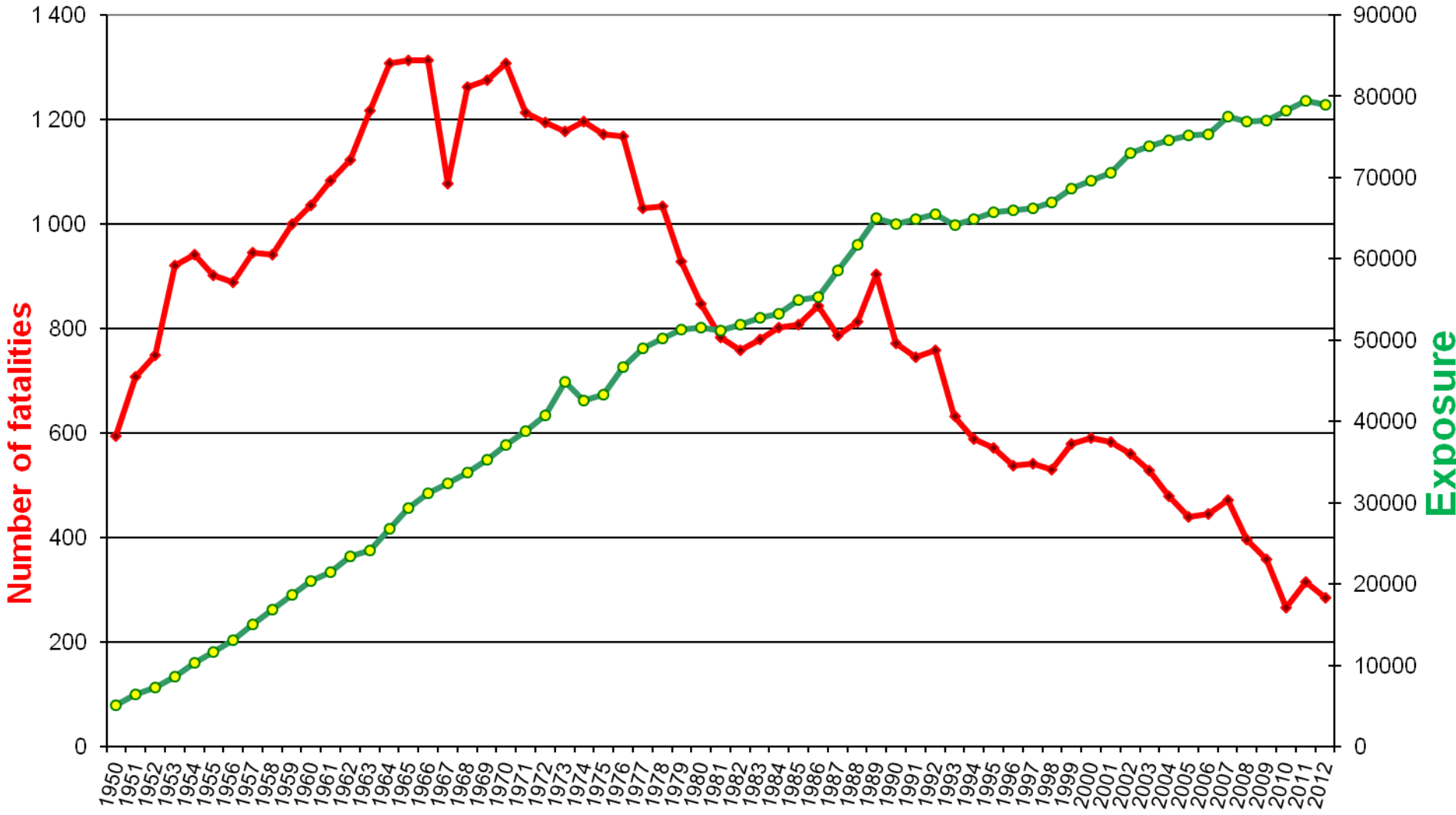


Toward Zero in Sweden

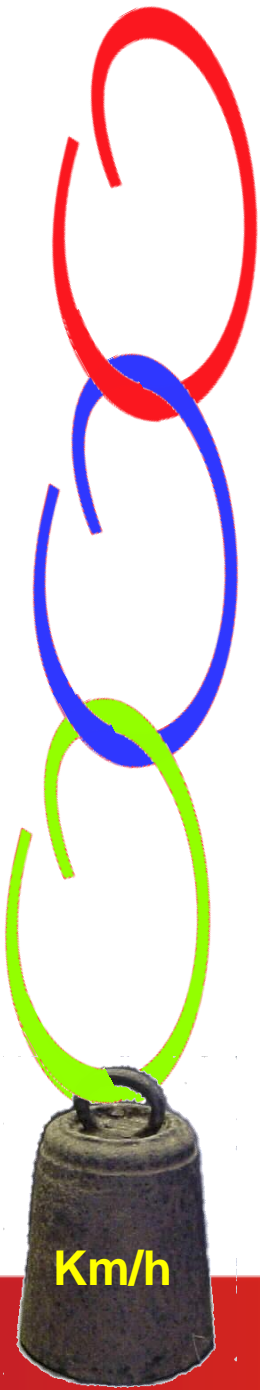
Lars Ekman



TRAFIKVERKET
SWEDISH TRANSPORT ADMINISTRATION



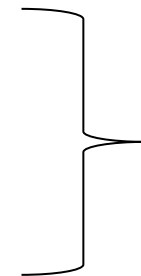
◆ Road fatalities
 ◆ Exposure



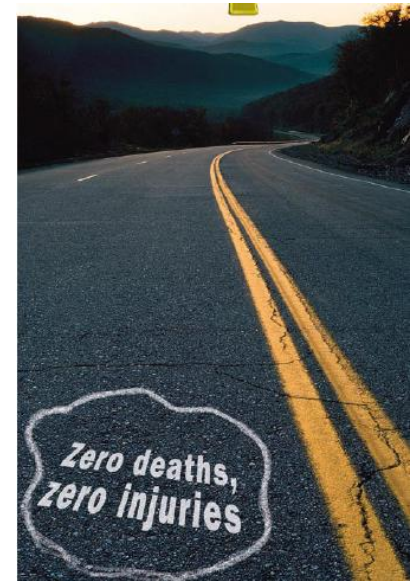
VIA NORDICA 2008

Responsibility must be shared by all those who participates in and create safe road traffic

- Politicians
- Road network responsible
- The Police
- **Vehicle manufacturers**
- **Private companies, public entities who buy transport services and vehicles**
- **Health sector, Working environment sector**
- **Insurance companies etc**



Traditional



Vision Zero's 5 main components

- Vision for many stakeholder
- Ethical platform
- Shared responsibility
- Driving forces for change
- Safety philosophy



