Presentation:

Overall view of the role of infrastructure for traffic safety

Univ.-Prof. Prof. h.c. Dr.-Ing. Ulrich Brannolte

- Professor emeritus
 Bauhaus-Universität Weimar (BUW), Germany
- Honorary Professor MADI, Moscow Automobile and Road Construction State Technical University (STU), Russia

About 1.3 million people die in road accidents annually

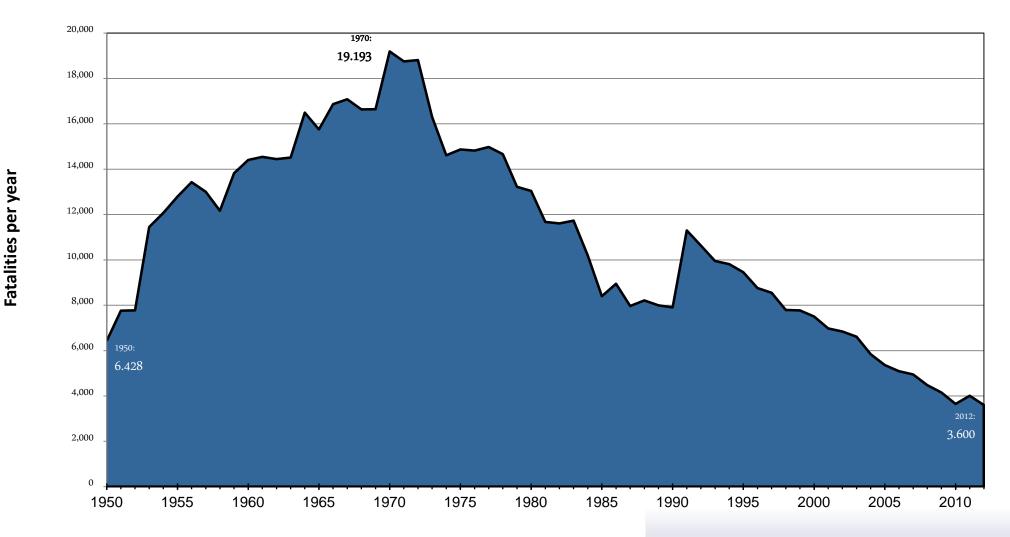
Up to 50 million people are injured and often disabled

Prognosis: it is expected that the number of lethal casualties will double by 2020

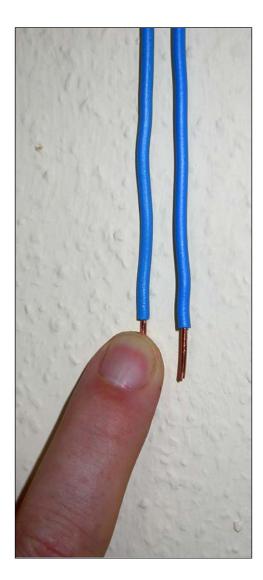


köln.de, (Symbolfoto: ddp)

