

Speed Management

Successful strategies

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*High Level Seminar on Road Safety
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Speeding: The number one road safety problem

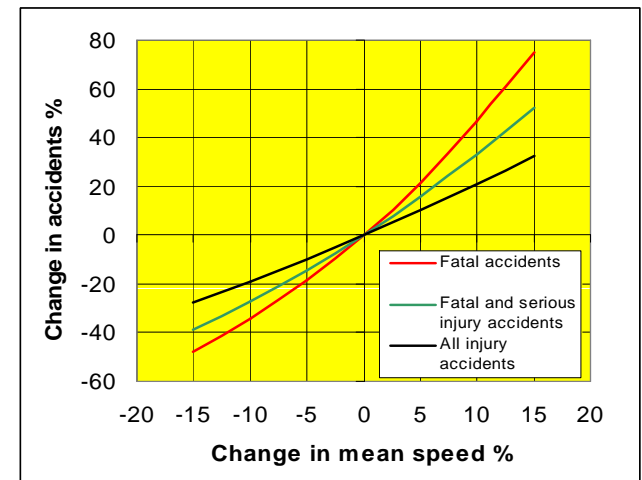
- Speeding = excessive speed + inappropriate speed
- Speed is involved in **1/3 of fatal accidents**
- Speed is an aggravating factor in **all** collisions
- Large scale problem: **50%** of drivers over the limits
- **Reducing mean speed by a few km/h can greatly reduce accident risks:**

5% decrease in average speed ->

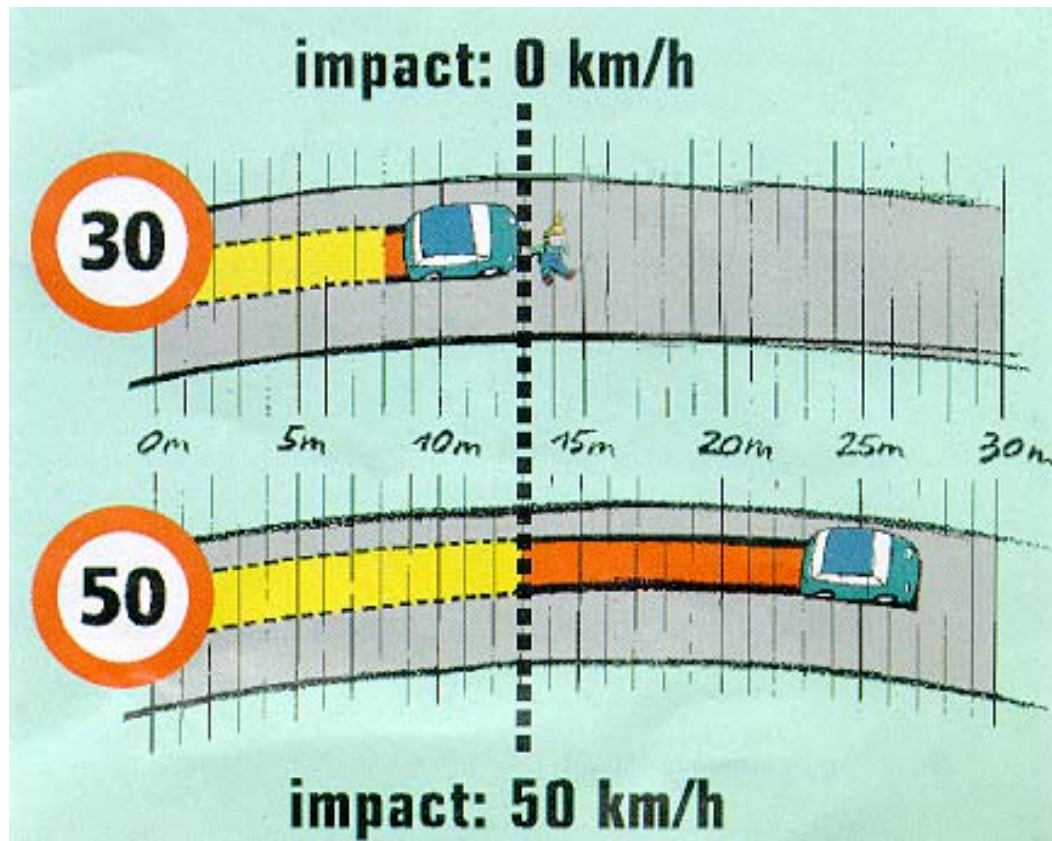
- **10%** reduction in injury accidents
- **20%** reduction in fatal accidents

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The Nilsson rule



Just an example: speed and stopping distances in urban areas



At 30 km/h, the stopping distance is 13 meters: **no pedestrian injured**

At 50 km/h, the stopping distance is doubled: **severe injuries for the pedestrians**