An aerial, top-down view of a multi-lane road curving through a stylized, low-poly landscape. Two cars are visible on the road, each surrounded by a green circular sensor or detection field. The overall aesthetic is futuristic and technological.

**Our Vision is that no one is killed or
injured in a Volvo by 2020**

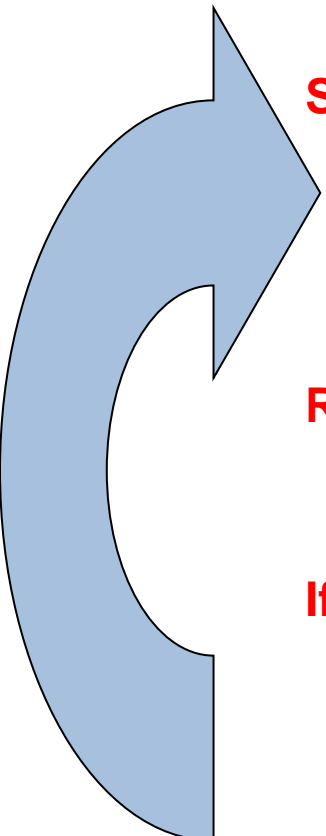
Volvo Cars' Vision 2020

The vehicle of the future - Just like the farmer's horse:

- Can be steered actively and in full control by the farmer **but**
- It can handle a situation where the farmer falls asleep and still find its way home **and**
- It will not accept being steered into a tree or off a cliff



Shared responsibility



System designers are responsible for the design, operation and the use of the road transport system and are thereby responsible for the level of safety within the entire system.