Development of lethal casualties due to traffic accidents in Germany



Example from everyday life



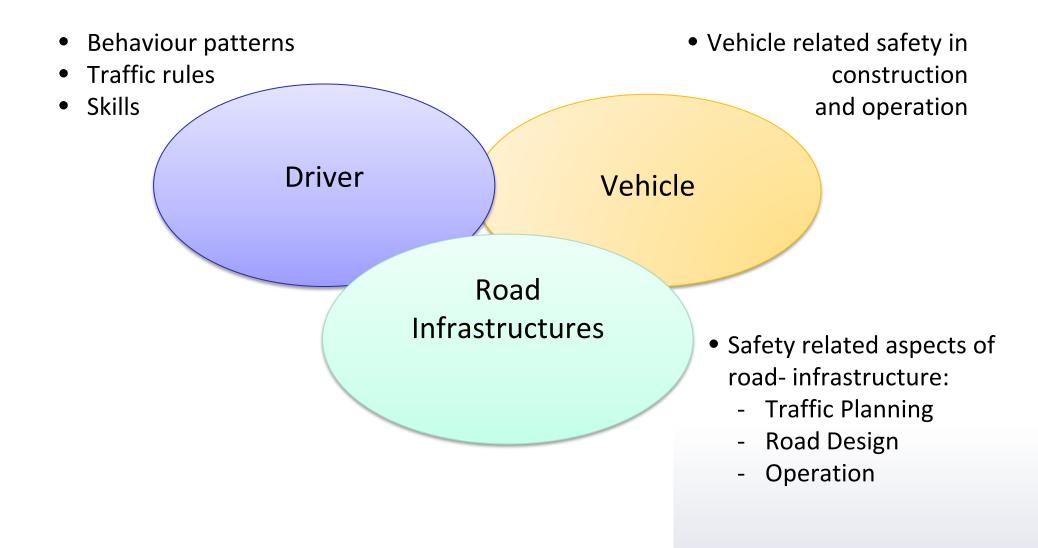




project

source

Road safety activities – 3 lines of action



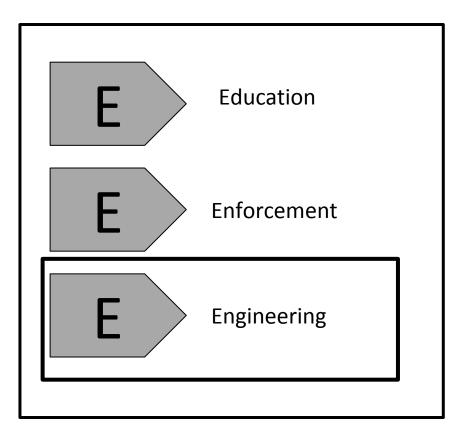
project:

source:

Road safety activities – 3 lines of action

Road traffic safety can be influenced...

... by three areas of road safety actions:



Road Infrastructure Safety Management on Trans-European Networks

...Many lives could be saved and many accidents avoided, if the existing road infrastructure was managed according to the best

practice of safety engineering. Action needs to be taken on the selection of high risk road sections or black spots on the basis of

local accident records.

EUROPEAN COMMISSION

DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT

Brussels, 12 April 2006

more information about the road safety audit (RSA) in Germany...

... are available in the literature:

- Sicherheitsaudit für Straßen in Deutschland (Road Safety Audit in Germany; *research report;* BASt V 98)
- Sicherheitsrelevante Aspekte der Straßenplanung (safety-related aspects of road design, BASt V 1996)



Conclusion

In Germany data collection and analytical road safety work is supported by software solutions.

It is an advanced approach to combine transportation planning issues with road safety aspects, to create a systematic approach for a comprehensive road safety management.

Presentation:

Road Safety Impect Assessment (RIA) - creating data and knowledge

Univ.-Prof. Prof. h.c. Dr.-Ing. Ulrich Brannolte

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project:

source:

Road Safety Management



source: according to WEBER, R. 2009

new roads

Road Safety Impact Assessment	
Road Safety Audit	

(preventive) (preventive)

\succ existing roads

Safety Inspections of Roads Network Safety Management Black Spot Management

(preventive / reactive) (reactive) (reactive)

Road Safety Management

Road Safety Impact Assessment of Infrastructure Projects (RIA)

Using safety knowledge - based on empirical experiences and data - in very early stages of project development.

