

A comprehensive approach for road safety – The example of Germany

User Related Measures

(TRAINING AND EDUCATION, TRAFFIC LAW, INCENTIVES, ENFORCEMENT)



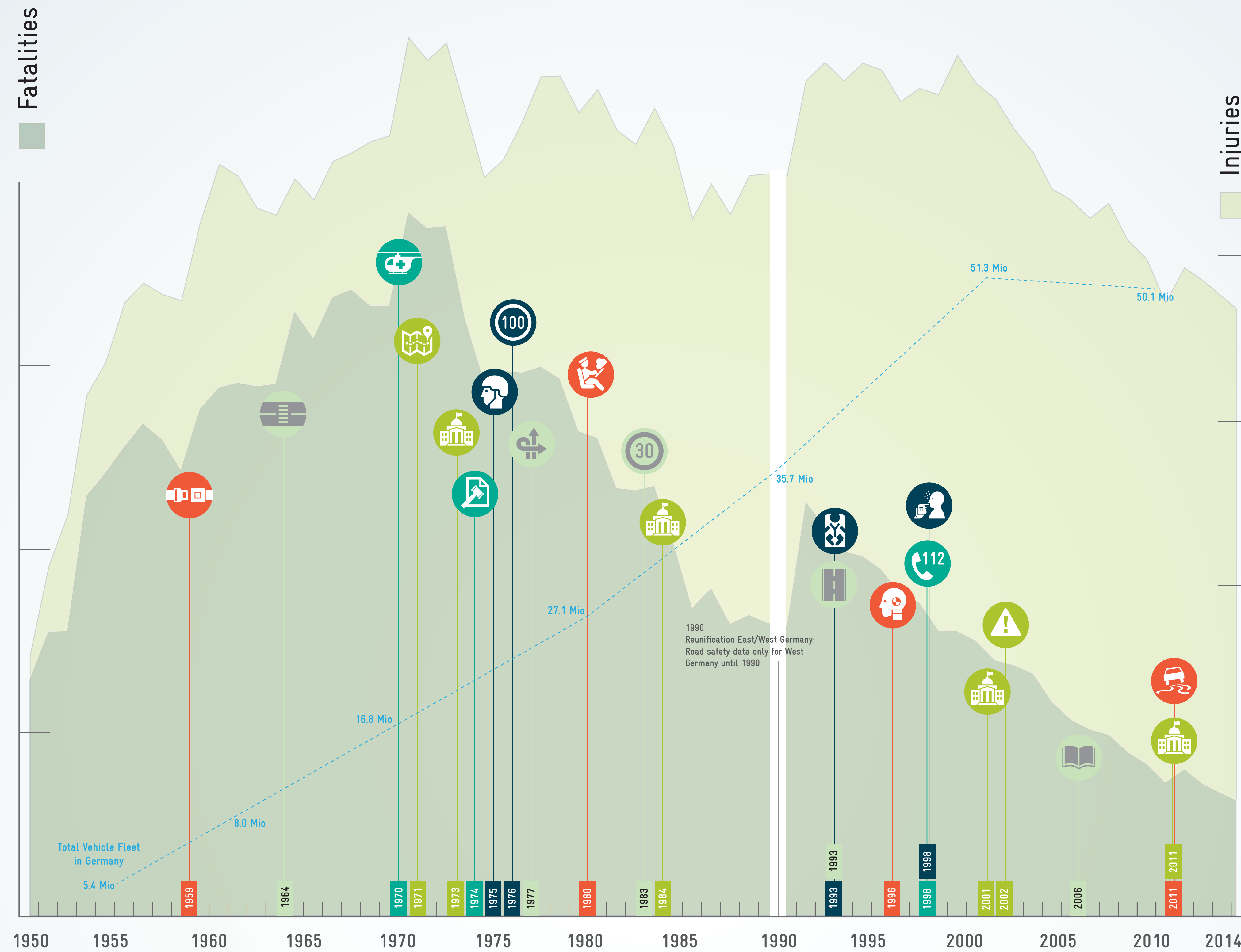
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| 1966 | Introduction of a 1.3‰ legal blood alcohol limit |
| 1970 | Introduction of the principle of defensive driving |
| 1970 | Compulsory use of turn signal (blinking) in urban areas |
| 1973 | Revision of legal blood alcohol limit to 0.8‰ |
| 1974 | Accumulating credit system for traffic offenses |
| 1974 | Introduction of recommended speed limit on motorways (Autobahnen) – 130 km/h |
| 1975 | Use of seatbelt and helmet becomes compulsory |
| 1976 | Introduction of 100 km/h speed limit outside of built-up areas |
| 1980 | Introduction of fines for riding motorcycles without helmet |
| 1984 | Introduction of fines for driving without fastened seatbelt |
| 1986 | 2-year trial period for new drivers |
| 1986 | Minimum age for driving heavy motorbikes raised to 20 years |
| 1988 | Introduction of minimum distance to trucks and buses |
| 1993 | Mandatory use of child safety seats for children in cars |
| 1995 | Compulsory speed limit for vehicles that drive past standing buses (walking speed) |
| 1998 | Revision of legal blood alcohol limit to 0.5‰ |
| 2001 | Introduction of fines for using mobile phones while driving |
| 2007 | Blood alcohol limit of 0.0‰ for novice drivers and persons under the age of 21 |
| 2010 | Introduction of accompanied driving from the age of 17 |

