

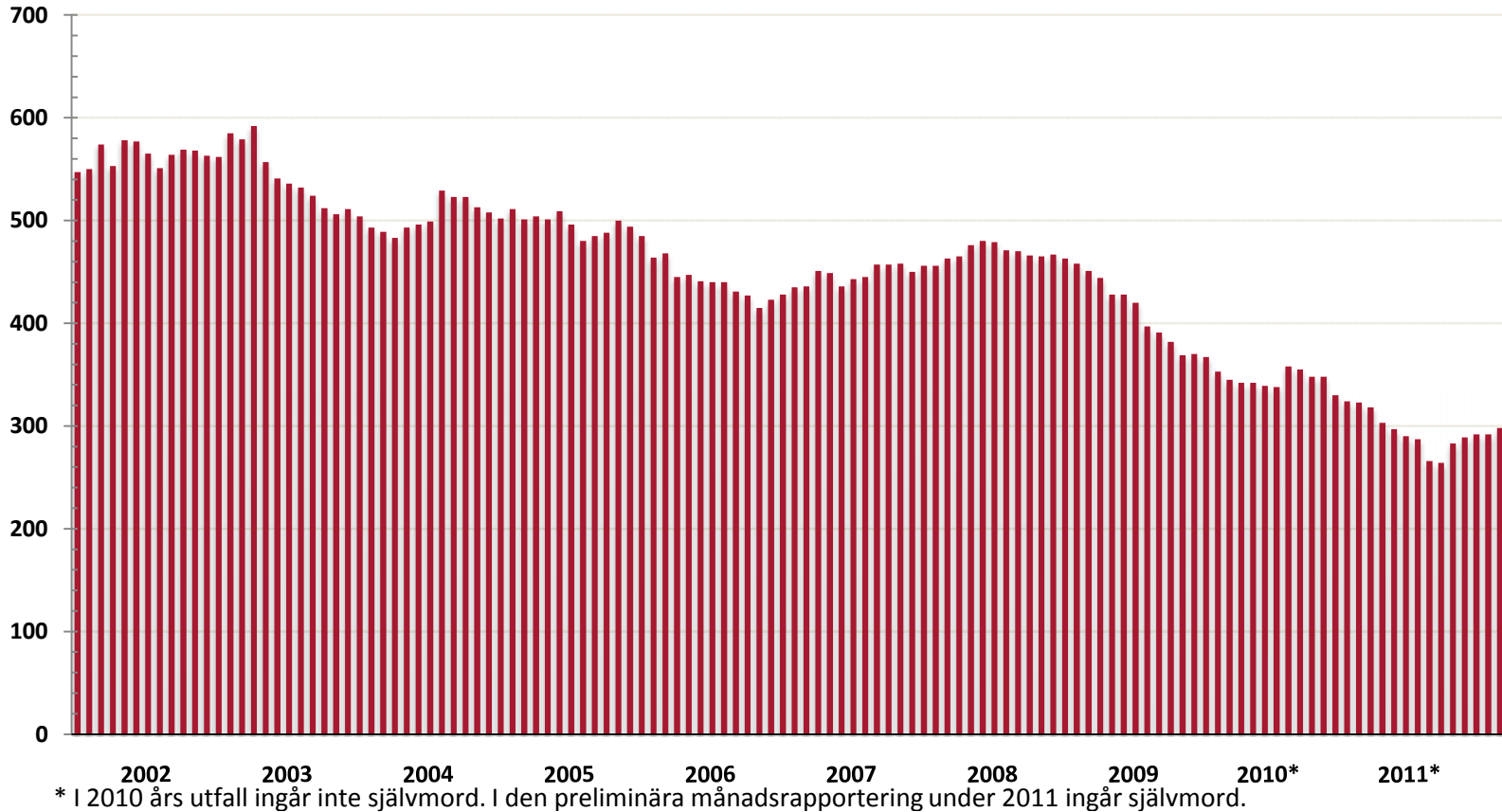
Håller Nollvisionen?

