



# VINNOVA's impact analyses

Ministry of Industry requires impact analyses

4 pilot studies in 2001

4 impact analyses concluded

- Competence centre programme 1995 – 2003 8 years perspective
- Impacts of neck injuries research 1985 – 2003 18 years
- User oriented ICT research 1982 – 1997 15 years
- Traffic safety research 1971 – 2004 33 years

2 more analyses under way

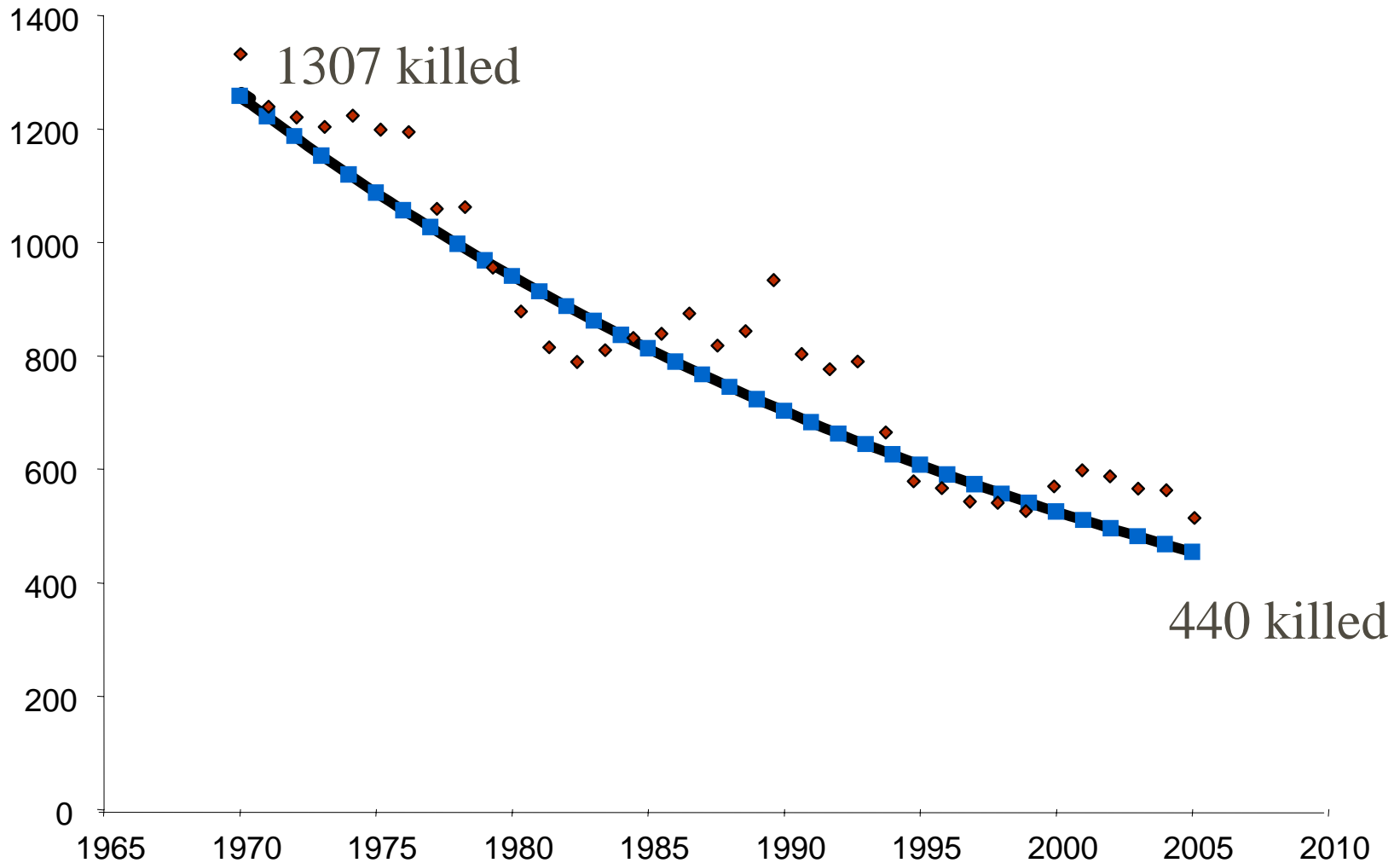
- Role of R&D for Swedish mobile phone development 1975 - 2000
- Seed financing programmes 1992 - 2002



# Number of killed in traffic 1970 – 2004

Note. Traffic volume increased from 37 to 77 billion vehicle kilometres in same period (208 %).