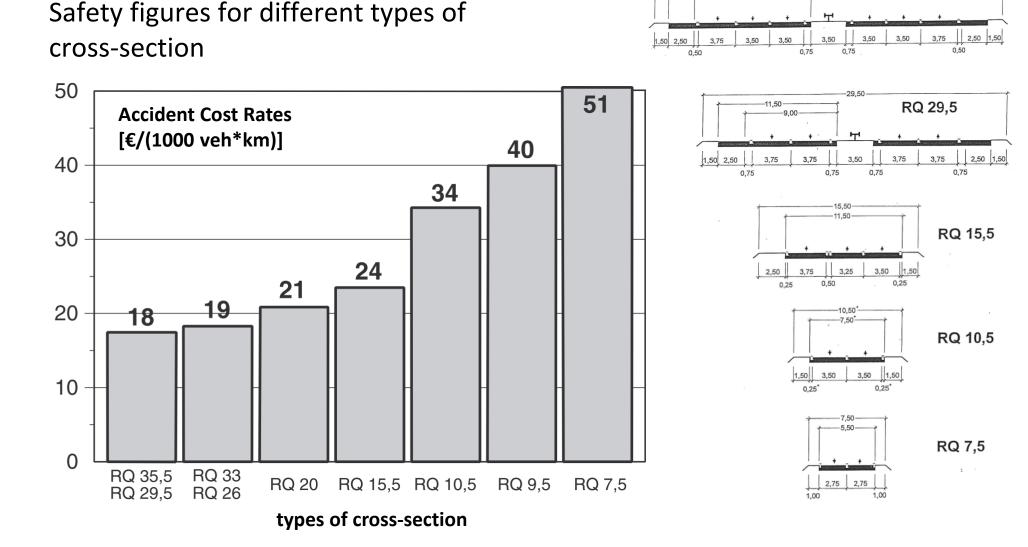
Two examples:

- (1) Safety figures for different types of cross-section
- (2) Safety related different Solutions for intersection control

project:

source:

Road Safety Impact Assessment of Infrastructure Projects (RIA)



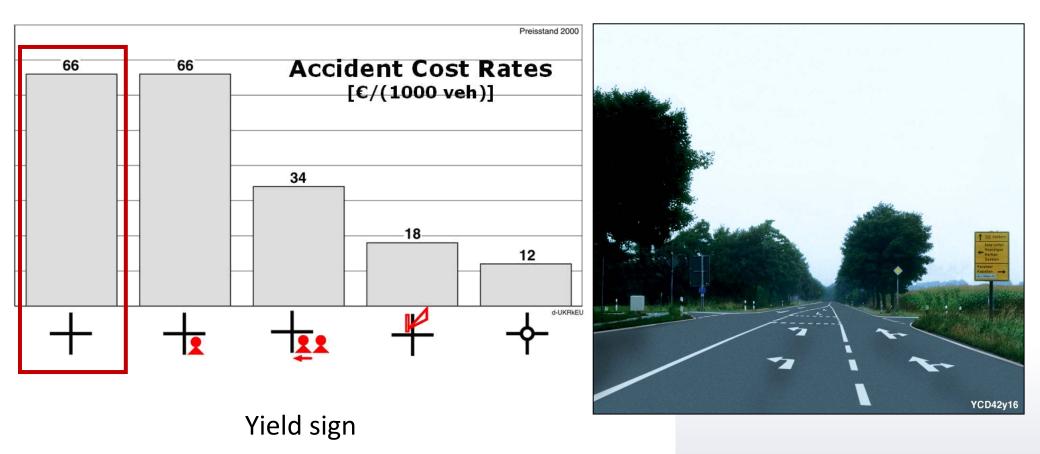
RQ 35,5

-14,50-

Eckstein, Meewes, 2002; Auswertung Straßenverkehrsunfälle Teil 2, ISK

Road Safety Impact Assessment of Infrastructure Projects (RIA)

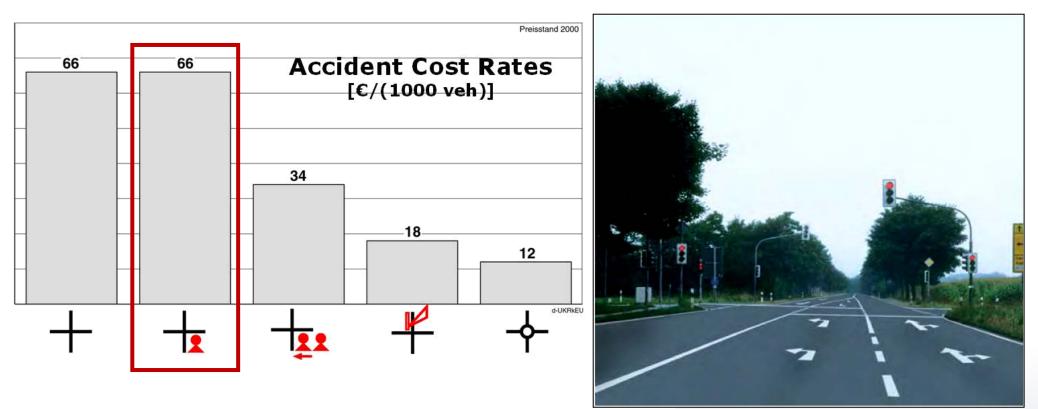
Safety related Solutions for intersection control