Claes Tingvall

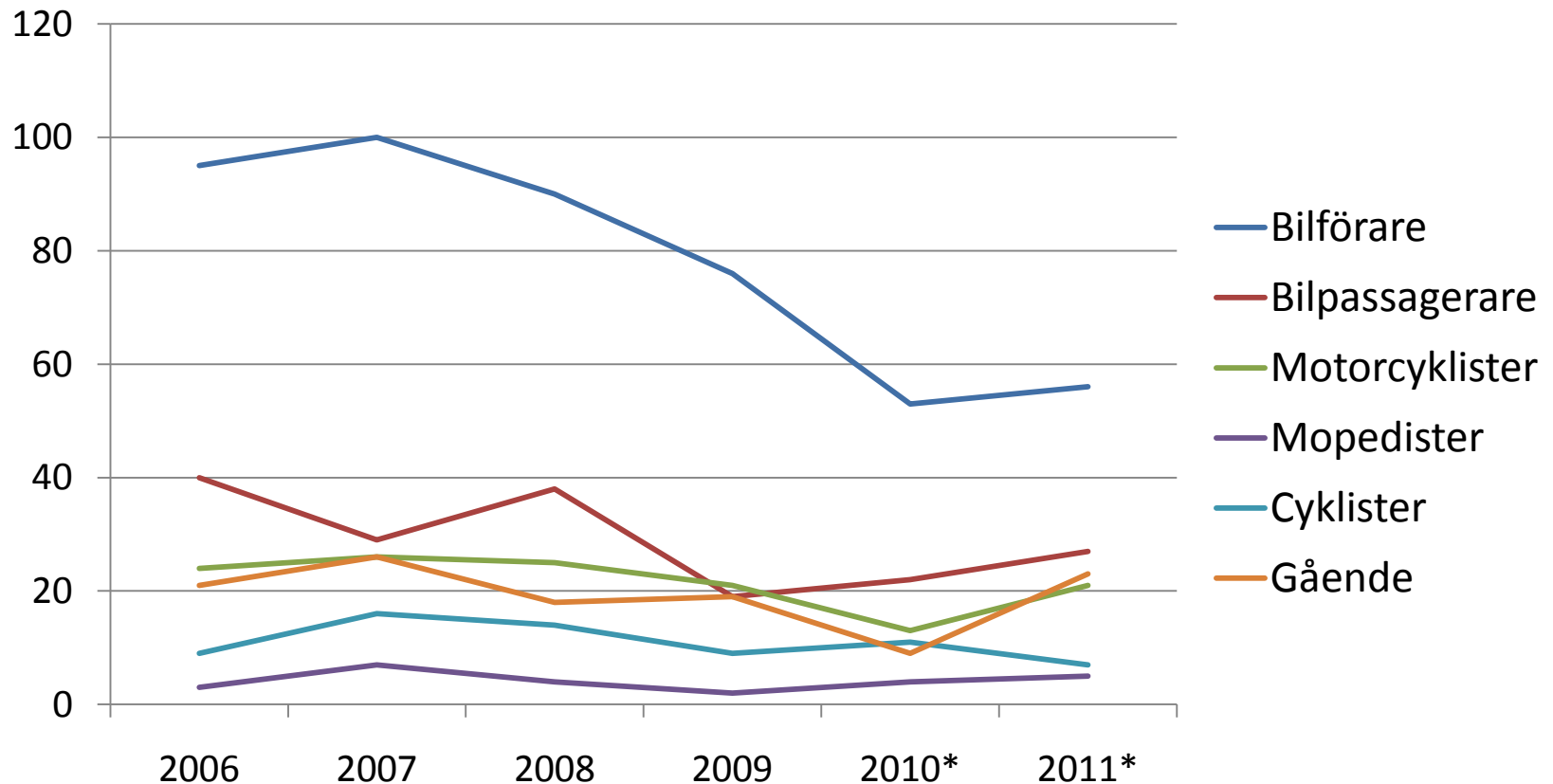
Anders Lie

Trafikverket Juli 2011

Omkomna i vägtrafiken de senaste 12 månaderna, 1997-2011

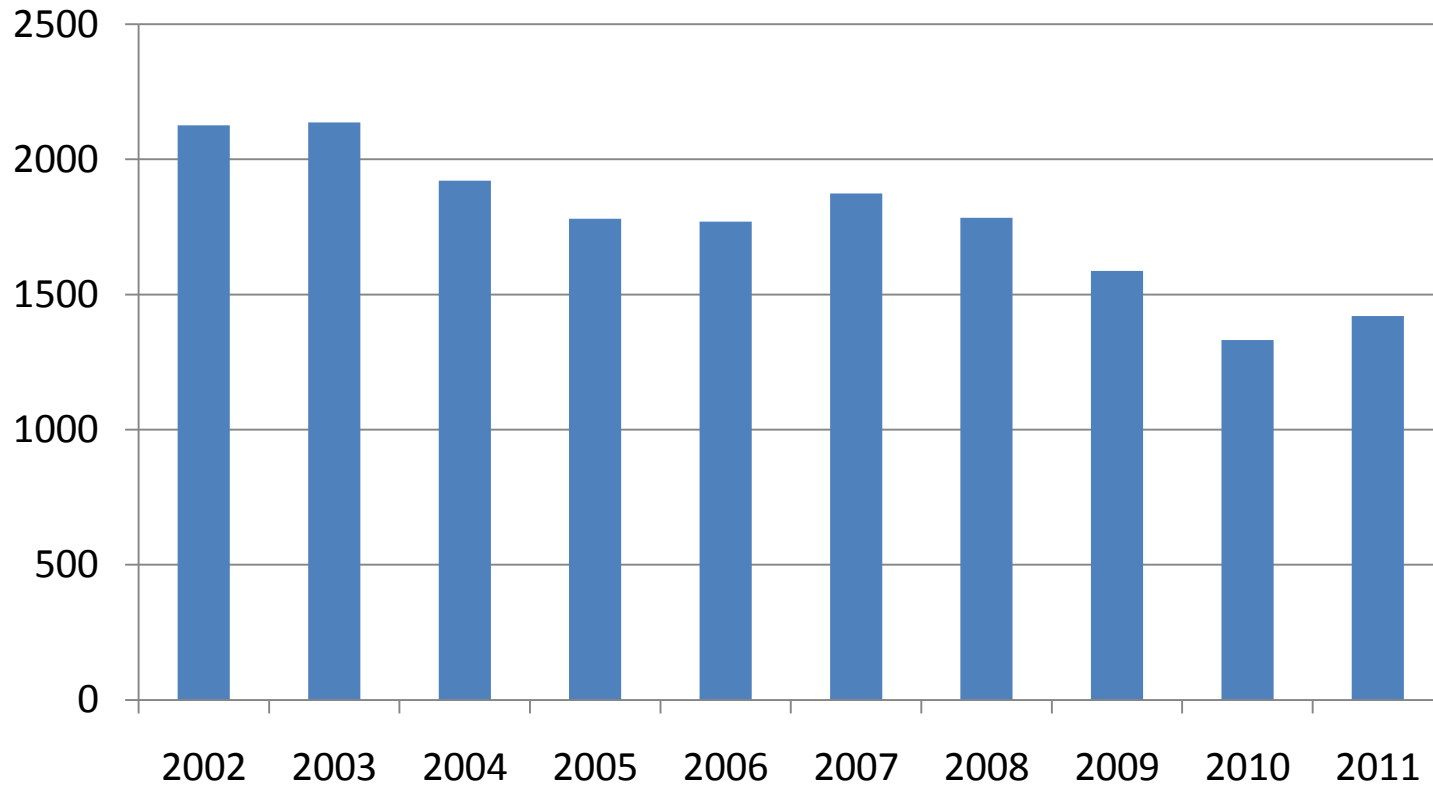


Omkomna fördelade efter färdssätt januari-juni, 2006-2011

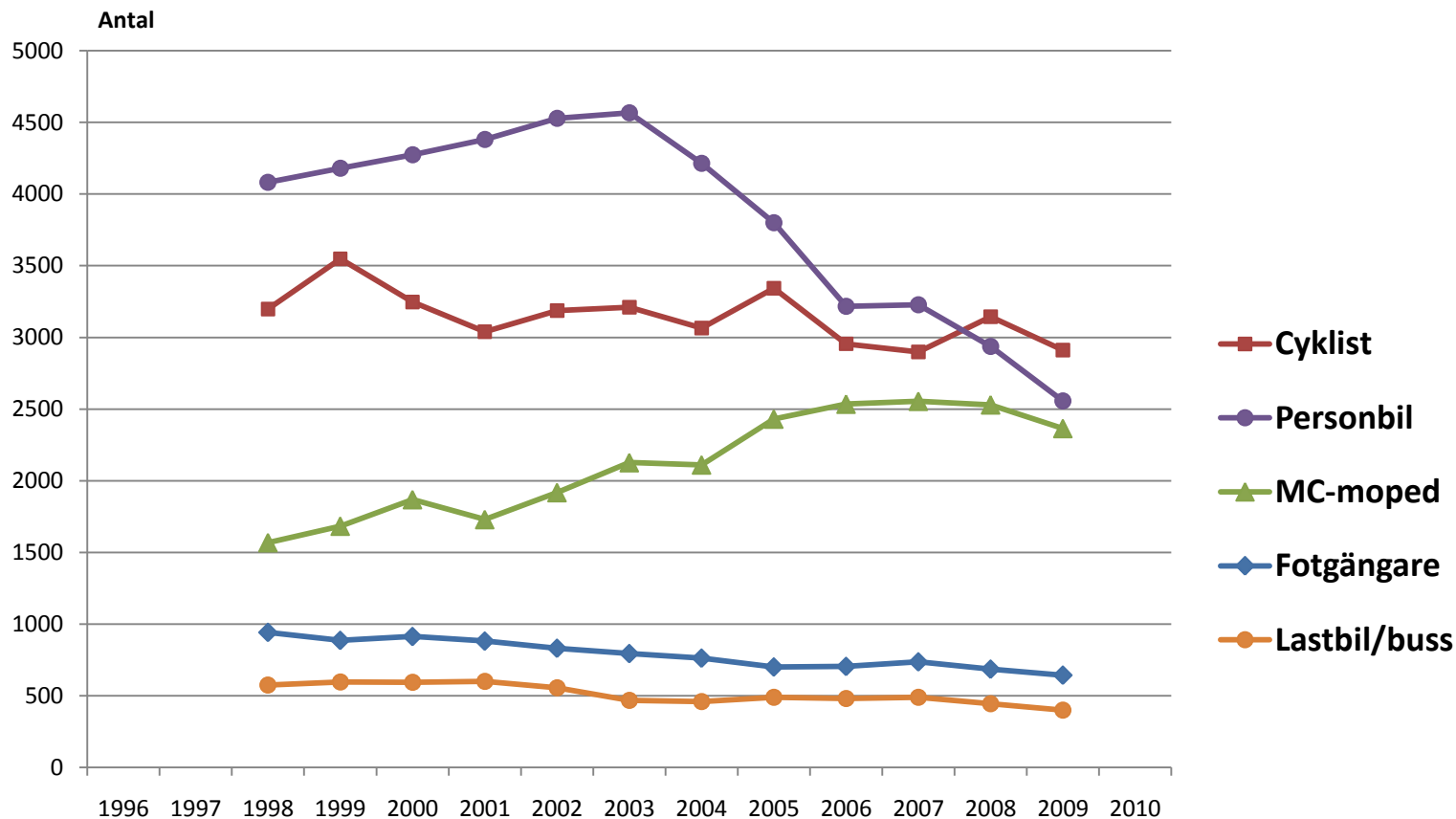


* F o m 2010 exklusive suicid enligt officiell statistik (15-20 fall årligen). I den preliminära statistiken för 2011 har dessa ännu inte kunnat exkluderas.

