Speed Management

Successful strategies

Jacques Nouvier, France, CERTU
Chairman of the JTRC Working Group on Speed Management

High Level Seminar on Road Safety
Paris, 25-26 September 2008
**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
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.

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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 in not incompatible with mobility and economic needs.

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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.

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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!

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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.

High Level Seminar on Road Safety
Paris, 25-26 September 2008
Signalling in urban areas

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

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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.

High Level Seminar on Road Safety
Paris, 25-26 September 2008
Evolution of speed in France
(% speed limit +10km/h)

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

Source: ONISR

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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

High Level Seminar on Road Safety
Paris, 25-26 September 2008
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

High Level Seminar on Road Safety
Paris, 25-26 September 2008
Speed Management: the Report

- Executive summary can be downloaded for free (in English, French, Russian, and soon in Spanish and Chinese)

www.oecd.org

High Level Seminar on Road Safety
Paris, 25-26 September 2008
Comments or questions?

Contact: Jacques NOUVIER, CERTU, France

E-mail: jacques.nouvier@developpement-durable.gouv.fr

High Level Seminar on Road Safety
Paris, 25-26 September 2008