





Going downstream
(or simply finding the victim)






DON'T BE A

DICKHEAD

DON'T USE YOUR PHONE

 **vicroads**

Going upstream

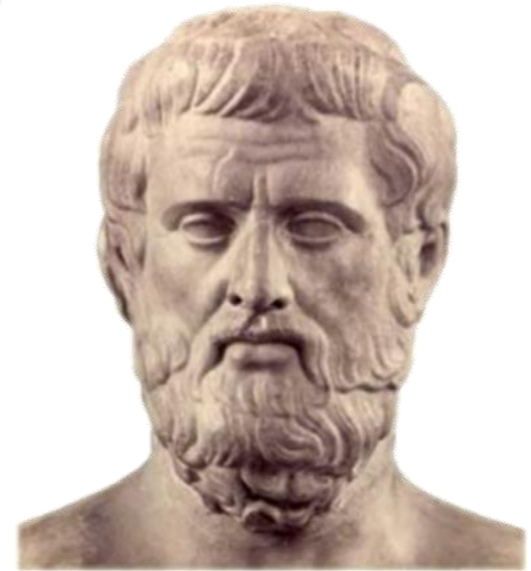
(or simply finding the systemic prevention)





ERRARE
HUMANUM EST

Lucius Annaeus Seneca



Normal cycling



Departure from normal cycling



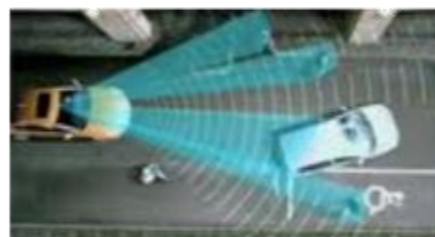
Approaching critical situation



Critical situation



Crash unavoidable



Combined effect

~ 95 percent injury reduction

Sober driving
Speed compliance
Belt use

Normal driving

Deviation from normal driving

Emerging situation

Critical situation

Crash unavoidable



Speed management



Autonomous
Emergency Braking
($>1G$)



Protective clothing



minimum 3500 Euro/meter

**1995 300 mill Euro invested;
1 less fatality/year**



Livlina på E4

Beslutsprocess för trafiksäkerhet

Sven-Olov Larsson
Sonja Forward
Sanja Obrenovic



VTI notat 47-2002

Kostnadsuppföljning av mötesfri väg

Resultat från en enkät till Vägverkets regioner

Författare	Jörgen Larsson
FoU-enhet	Transportsäkerhet och vägutformning
Projektnummer	50386
Projektname	Kostnadsuppföljning av mötesfri väg
Uppdragsgivare	Vägverket
Distribution	Fri