Svårt skadade i vägtrafiken januari-juni, 2002-2011

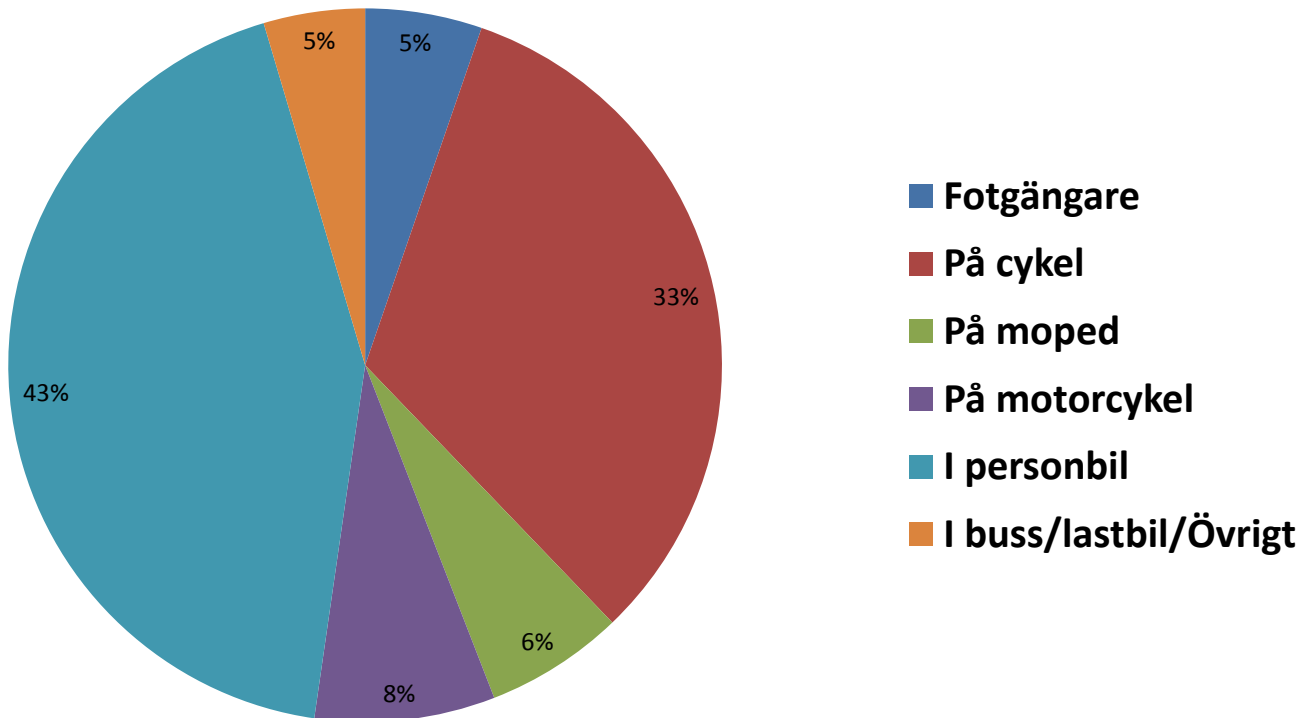


Allvarligt skadade efter färdssätt till 2009



Allvarligt skadade efter färdssätt, 2010

Invaliditetsgrad från 10 %



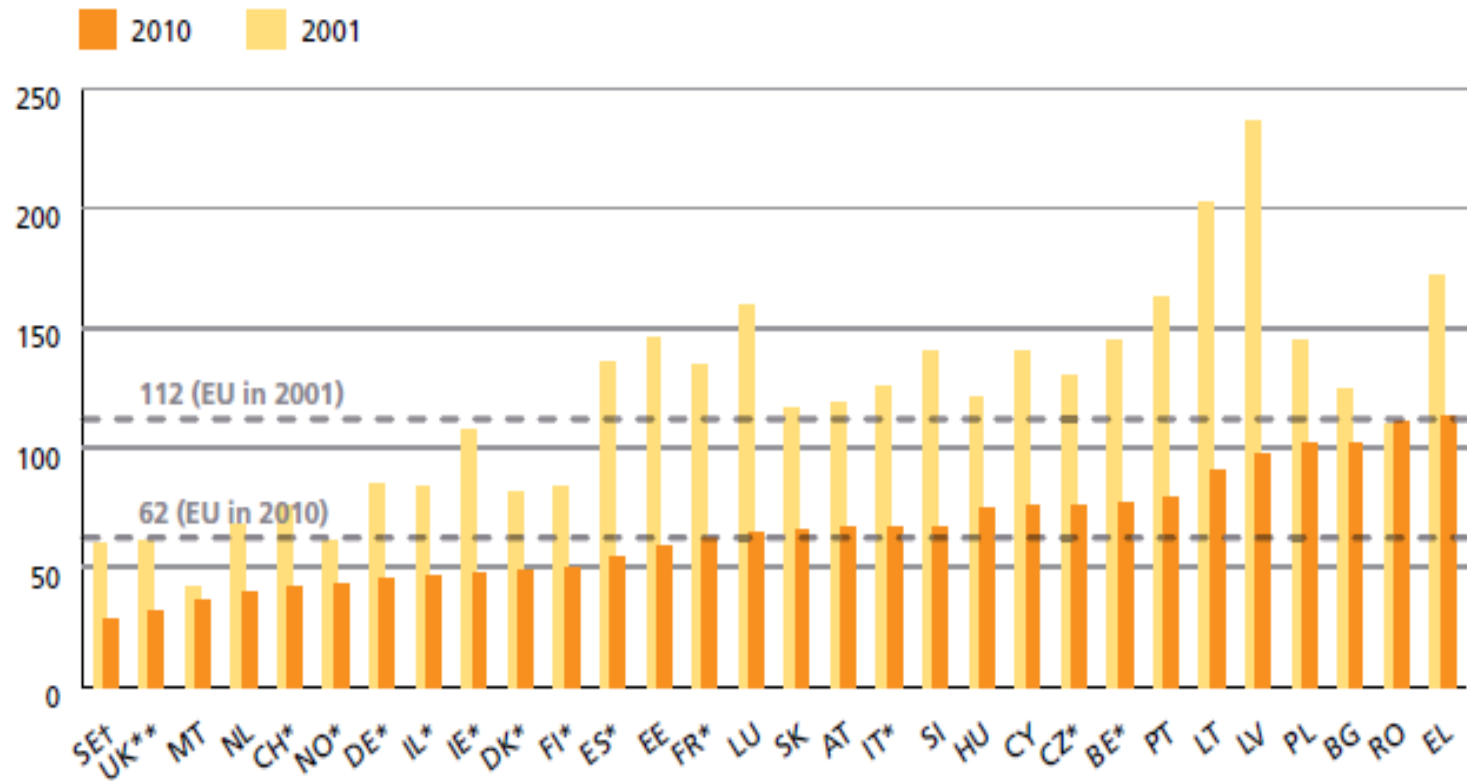
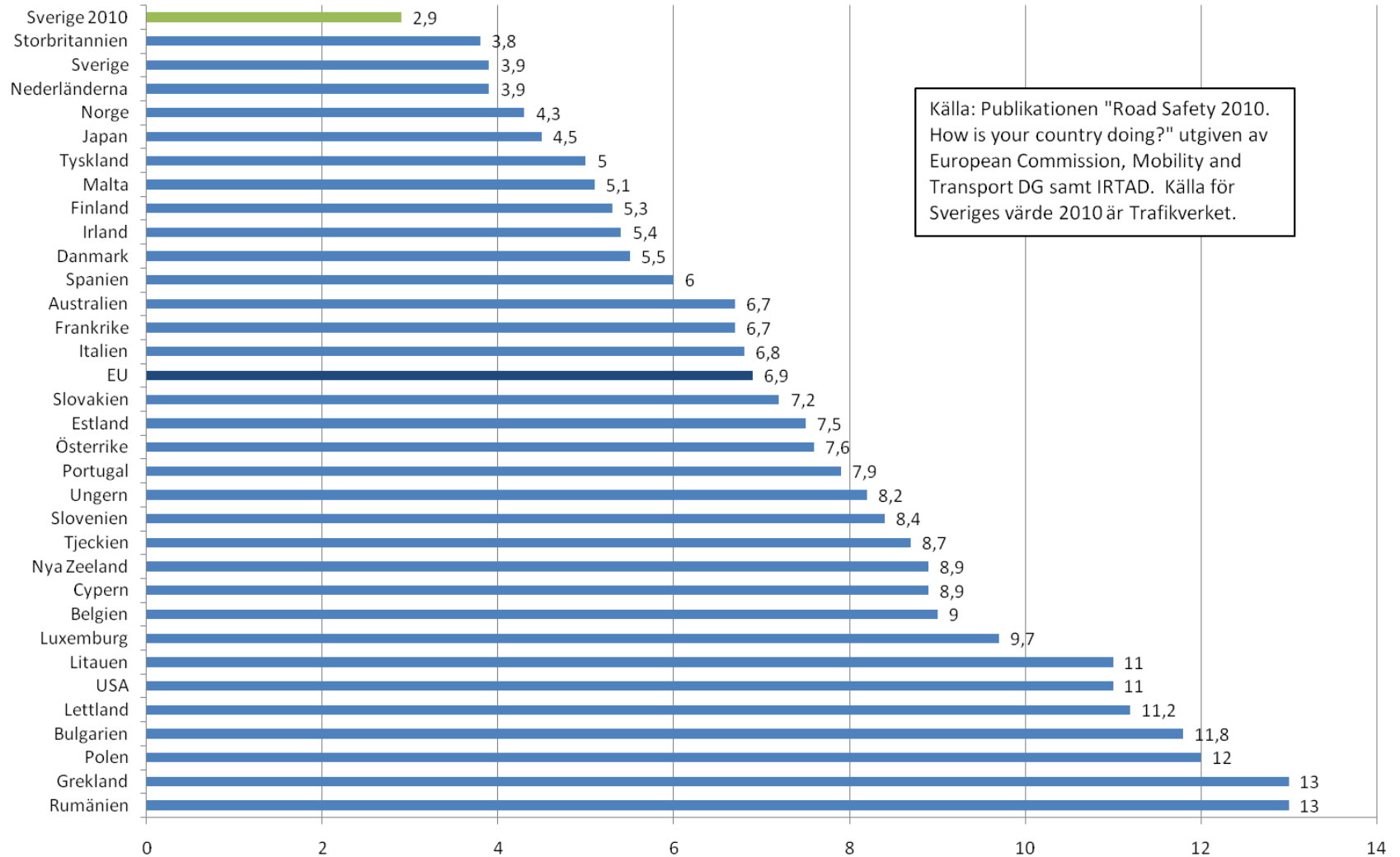