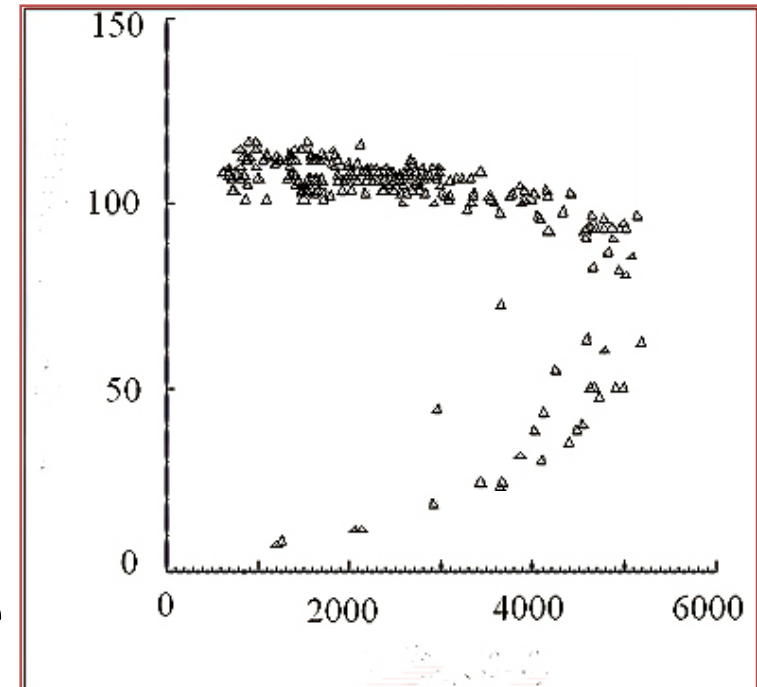
Hence the importance of decreasing speeds in urban areas

Other impacts of speed

- Increased fuel consumption and greenhouse gases
- Increased level of local pollutants
- Noise
- Quality of life
- Traffic flow (speed / throughput) ->
- Travel time

**Road safety and environment
have twin goals.**

**Speed Management is not incompatible
with mobility and economic needs.**



How to address the problem? By a combination of measures

- Infrastructure: self explaining roads
- Education, training, information campaigns
- Speed limits
- Signing, signalling and marking
- Enforcement
- Vehicle engineering and new technologies

Actions can be taken now.

Traditional measures are effective.

Innovative measures should be encouraged.

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Education, training, information campaigns

- Target education and information to the public and policy makers
 - Prerequisite to the success of speed management
 - Continuous activity
- Idea: convince the public at large that:
 - the Nilsson rule is a solid basis
 - speed is not only an individual problem
 - everybody is partly responsible of the average speed!

Speed limits and road signing

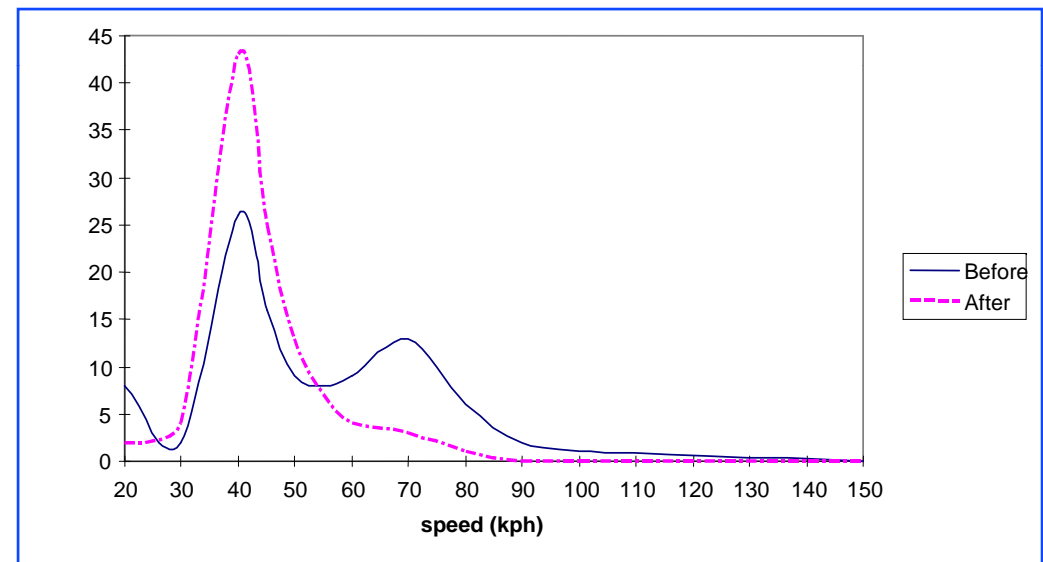
- Speed limits:
 - Determine appropriate speed for all roads
 - Review existing speed limits
 - Harmonise speed limits for each world region (e.g. Asia, North America, Europe...)
 - Develop variable speed limits (weather and traffic conditions, etc.), as in Germany, in The Netherlands, in Japan, etc.