Organization

(PLANNING, FINANCING, CONTROLLING)



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| 1956 | Regular Road Safety Inspection for roads becomes obligatory in road traffic regulations (VwV-StVO) |
| 1961 | Regular vehicle safety inspections (PTI) become mandatory |
| 1969 | The German Road Safety Council (DVR) is founded, bundling the efforts of all parties involved in road safety in order to achieve efficient action |
| 1969 | Publication of the German Road and Transportation Research Association (FGSV) bulletin on local transport plans (introduction of accident analyses, consideration of non-motorized transport) |
| 1971 | Adoption of the Municipal Transport Financing Law, introducing federal financing schemes for urban transport and mandatory local transport plans |
| 1979 | Introduction of target-oriented transport planning instead of supply-oriented planning in guidelines for local transport plans |
| 2002 | Introduction of safety audits to avoid shortcomings with regard to road safety during the planning process |
| 2008 | Directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 on road infrastructure safety management |
| 1973, 1984, 2001 and 2011 | Road Safety Programmes of the Federal Government |



Infrastructure Related Measures

(ROAD DESIGN, ROAD CONSTRUCTION, MAINTENANCE)



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| 1964 | Introduction of zebra crossings for pedestrians |
| 1973 | Introduction of standards for geometric layout, gradients, cross sections and design speeds to be integrated into design guidelines |
| 1977 | Introduction of general principles of road network design, classification of roads according to road categories (i.e. interstate, arterial, collector, local) and connection type (urban vs rural, expected volume etc.) |
| 1980 | Introduction of zones with traffic calming („Spielstraßen“, or play streets), designed to be oriented towards pedestrians |
| 1981 | Publication of German Road and Transportation Research Association (FGSV) recommendations on traffic calming in residential areas |
| 1982 | Introduction of guidelines on cross-sections for roads (RAS-D) including determining the dimensions of the roadway components based on physical and volume characteristics |
| 1983 | First trials for zones with 30 km/h speed limit in residential areas |
| 1990 | Increasing use of roundabouts as alternative form of intersection |
| 1993 | New design recommendations for urban main roads (including consideration of urban design and requirements of pedestrians and cyclists) |
| 1995 | Revised guidelines on road alignment including updates on overtaking sight distance requirements |
| 1996 | Introduction of 2+1 lane road design for high level rural roads to prevent overtaking accidents |
| 2006 | Introduction of concepts for self-explaining (i.e. standardized) roads and forgiving roadsides in design guidelines |
| 2007 | Dedicated recommendations on improving road safety on popular motorbike routes through improved road design and enforcement measures |
| 2008 | First shared space project in Germany (City of Bohmte) |
| 2011 | Introduction of „Design for All“ principle to provide accessible transportation facilities (HBVA) |

Vehicle Related Measures

(ACTIVE SAFETY, PASSIVE SAFETY, TELEMATICS)



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| 1959 | Introduction of three point seat belt |
| 1963 | Introduction of energy absorbing steering column (avoiding excessive injuries to the driver in the event of a heavy frontal impact) |
| 1978 | Introduction of anti-lock braking system |
| 1980 | First introduction of an air bag (in driver seat only) for a Mercedes car |
| 1990 | Mandatory introduction of side guards on trucks above 3.5 tons to protect two-wheel drivers and pedestrians |
| 1996 | Introduction of Brake Assist System (BAS) |
| 1996 | Introduction of Euro.NCAP testing procedures for vehicle passive safety devices |
| 1998 | Increasing use of windowbags (protecting passengers from head injuries) |
| 2004 | Commitment by European car manufacturing industry to equip all new cars with anti-lock braking system |
| 2011 | Mandatory introduction of Electronic Stability Control in all new cars and trucks in the EU |

Rescue Services

(ALERT, RESCUE)



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| 1970 | First permanent HEMS (Helicopter Emergency Medical Services) base is established in Munich |
| 1971 | Introduction of emergency telephones along highways and major roads |
| 1973 | Introduction of country-wide emergency call numbers 110 (police) and 112 (fire brigade), although regional numbers for EMS continue to exist |
| 1974 | First EMS law introduced in the Federal State of Bavaria, outlining requirements for staff, equipment and response times. Other federal states follow soon. |
| 1998 | EU-wide mandatory introduction of emergency call number 112 for EMS |

The challenge of road safety

About 3,400 people die every day in road traffic accidents around the world. A further 50 million people are injured every year. Despite comparatively low levels of individual motorisation, emerging economies and developing countries in Africa, the Middle East and Asia are particularly affected, with more than 90 per cent of traffic-related deaths occurring in these countries. If current trends continue, road accidents will overtake HIV/AIDS and tuberculosis to become the world's third most significant health hazard by 2030.

By launching the Decade of Action for Road Safety 2011-2020, the United Nations have called on the member states to step up their efforts to improve road safety. This infographic illustrates the comprehensive approach that Germany has taken as a response to sharply rising fatality rates since the 1950s. Along with many other European countries, Germany has succeeded in reducing fatalities significantly – thanks to a bundle of measures that can be replicated elsewhere.

Further information and the infographic as pdf



Imprint

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