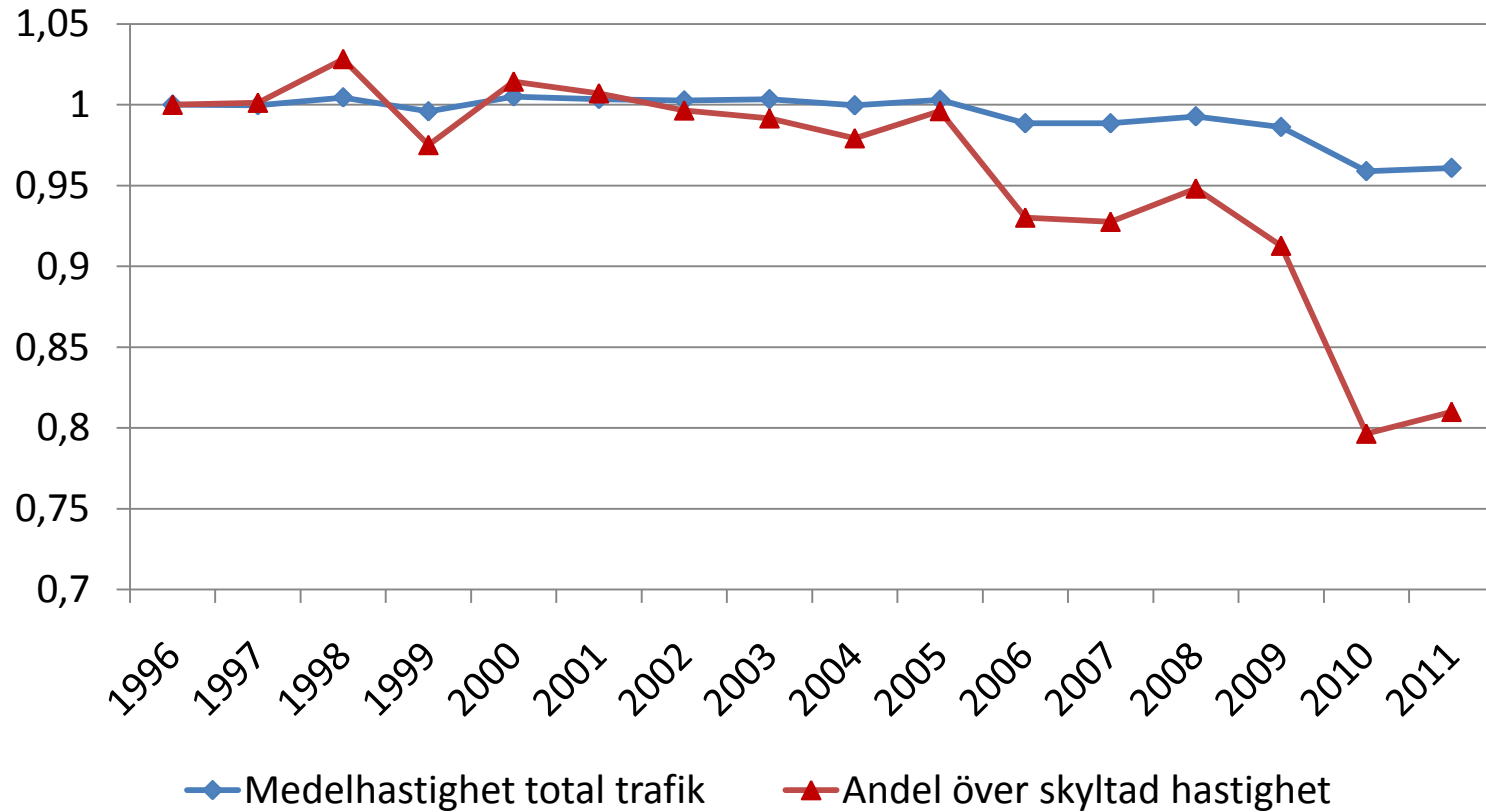
Fig.6 Road deaths per million inhabitants in 2010 (with road deaths per million inhabitants in 2001 for comparison).

Omkomna i vägtrafiken per 100000 invånare år 2009 samt år 2010 Sverige



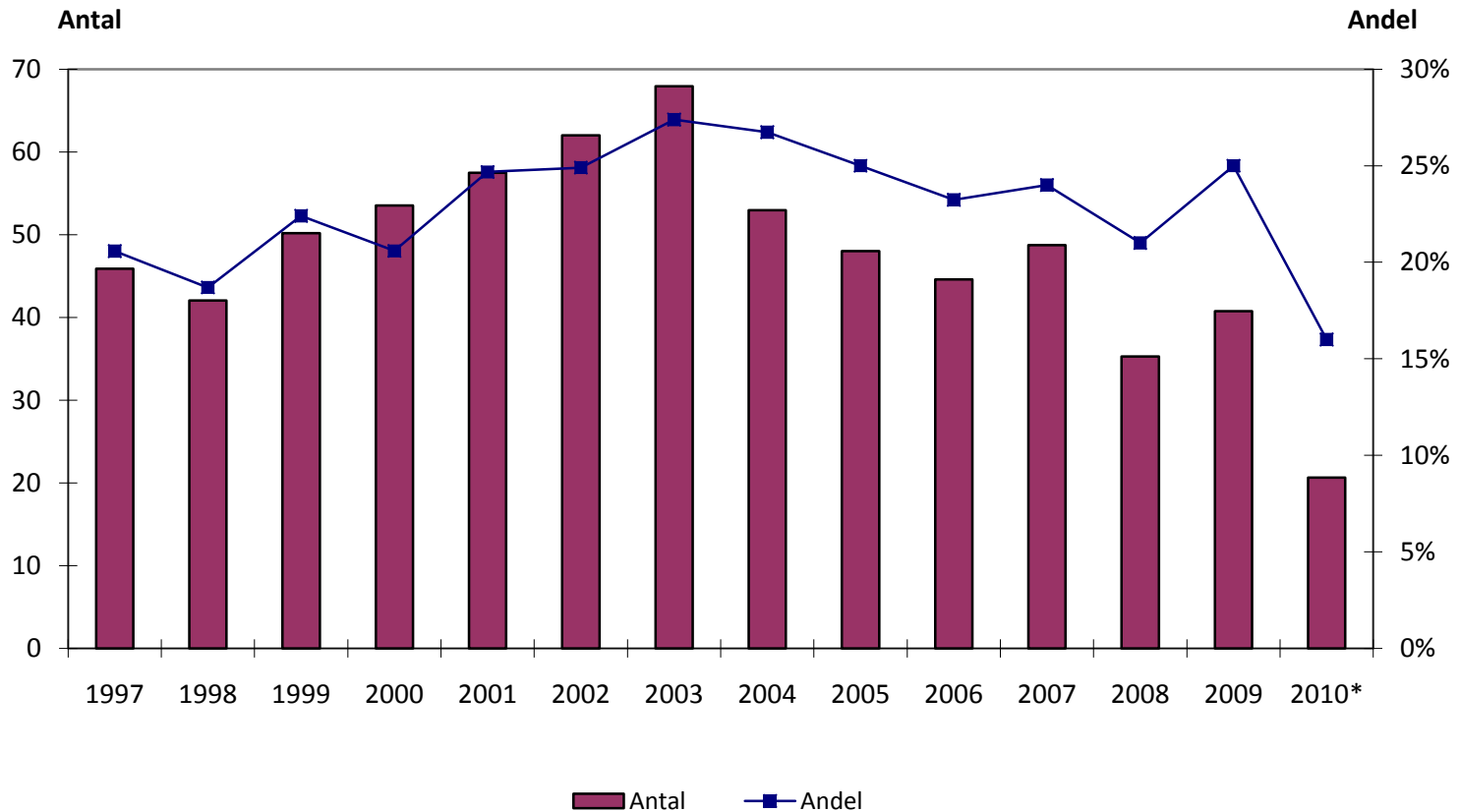
Källa: Publikationen "Road Safety 2010. How is your country doing?" utgiven av European Commission, Mobility and Transport DG samt IRTAD. Källa för Sveriges värde 2010 är Trafikverket.

Relativ utveckling av andel trafikarbete över hastighetsgräns samt medelhastighet, statligt vägnät jan-maj 1996-2011 (Index 1996 = 1)