2+1 road: 150 Euro/meter

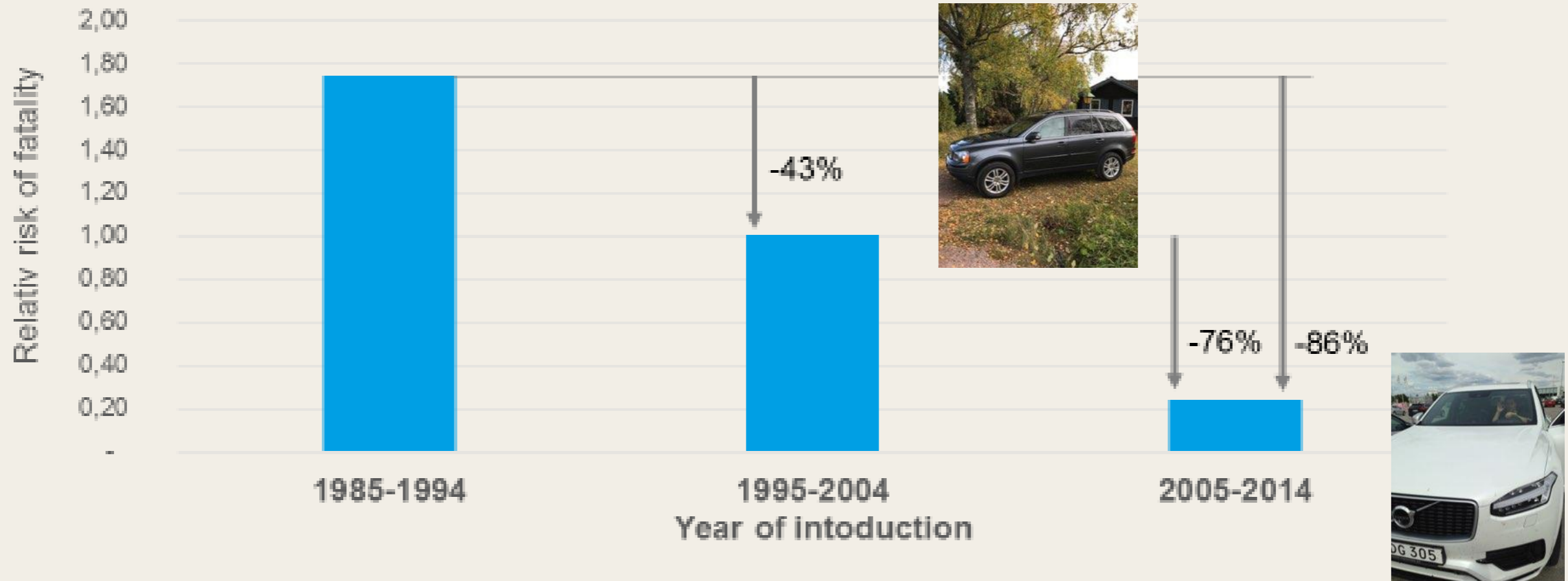
= 23 times





Development in risk of fatality

Cars with year of introduction 1995-2004
colliding with other cars





**Volvo 855 SE 2,5 1995
237 000 = 301 000 2018**

**Airbag driver only
No ESC
No radar
No camera
Euro NCAP 0 stars**

**Volvo V60 Momentum D4
2019 317 000**

**6 airbag systems
ESC
Autonomous braking
for frontal/rear/animal/
pedestrian/cyclist
Autonomous emergency
steering
Euro NCAP 5 stars**



Ethics
Responsibility
Scientific methods
Driving forces and
systematic development
Innovation



= Vision Zero

”

*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**.*

”



An aerial, top-down view of a multi-lane highway curving through a landscape. Several cars are visible on the road. Green circular sensor beams emanate from the cars, suggesting advanced driver assistance systems. The overall aesthetic is futuristic and technological.






***“OUR VISION IS TO DESIGN CARS THAT SHOULD NOT
CRASH AND BY***

2020

NO ONE WILL BE KILLED OR INJURED IN A VOLVO”



Joint effort to define boundary conditions

				Passivt	Aktivt
80		Head-on	60	+	20
40		Pedestrians	10	+	30
70		Side	55	+	15
△ 40		Rear-end	△ 20	+	△ 20
110		Large animals	80	+	30

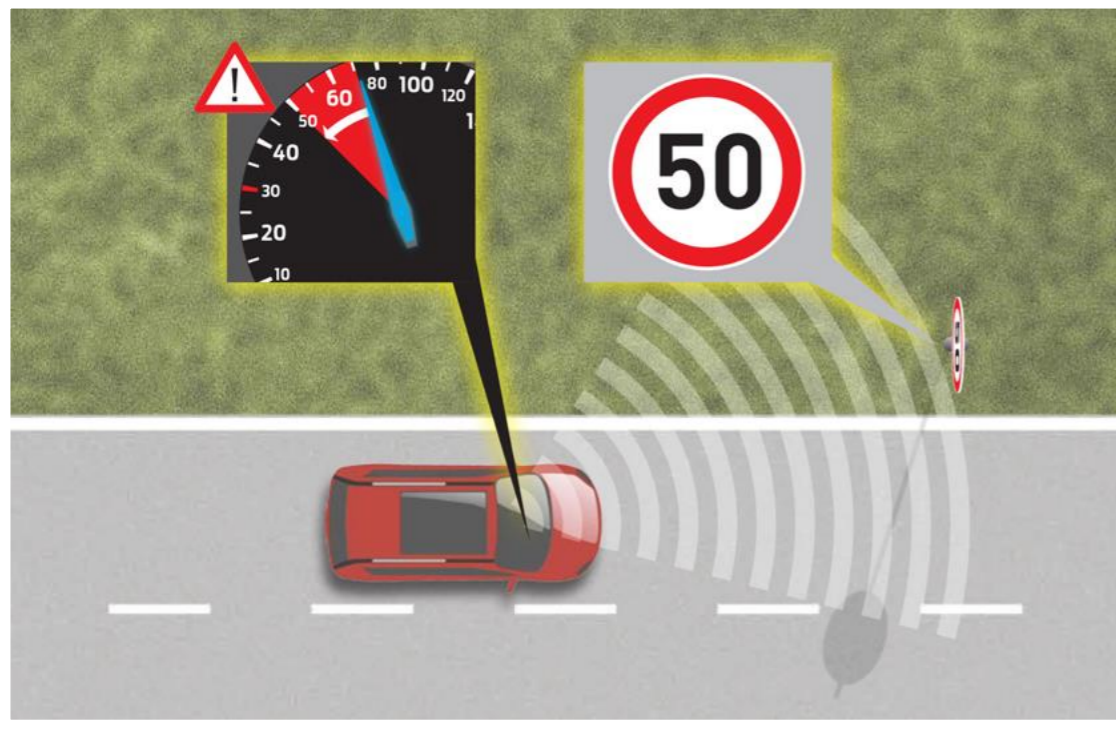
Sustainable – not just more sustainable!



- Compact and space efficient
- Fossil free
- Silent
- Clean air
- Safe
- Mobility for all
- Affordable
- Shared economy
- ...and new technologies



Geofencing "ISA" that limits speed and access only for certain vehicles





Σ0