Road users are responsible for following the rules for using the road transport system set by the system designers.

If the users fail to comply with these rules due to a lack of knowledge, acceptance or ability, the system designers are required to take the necessary further steps to counteract people being killed or injured.

Vision Zero a road safety policy innovation

Traditional approach	Vision Zero approach
Accidents	Serious injuries
Individual road user behavior	The system is not designed according to human capability and human tolerance against external violence – in other words what the human body can stand.
Road users have primary responsibility	System designers have primary responsibility
People don't want safety	People demand safety
Change individual road user behavior	Change the environment (road environment, vehicles, support good social norms)
Risk reduction	Eliminate fatalities and serious injuries

Vision Zero – a road safety policy innovation DOI:10.1080/17457300.2011.635213

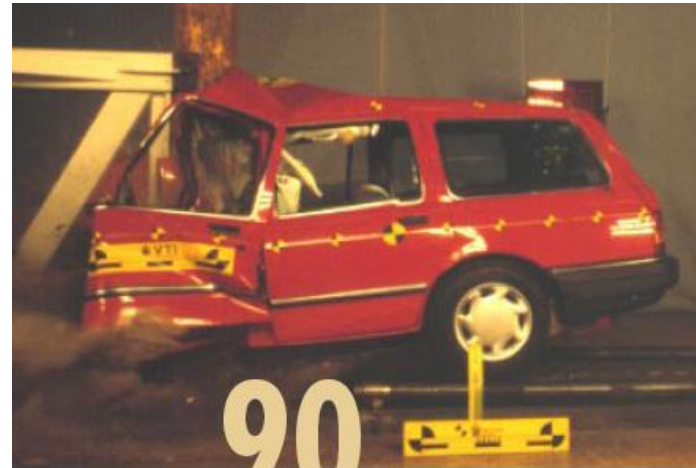
Matts-Åke Belin, Per Tillgren & Evert Vedung

Available online: 14 Dec 2011 <http://www.tandfonline.com/doi/abs/10.1080/17457300.2011.635213>



Speed limit, road design and car design goes hand in hand!

- Crash test 90km/h into tree
- Crash test 90km/h into guard rail

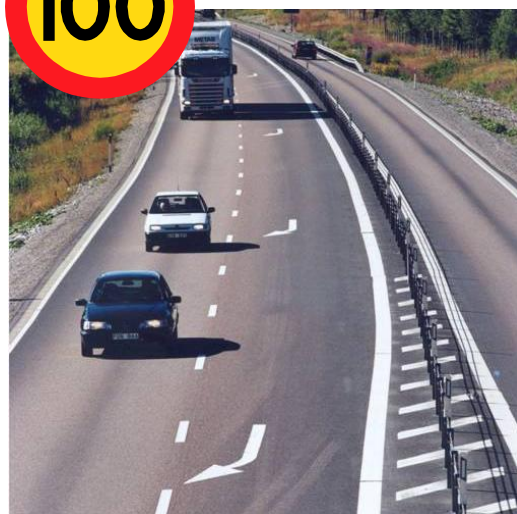


Speed limits based on injury related criteria – rural area

80



100



110



or

120



90 km/h roads

Risk

0,012
0,01
0,008
0,006
0,004
0,002
0

Two lane, narrow
Two lane, normal
Two lane, wide
2+1 MLV
2+1 MML
Motorway (C)
Motorway (A)



Developements for indicators



- Speed rural roads (80%)



- Speed urban roads (80%)



- Sober traffic (99,9%)



- The use of seatbelt (99%)

- The use of helmets



- Bicycle (70%)



- Moped (99%)



- Safe cars (80%)



- ABS-brakes on MC (70%)



- Safe rural roads (75%)



- Safe crossings for vulnerable road users (next year)

- Maintenance on pedestrian and bicycle paths (next year)