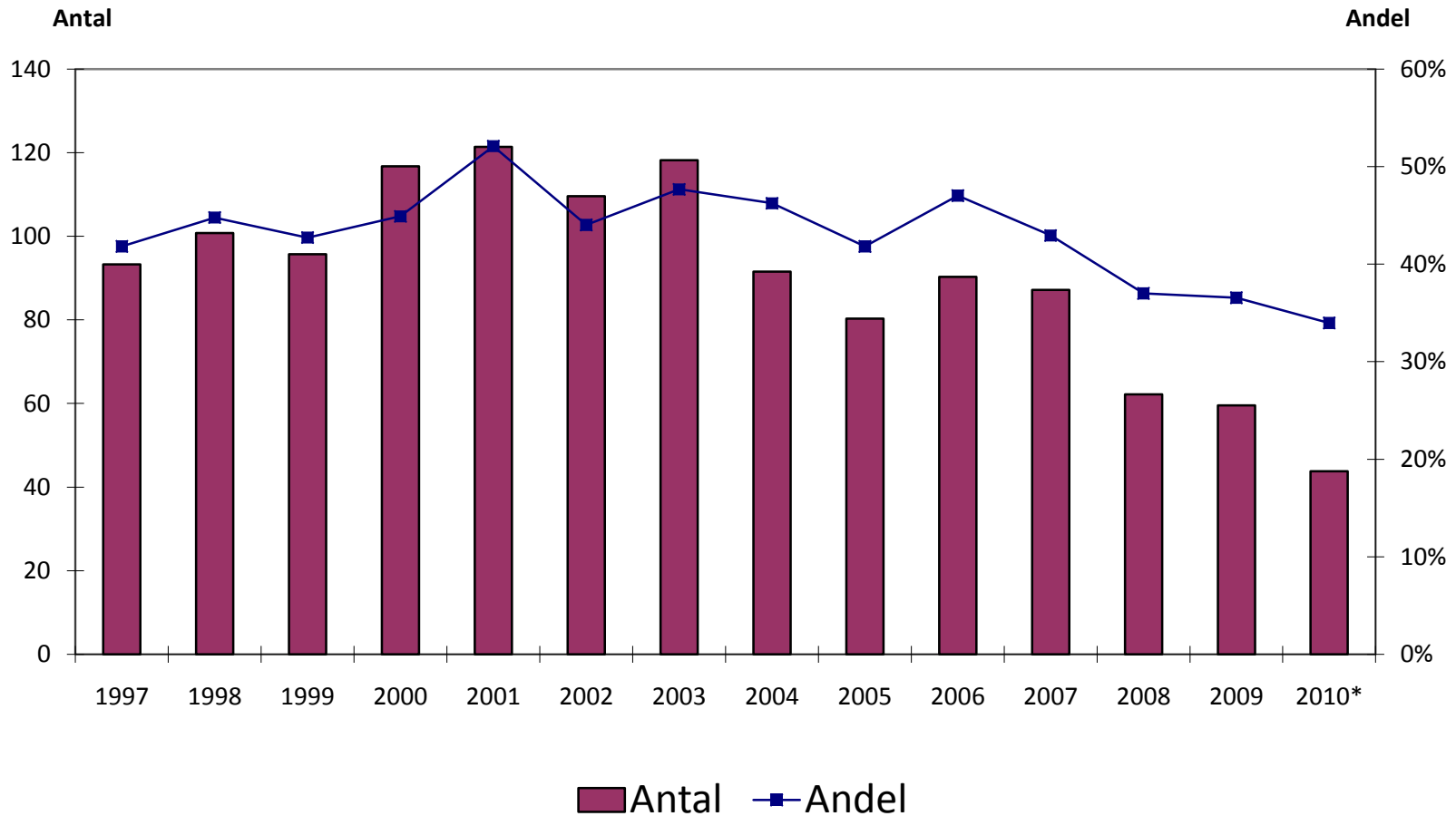
Nykter trafik

Alkoholpåverkade omkomna personbilsförare



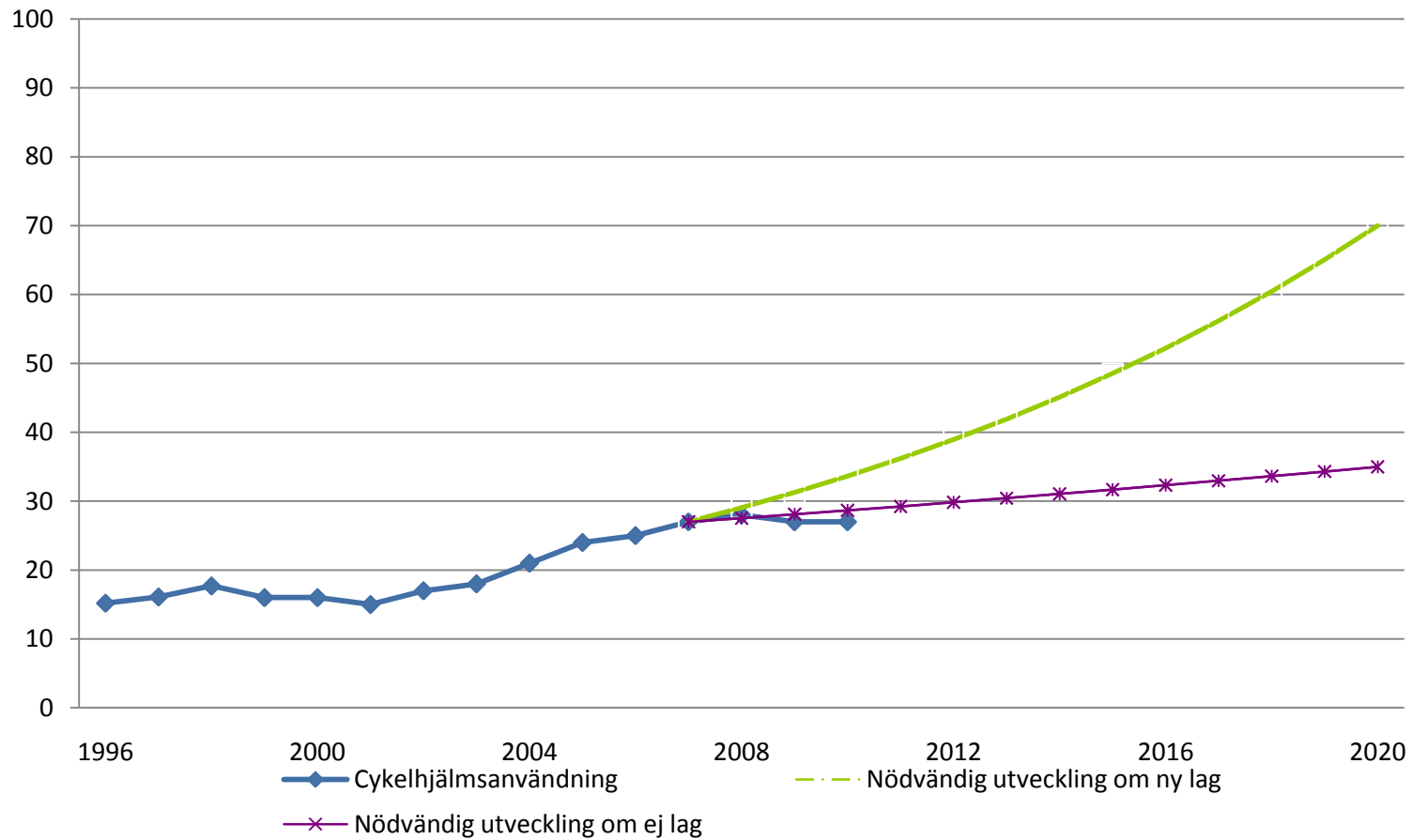
Bältesanvändning