Eckstein, Meewes, 2002; Auswertung Straßenverkehrsunfälle Teil 2, ISK

Road Safety Impact Assessment of Infrastructure Projects (RIA)

Safety related Solutions for intersection control

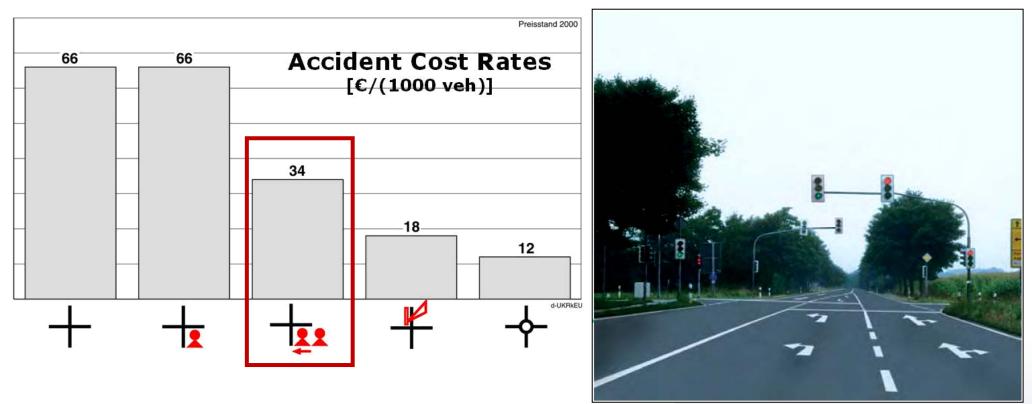


Signal control with no left-turn protection

Eckstein, Meewes, 2002; Auswertung Straßenverkehrsunfälle Teil 2, ISK

Road Safety Impact Assessment of Infrastructure Projects (RIA)

Safety related Solutions for intersection control



Signal control with left-turn protection

Road Safety Impact Assessment of Infrastructure Projects (RIA)

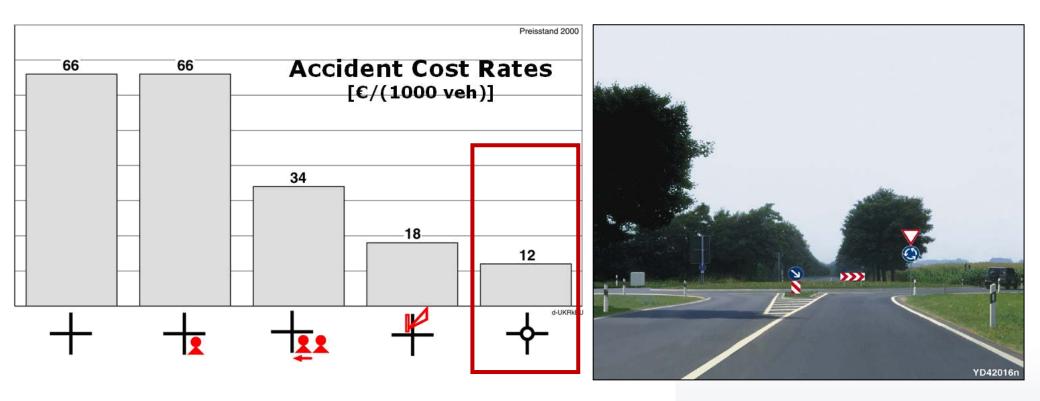
Safety related Solutions for intersection control



Permanent camera enforcement

Road Safety Impact Assessment of Infrastructure Projects (RIA)

Safety related Solutions for intersection control



Roundabout

Thank you!

For more information, please visit:

www.vpt-weimar.de mail to: ulrich.brannolte@uni-weimar.de