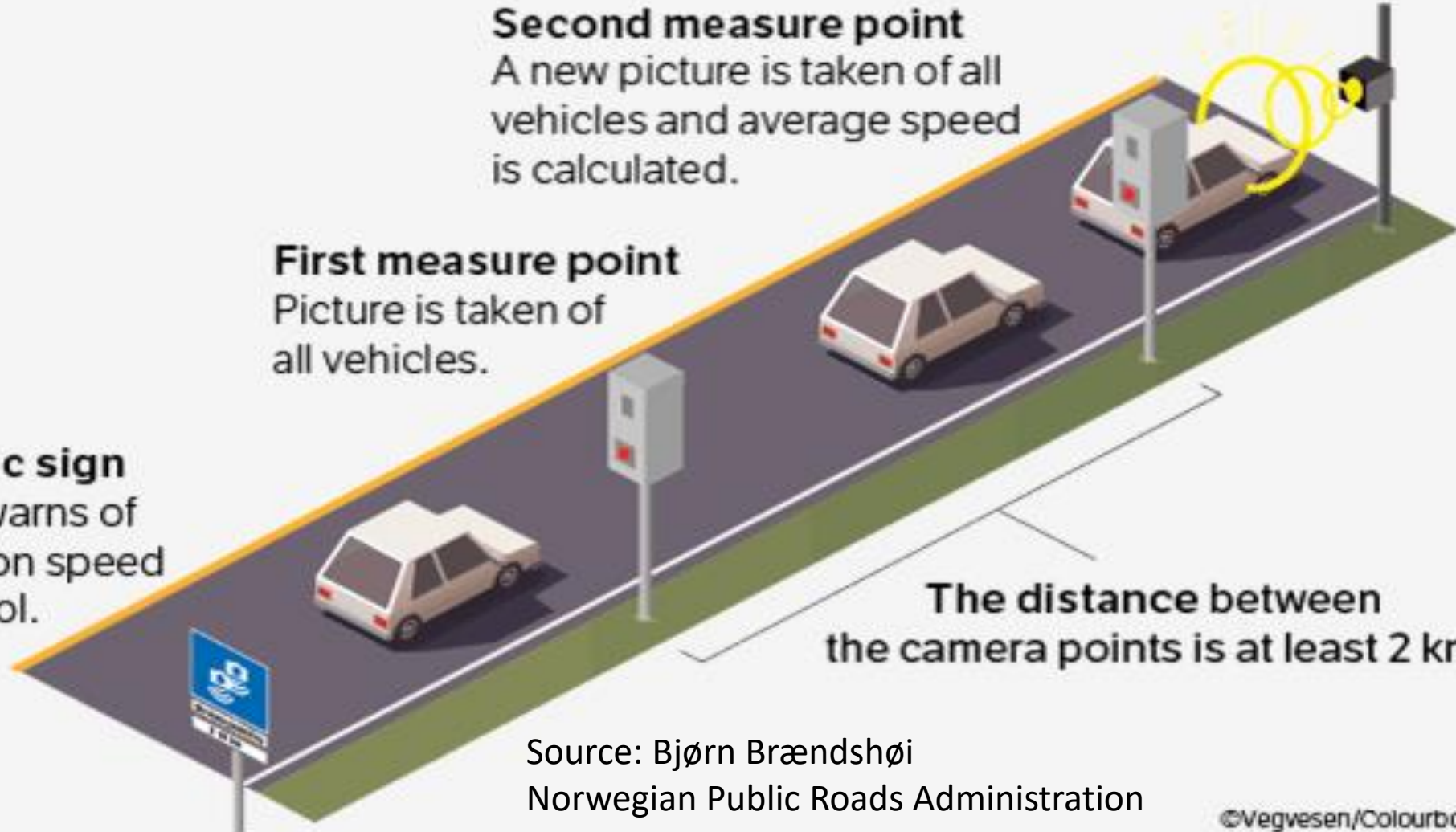
First measure point

Picture is taken of all vehicles.

Traffic sign

that warns of section speed control.

The distance between the camera points is at least 2 km.