Omkomna obältade personbilsförare

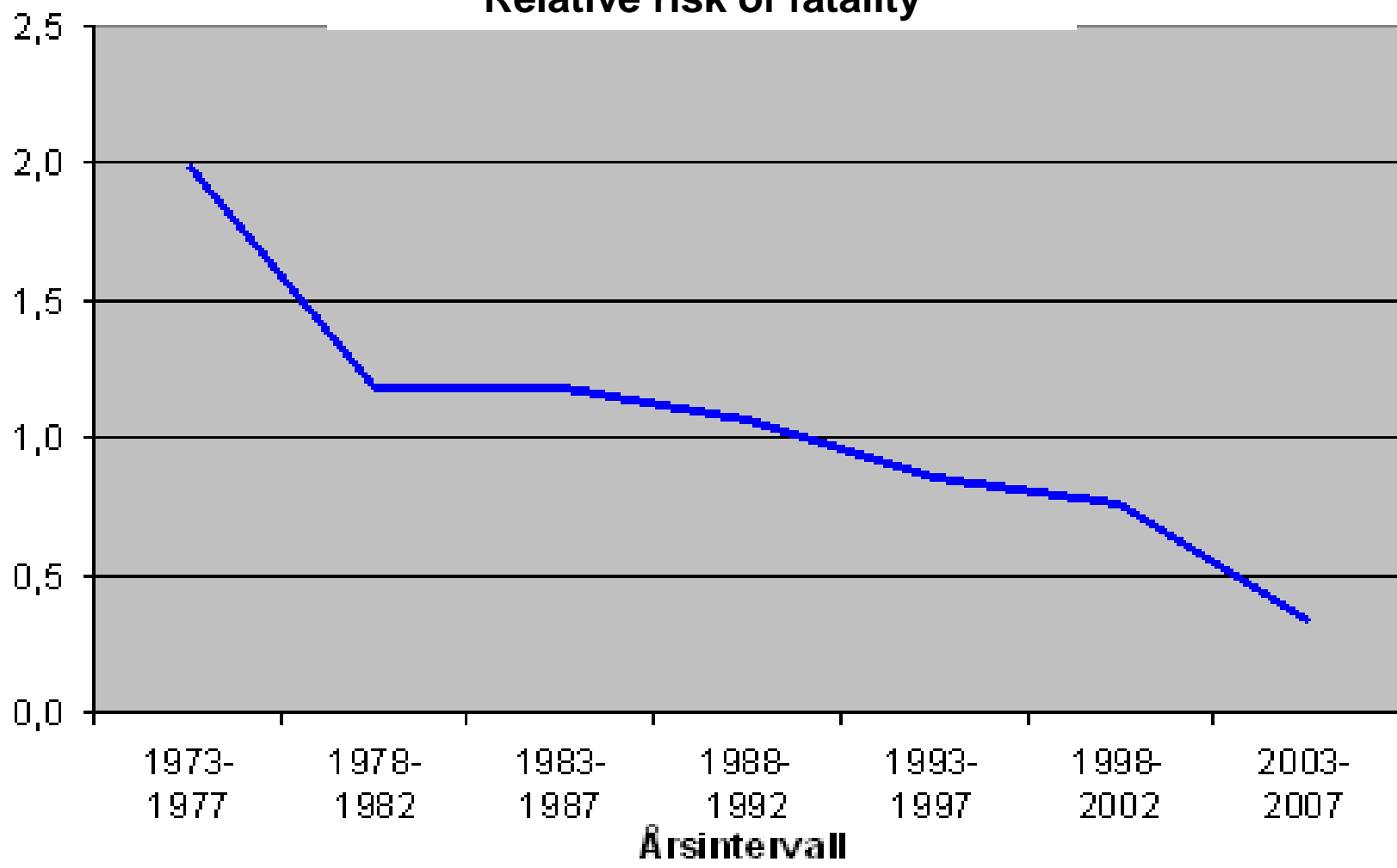


Hjälmanvändning – cykel

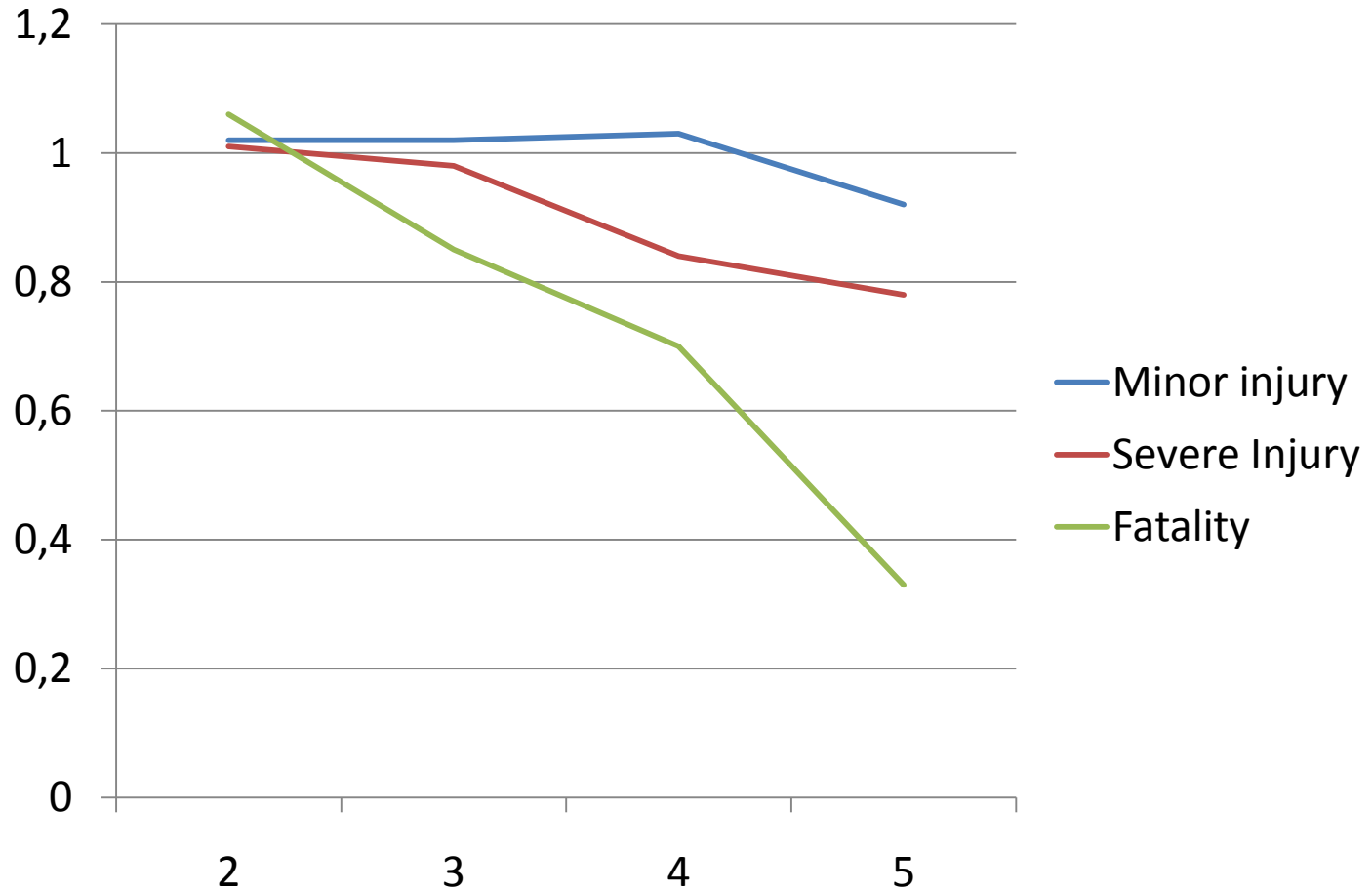
Observerad hjälmanvändning bland cyklister