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Signalling in urban areas

- “Moderating green waves” could have a positive influence
- Great attention should be paid to several uses of traffic lights



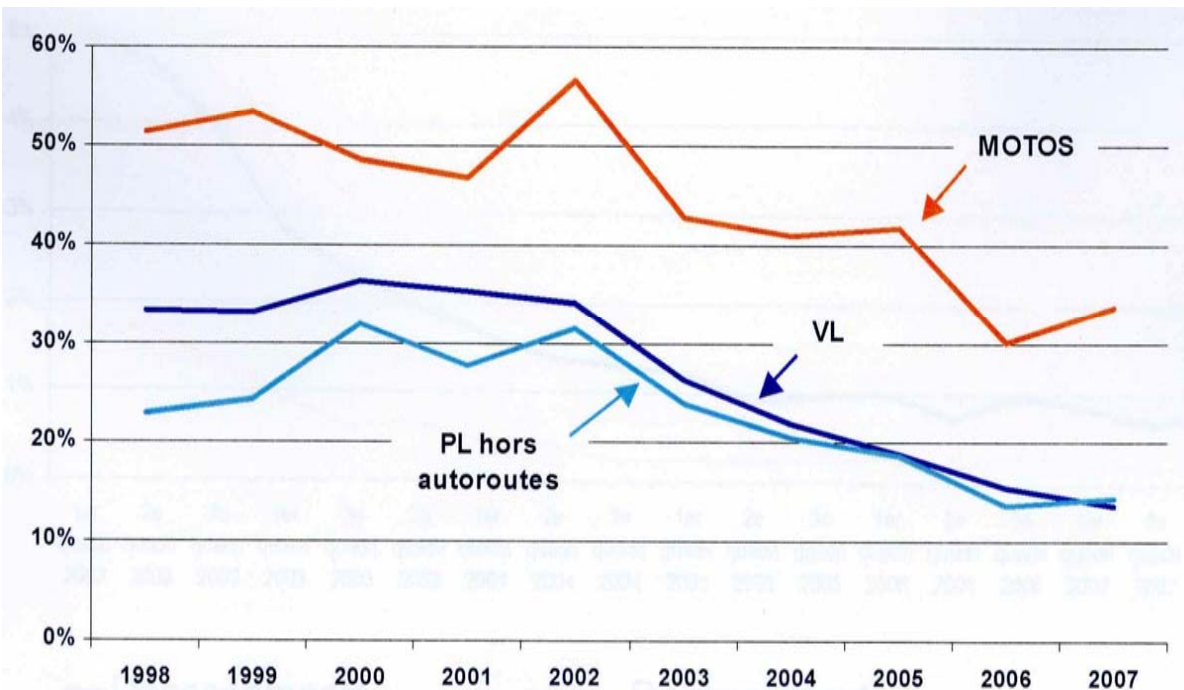
Enforcement

- Ensure an appropriate level of traditional police enforcement and automatic speed control, which targets all road users
- In the case of automatic enforcement, provide a system that makes the vehicles' owners legally responsible for the violation when the driver cannot be identified
- Promote the respect of speed limits everywhere
- Promote the “section control”

The French example clearly shows that significant results can be achieved



Evolution of speed in France (% speed limit +10km/h)



Year	Killed	Variation / previous year
2001	7720	+1 %
2002	7242	- 6.2 %
2003	5731	-20.9 %
2004	5593	- 4.9 %
2005	5318	Change of definition
2006	4709	-11.5 %
2007	4620	- 1.9 %

Source: ONISR

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Vehicle engineering and new technologies

- Not only related to the power or the power/weight ratio
- ACC, ESC/ESP, EDRs
- Intelligent Speed Adaptation (ISA)
 - All new cars should be equipped with manual speed limiters, and asap with voluntary informative or supportive ISA
 - Consider future adoption of mandatory ISA





Conclusions

- Speed has many consequences (not only on safety)
- Speeding needs to be reduced quickly, taking into account the number of fatalities (the French example shows that it is possible)
- Develop a comprehensive package (no “magic” measure), tailored by country
- New technologies, notably ISA and co-operative systems, can bring significant improvement in the future



Speed Management: the Report

- A 250-page report, available in English (end of 2006) and in French (2007) and soon in Spanish (2008)
- Executive summary can be downloaded for free (in English, French, Russian, and soon in Spanish and Chinese)



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Comments or questions?

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