Number killed per year



# Traffic accident costs in 2005

Degree of injury	Number in 2005	Costs per injury (M €)	Costs to society (M €)
Killed	440	1,90	840
Severe injuries	4 400	0,35	1 520
Injuries	44 000	0,02	840
Total			3 200

Note 1 – costs according to SIKA 2005

Note 2 – statistics re. number of injured is incomplete. For each killed, 10 are assumed to be severely injured and 100 to be injured.



# Why impact analysis?

Concern for position of behavioural sciences research

Intuitive belief that funded research was successful, need to understand if this was true and in which ways it was successful



# How analysis was implemented

Advisory group – particularly informed individuals

Early conclusion – focus on the researchers (not e.g. money or projects)  
Overview of all Swedish research 1949 – 2005

## **Selected evaluator team**

*Field competence:* Norwegian Institute of Transport Economics (TÖI)  
Synthesis of 1600 research articles on traffic safety measures,  
incl. to what degree measures were based on research

*Evaluation competence:* Professor Arild Hervik, University of Molde

Step by step approach – 3 successive contracts



# Impact analysis on three levels

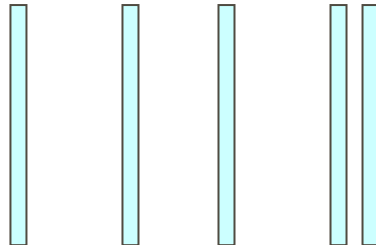
1973 – 2004  
49 M €

VINNOVA 1971 – Council for Vehicle Research – ffp 1994 -	VTI institute	Sw Road Adminis- tration
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28 + 21 M €

<b>C T H</b>	<b>L T H</b>	<b>U U</b>	<b>V T I</b>	Others
<b>6,5</b>	<b>5</b>	<b>5,2</b>	<b>11,7</b>	<b>21,2</b>

Case studies  
on safety  
measures



Year 2000 price level



## Four dominating research environments

- Department of Applied Road Safety, Chalmers University of Technology
  - Safety systems for vehicles such as whiplash injuries, air bags, safety belts
  - 6,5 M € 34 projects
- Department of technology and society, Lund Institute for Technology
  - Research on traffic environment in urban areas
  - 5,0 M € 62 projects
- Department of Psychology, University of Uppsala
  - Research on human behaviour in traffic
  - 5,2 M € 54 projects
- Swedish National Road and Transport Research Institute (VTI)
  - Technologies for roads and vehicles, tests, traffic economy, driver training etc
  - 11,7 M € 105 projects