Relative risk of fatality

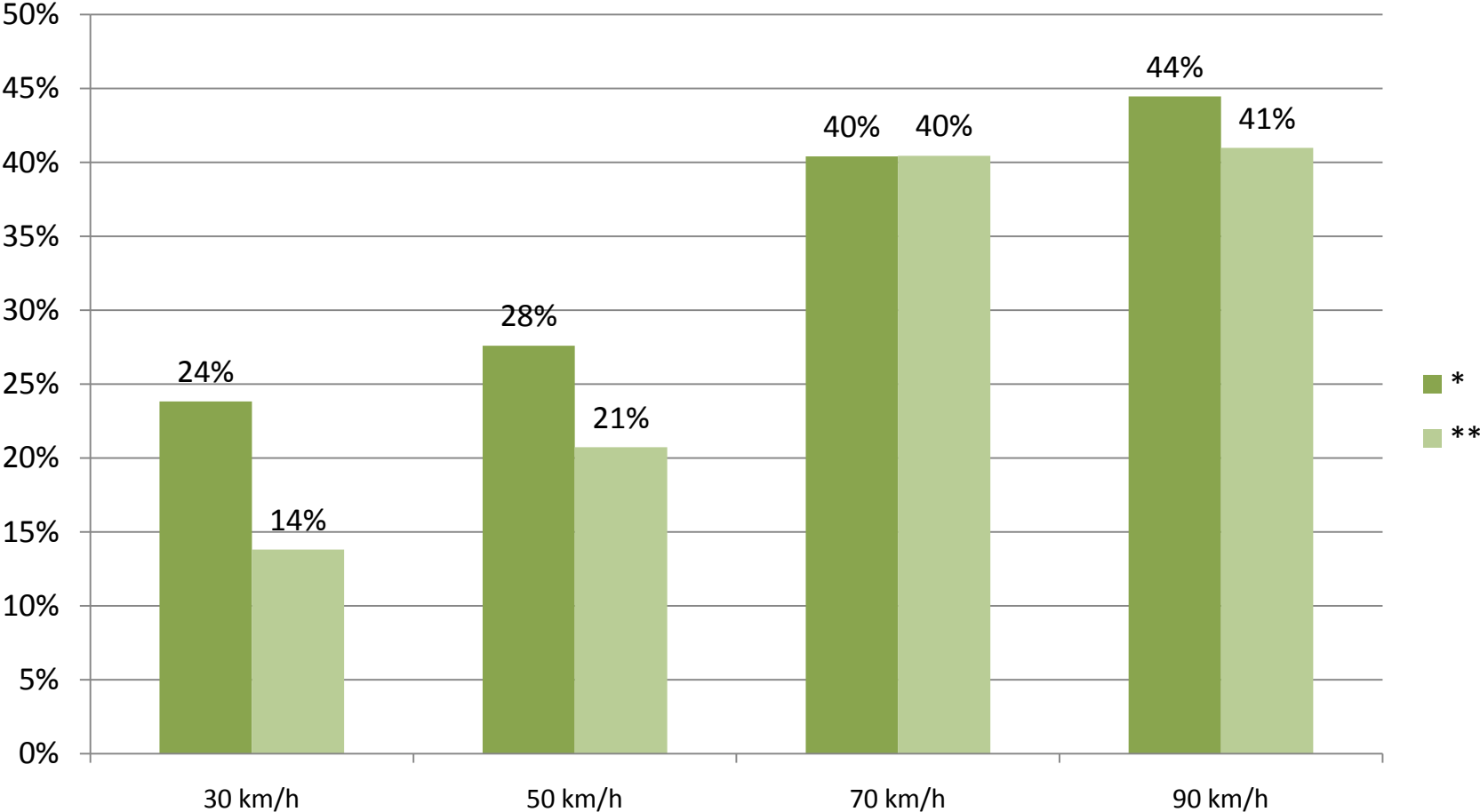


Kullgren, Lie & Tingvall 2010

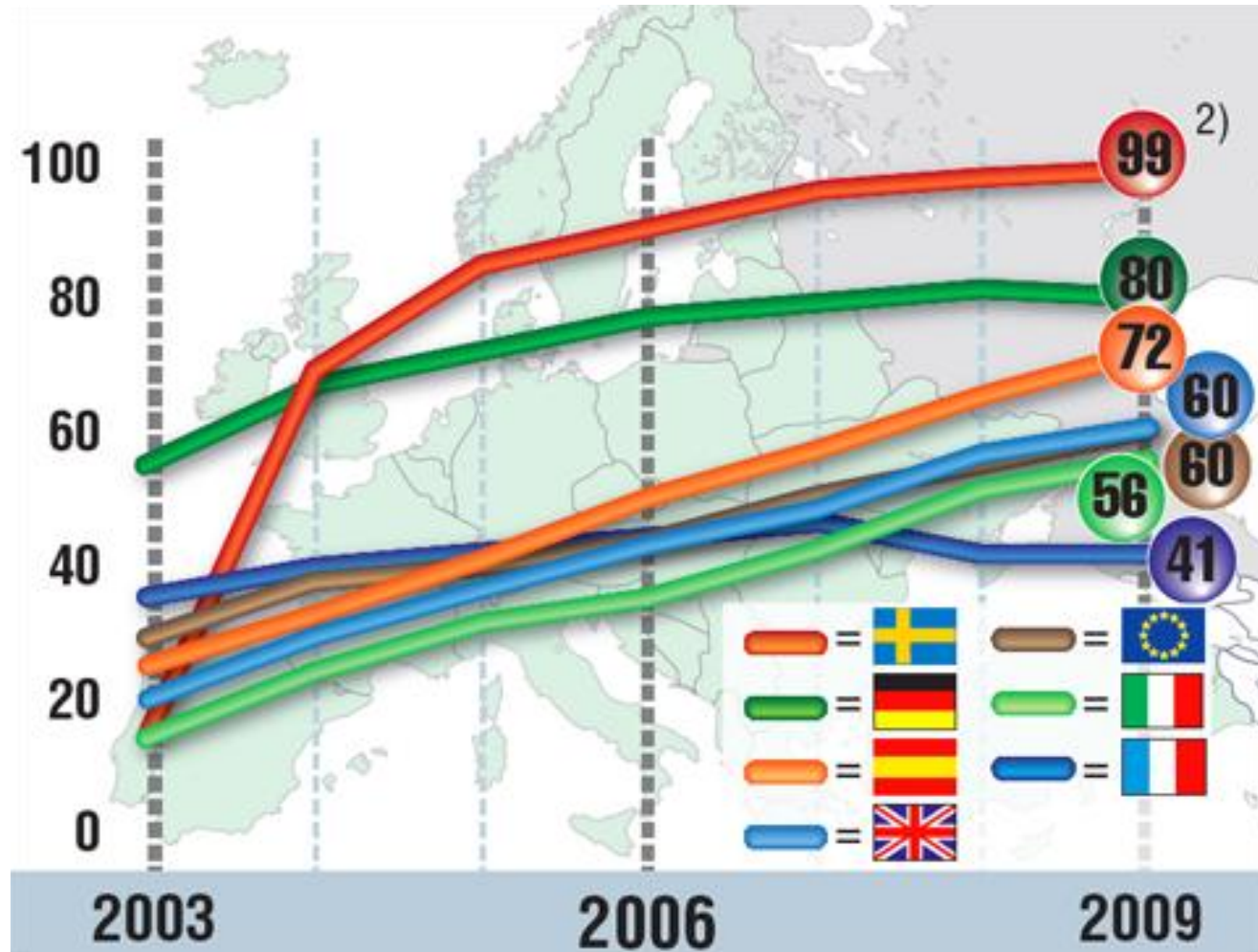


Comparison of mrsc in one and two star cars in different speed limits

MRSC 5 %+, n=542

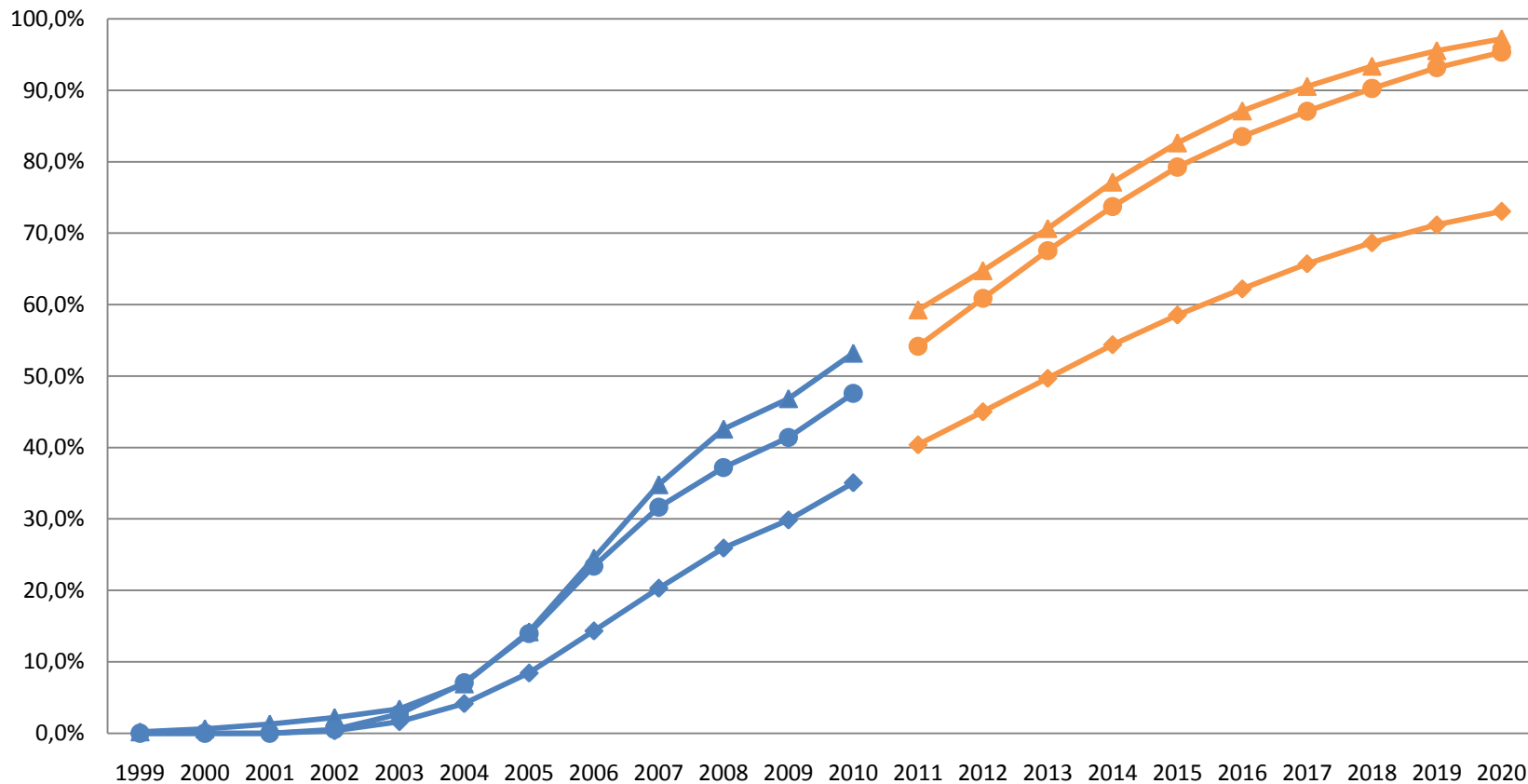


ESC new cars fitment rate 2009



Säkra fordon – personbilar

Andel trafikarbete med personbilar med olika skyddssystem



Säkra fordon - motorcyklar

Andelen motorcyklar utrustade med ABS i nyförsäljningen

2009	2010
30 %	60%



100



Voie pié



plo

(9) By 2050, move close to zero fatalities in road transport. In line with this goal, the EU aims at halving road casualties by 2020. Make sure that the EU is a world leader in safety and security of transport in all modes of transport.

WHITE PAPER

Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system

EU commission 2011

9. CONSIDERS that infrastructure, vehicles and road users should be seen as a system in which human error and inappropriate behavior should always be taken into account. Infrastructure and vehicles should be designed as to prevent and limit consequences of such failures;


**Council conclusions on road safety 3052th TRANSPORT,
TELECOMMUNICATIONS and ENERGY Council meeting Brussels, 2–3
December 2010**

**"Towards a European road safety area: policy orientations on road
safety 2011-2020"**

15. ENCOURAGES a strong cooperation between the bodies responsible for the infrastructure in the Member States and the vehicle industry in order to support the deployment of promising in-vehicle safety systems that can contribute to save lives on the European road-network. New technical solutions of which the effect is proven can contribute to make it possible to deal with problems like speeding and impaired driving (such as driving under the influence of alcohol, drugs and fatigue);

Council conclusions on road safety 3052th TRANSPORT, TELECOMMUNICATIONS and ENERGY Council meeting Brussels, 2–3 December 2010

"Towards a European road safety area: policy orientations on road safety 2011-2020"

An aerial, top-down view of a curved road with white dashed lane markings. Two cars are visible on the road, each surrounded by a green circular sensor or detection field. The background is a stylized, low-poly landscape in shades of blue and grey. The overall image has a futuristic, technological feel.