Source: Bjørn Brændshøi
Norwegian Public Roads Administration

The Big European Burger Index



SpeedingEurope.com

the ultimate information on European speeding and traffic violations

NORWAY



speedingeurope.com

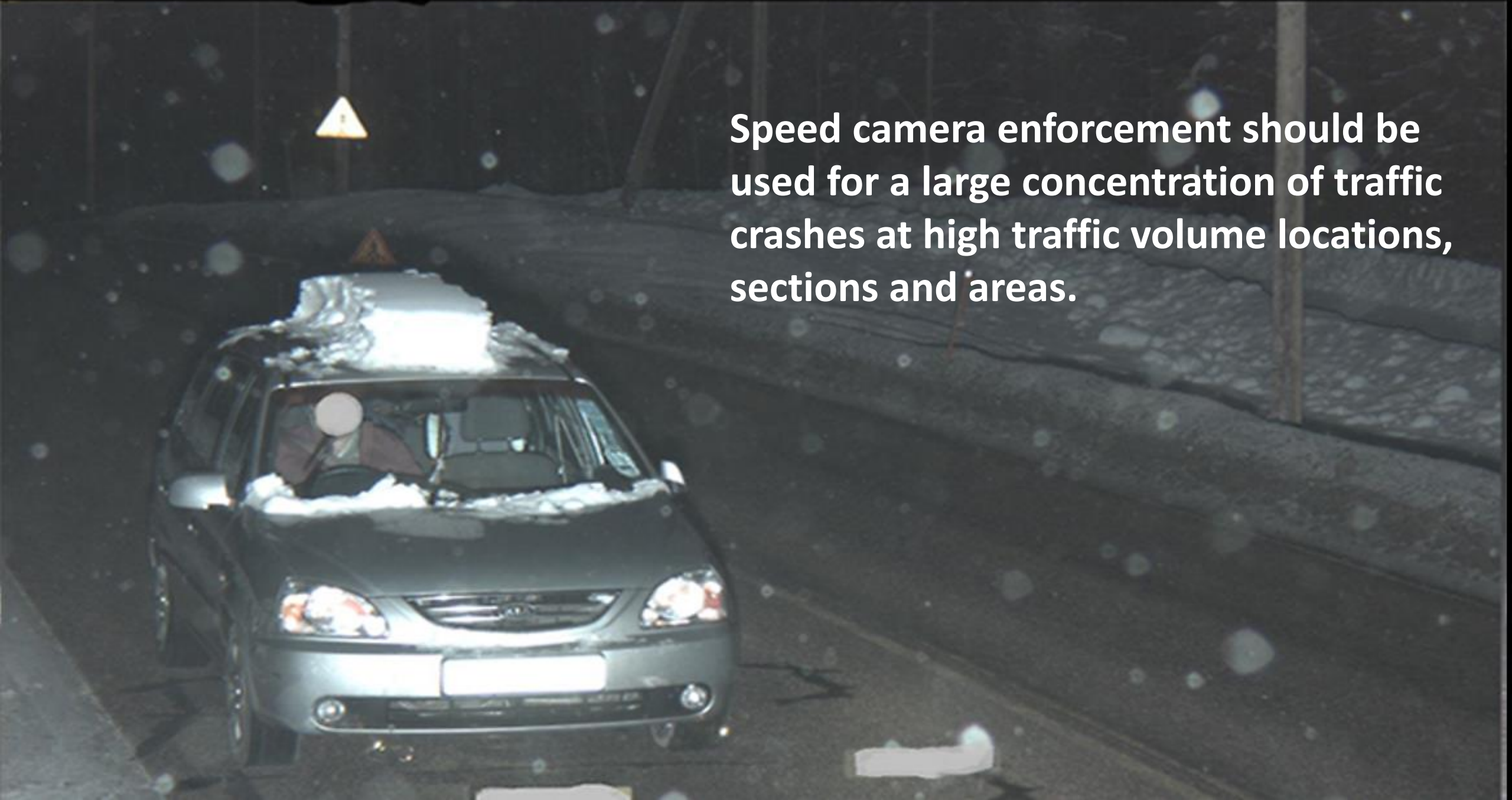


In a meta-analysis study, Høye 2014:

Average speed control using

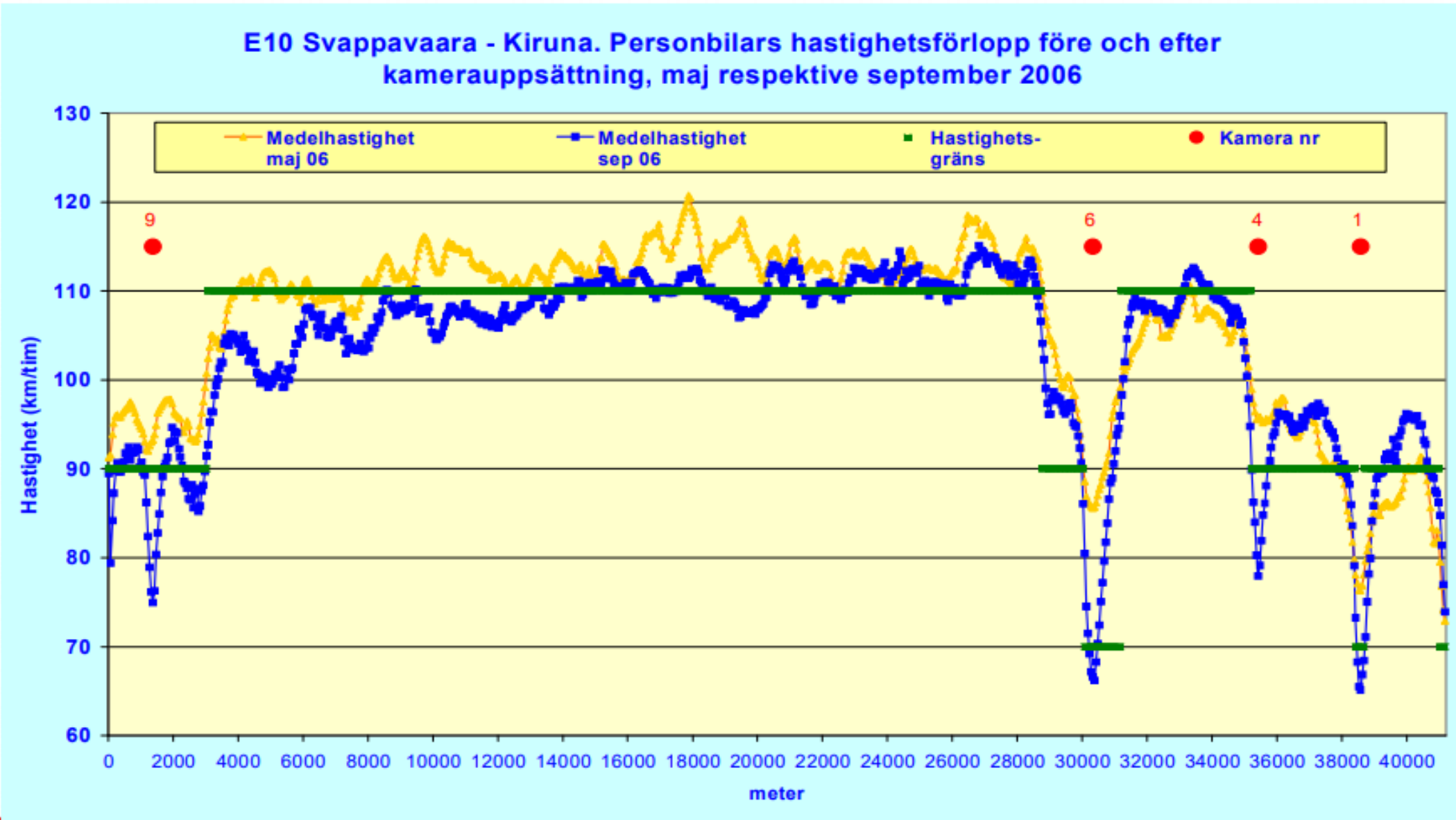
- -33% for all accident
- -56% for Fatal-and-Seriously-Injured accidents

Speed	Time	Date	Code	Amb-	Red-	Photo	L	Int	Fix	Site	Loop	TraffiStar	SR520
071 km/h	16:25:50		0000779	----	-----	738	1	-----	---	060	Car	2500	



Speed camera enforcement should be used for a large concentration of traffic crashes at high traffic volume locations, sections and areas.

4. ADDITIONAL CONSIDERATIONS



Regression-to-the-mean

If she loves you more each and every day, by linear regression she hated you before you met.



”kangaroo effect”

(enforcement avoidance behavior)



5. MEASURES TO SUPPORT

SOLUTIONS FOR SAFER SPEEDS:



SAFE AND CREDIBLE SPEED LIMITS



SELF-EXPLAINING, SELF-ENFORCING ROADS



VEHICLES THAT HELP DRIVERS TO COMPLY WITH SPEED LIMITS



STRICTER LAWS



ROAD USER EDUCATION



EFFECTIVE AND FREQUENT TRAFFIC LAW ENFORCEMENT ACTIVITIES

6. ORGANIZATION



Cooperation and partnerships between police, local authorities and data experts provides the best guarantee for problem-oriented, outcome-focused and evidence-based speed policing operations.

7. FUTURE





**10 SPEED
CAMERA MYTHS
BUSTED**



To the extent that new technologies facilitate voluntary speed control, police speed enforcement can direct itself more at detecting extreme or repeated speed offenders.

Thank you for your attention



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