# Summary – impacts of traffic safety research

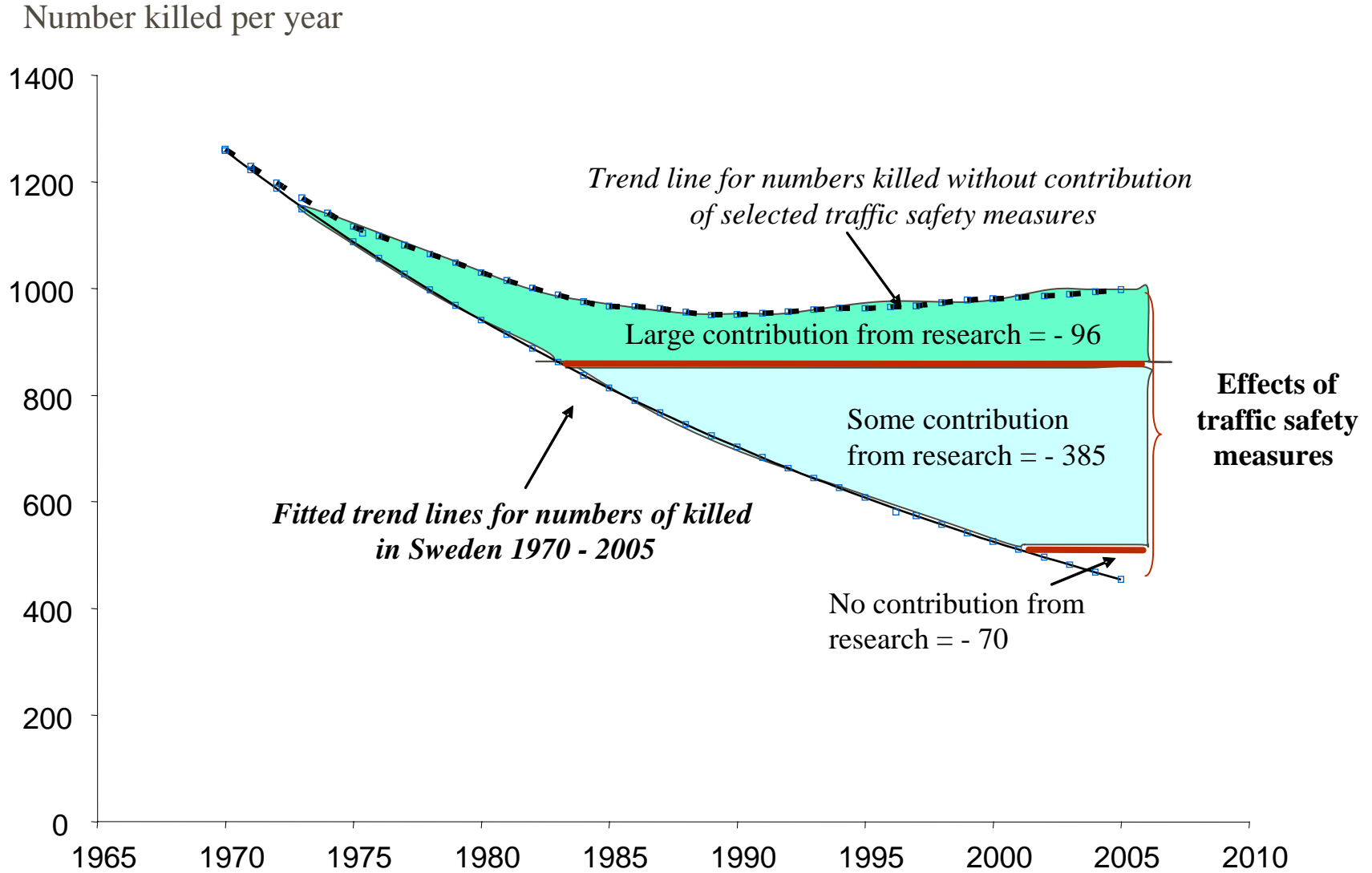
VINNOVA and Council for Vehicle Research have contributed to:

- 481 lives saved annually – at a value of 920 M €- and prevents many traffic related injuries
- Swedish automotive industry has developed a considerable number of safety related products, of importance to the industry's competitiveness
- Swedish research holds a high academic level in an international perspective
- Sweden has established university departments that trains qualified personnel in all domains of the traffic safety area – **a Good Research Circle**
- Effects on society's way of thinking about traffic safety, in Sweden and in Europe

Swedish Road Administration important in applying safety measures



# Contribution from research to increased traffic safety





# Impact of analysis as such (as we understand it)

## **Policy level**

Ministry of Industry - improved understanding of what VINNOVA produces - also in other areas than traffic safety

Strategic value - national consensus on traffic safety research

Consensus that behavioural sciences research is important for entire system of traffic safety research

## **Industry**

They refer to the analysis. Important for location of GMs and Fords safety research in Sweden

## **Research**

Instrumental for establishing SAFER research centre in Gothenburg  
Feedback to researchers – their work has been important



# Reflection on VINNOVA's impact analyses

They have been possible to do and they have been extremely useful

Most important – they give a much broader and more nuanced picture of impacts that follow from R&D

Results have been positively received and easy to communicate at policy level

Analyses have been motivated by specific forward looking needs

Demands for competence (field, evaluation) higher than normal  
-> limits which analyses may be possible to perform successfully



All summary reports in English

Full reports in English:

- Competence Centres Programme 1995 – 2003
- Traffic Safety Research 1971 - 2004

[www.vinnova.se/In-English/Publications/VINNOVA-Analysis/](http://www.vinnova.se/In-English/Publications/VINNOVA-Analysis/)

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