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


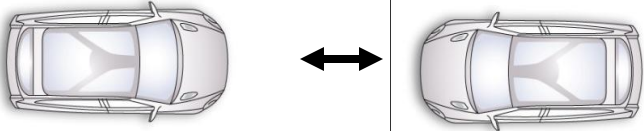



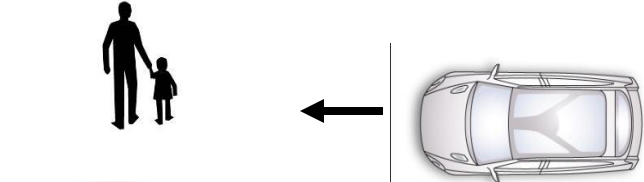



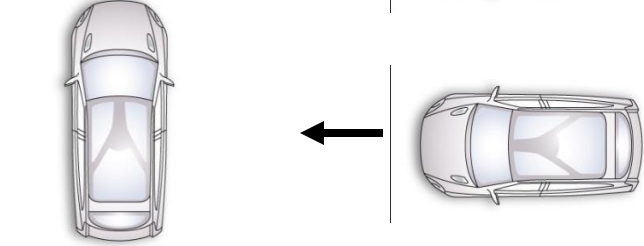



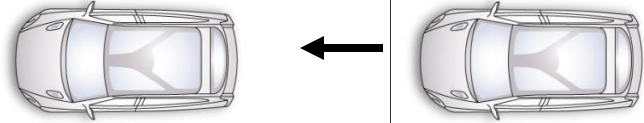



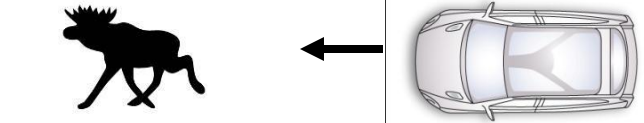


Volvo Cars' Vision 2020

Volvo Cars' Vision 2020, Sept 9,
2010
Anders Eugensson, Volvo Car
Corporation

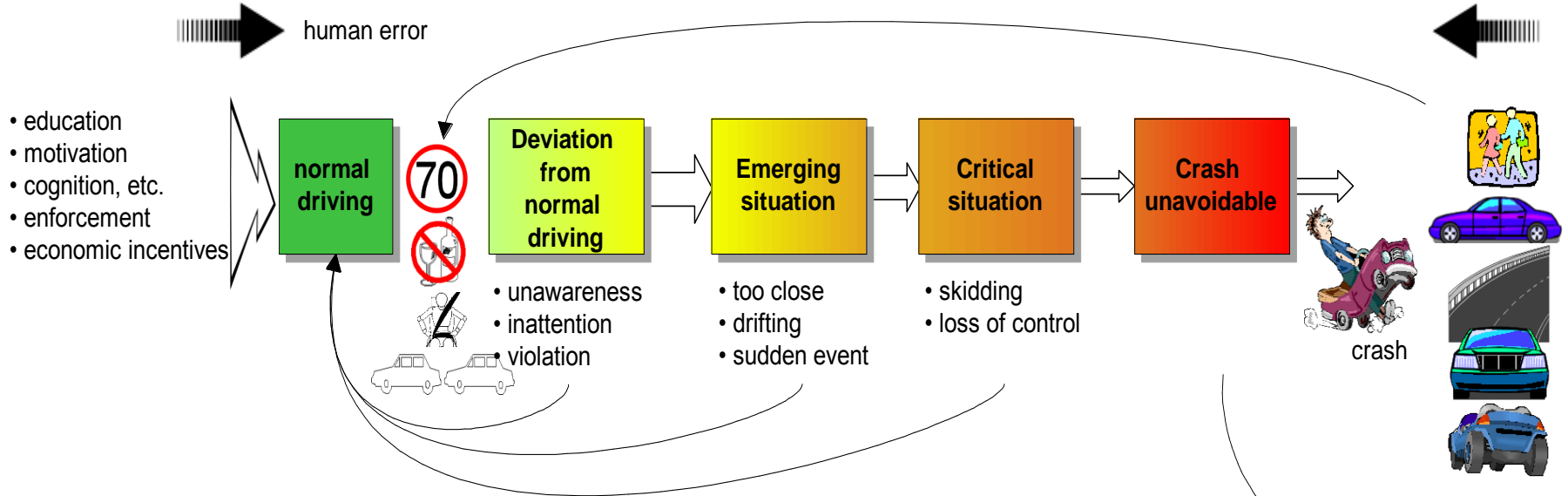
Shared responsibility / Boundary conditions

Contribution
passive
 safety

Contribution
active
 safety

		Head-on		+	
		Pedestrians		+	
		Side		+	
		Rear-end		+	
		Large animal		+	

The crash sequence: (matching human error and crash protection)



	<ul style="list-style-type: none"> • access to road transport system 	<ul style="list-style-type: none"> • comfort • economy • social conformity 	<ul style="list-style-type: none"> • warning system • supporting system 	<ul style="list-style-type: none"> • intervention in driving 	<ul style="list-style-type: none"> • immediate correction 	<ul style="list-style-type: none"> • preparation for crash 	<ul style="list-style-type: none"> crash protection
Vehicle	promote normal driving	(ISA, SBR, alcohol interlock)	(AICC, LDW)	(ESC, LDA, AICC2)	(pre-safe, emergency braking)	(seat belts, airbag, whiplash protection, pedestrian protection)	
Infrastructure	promote normal driving	(speed warning, tactile warning, humps)	tactile edge lines	high friction surface		barrier design, roundabouts	
Others	promote normal driving	<ul style="list-style-type: none"> • enforcement • insurance • contracts 				<ul style="list-style-type: none"> • emergency service 	

Normal Driving

Support systems

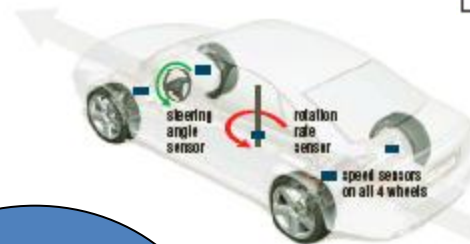
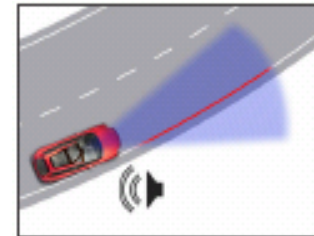
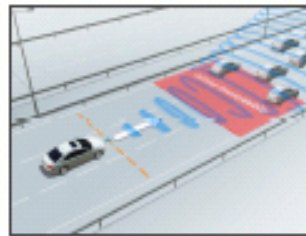
- Seat belt reminders
- ISA/Speed Alert
- Alcolocks
- Impaired driving detection
- Etc.



Dangerous Situation

Support systems

- Adaptive Cruise Control
- Lane departure warning
- Electronic stability control (ESC)
- Pre Impact Emergency Braking
- Etc.



And we should think:

“Roads that cars can read”



■ Examples of technologies

New and advanced safety technologies are considerably broadening the automotive safety landscape. Euro NCAP Advanced aims to provide car buyers with clear guidance about the safety benefits offered by these new technologies. Here is a list of some advanced safety systems recently developed by car manufacturers.

Blind Spot Monitoring

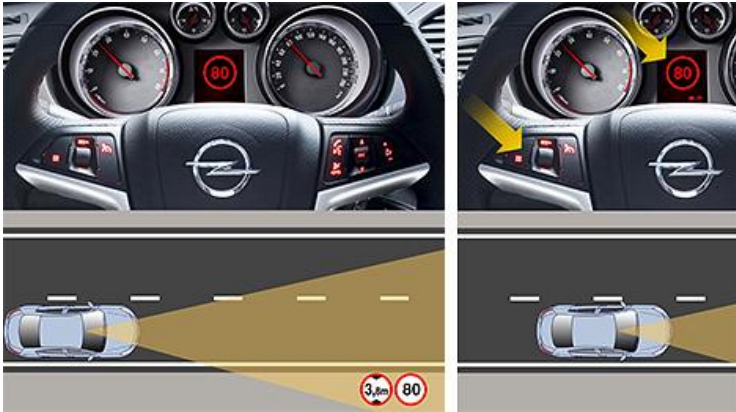


Lane Support Systems

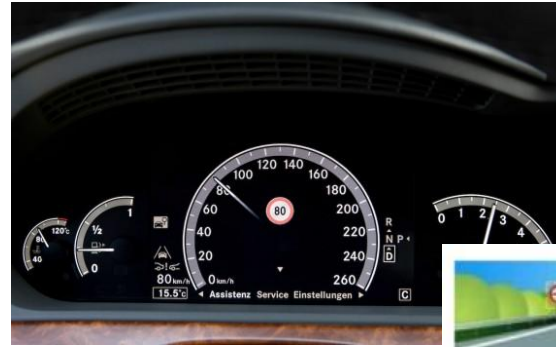


Speed Alert Systems





Opel Insignia



Mercedes S-Class



Note: Information shown in main instrument as

Saab 9-5



BMW 5-Series



Ford Focus

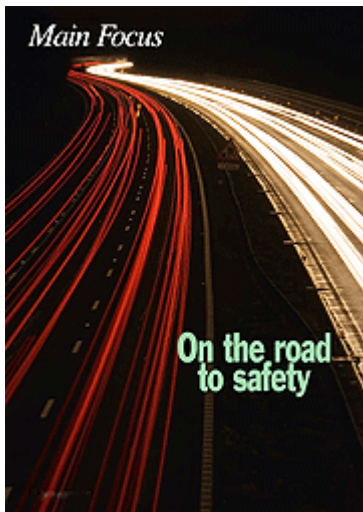


VW Phaeton / Passat



Audi A6

A management system standard



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Reference number of working document: ISO/PC 241 N **072**

Date: 13 Jun. 11

Reference number of document: **ISO/DIS**

Committee identification: ISO/PC 241

Secretariat: SIS

Road traffic safety (RTS) management systems – Requirements with guidance for use

Sammanfattning

Vi har haft en mycket positiv utveckling,
men nu måste vi lägga till nya
egenskaper och metoder

Dom nya egenskaperna finns i den nya
bilen, men den måste samverka med
både normer och infrastruktur

Organisationers och företagens
beteende är nyckeln till bättre normer
och därmed bättre teknik