Lund C



Km: 601 + 27

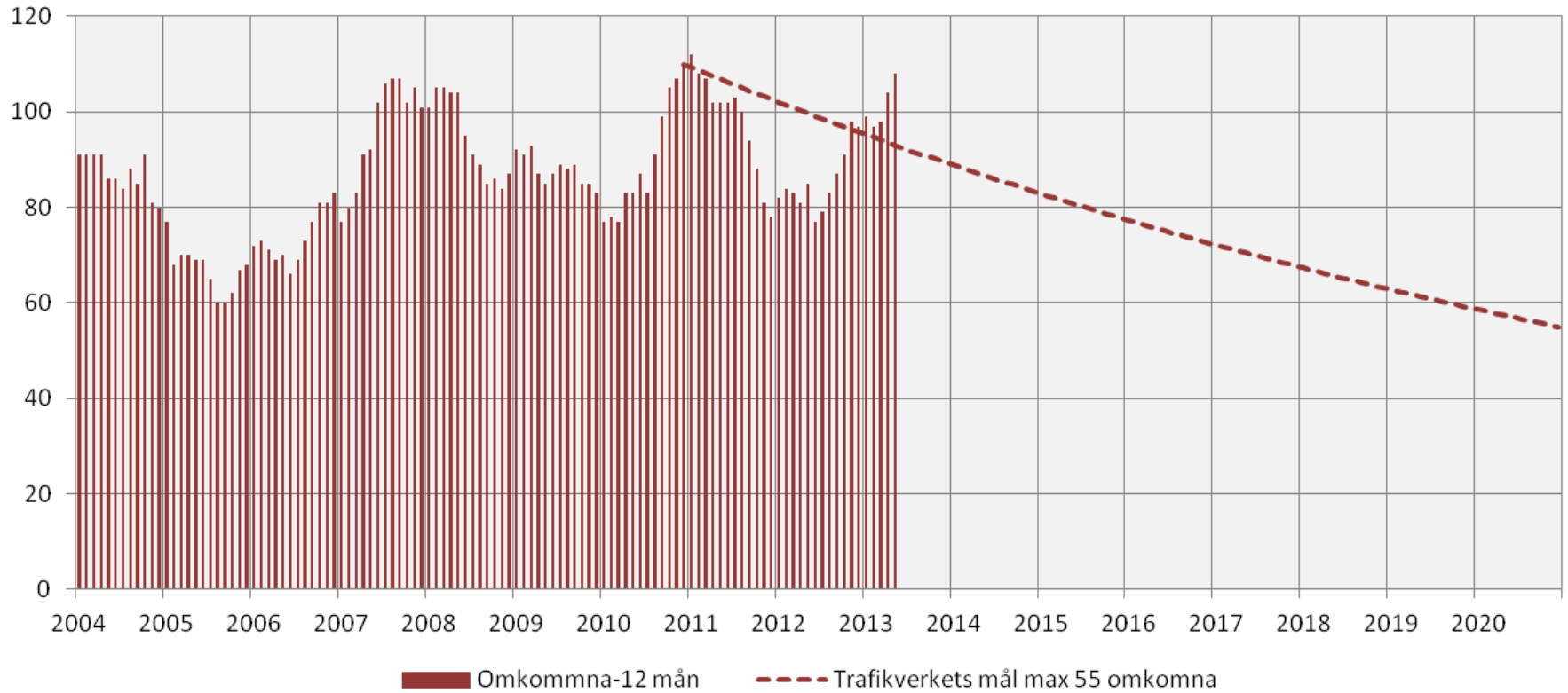
Bdl: 912 - Tornhill [Th]

INFRANORD

IMV100

Fatalities 12-month value – and our new target for 2020

Omkomna i järnvägstrafik samt mål 2020













NORRLÖVS *Stängsel*
BJUV
TEL. 042-815 70








Vision Zero - how close are we?

- Road traffic

- Child safety in cars 
- Drivers and passengers 
- Suicidal 
- Vulnerable road users 

- Railroad

- Passengers 
- Trespassers 
- Suicidal 

Conclusions

- A challenging vision is very useful
- it is important to put it on the political agenda
- A systematic work with measureable targets
- and effective countermeasures

Thanks!

