



AIT AUSTRIAN INSTITUTE OF TECHNOLOGY

The AIT Austrian Institute of Technology is Austria's largest research and technology organisation. With its seven Centers, the AIT regards itself as a highly specialised research and development partner for industry, and its researchers are tackling the key infrastructural challenges of the future: Energy, Health & Bioresources, Digital Safety & Security, Vision, Automation & Control, Transport Technologies, Technology Experience and Innovation Systems & Policy.

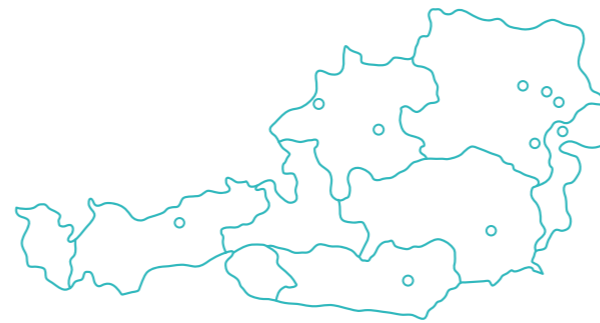
CENTER FOR TRANSPORT TECHNOLOGIES

Mobility is a core pillar of human society and therefore a central factor in our economic system. At the AIT Center for Transport Technologies, around 200 experts are working on solutions for sustainable, safe, intelligent and thus future-proof mobility. The focus of the research and development work is on material-based lightweight design, on the electrification of the propulsion train and the storage of electrical energy, as well as on a resilient and safe transport infrastructure. This also includes environmentally compatible and intelligent production technologies for mobility components. Comprehensive system know-how, scientific excellence, state-of-the-art laboratory infrastructure and many years of international experience enable AIT experts to drive innovations in the field of climate-friendly mobility and thus to serve industry and society already today with the solutions of tomorrow.

MORE ABOUT SAFE:



<https://www.ait.ac.at/en/safe>



1.400
EMPLOYEES

10 LOCATIONS

7 CENTERS

**AUSTRIA'S LARGEST
RESEARCH AND TECHNOLOGY
ORGANISATION**



**AIT AUSTRIAN INSTITUTE
OF TECHNOLOGY GMBH**

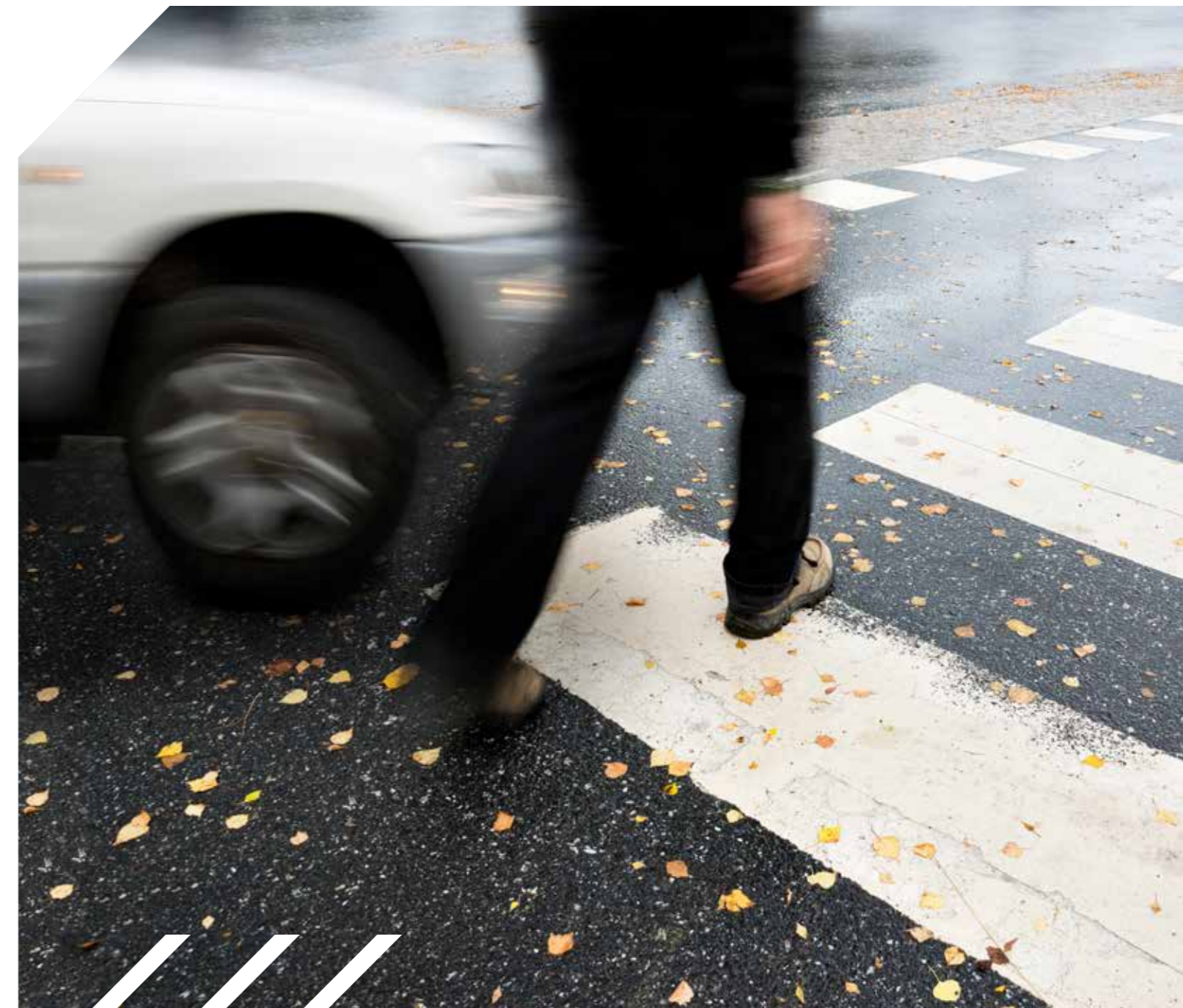
Center for Transport Technologies
Head: Dr. Christian Chimani
Giefinggasse 4 | 1210 Vienna, Austria
www.ait.ac.at



Mag. Florian Hainz, BA
Marketing and Communications
Center for Transport Technologies
T +43 50550-4518 | M +43 664 88256021
florian.hainz@ait.ac.at



DI Peter Saleh
Senior Research Engineer /
Thematic Coordinator Road Safety
Center for Transport Technologies
T +43 50550-6463 | F +43 50550-6439
peter.saleh@ait.ac.at



SAFE

Safety analyses and evaluation of measures
to improve road safety

SAFE: ANALYSES AND MEASURES TO IMPROVE ROAD SAFETY

One of the central goals of road operators is to achieve road safety across the entire road network. With SAFE, we carry out comprehensive analyses to reliably assess the risk of accidents on existing and planned roads and develop measures to reduce accidents.



INVESTIGATING ACCIDENTS AND OTHER RELEVANT FACTORS

We look at relevant factors in advance: detailed accident statistics, including all accidents with personal injury in Austria from 1994, results from empirical studies on traffic conditions with our TRAFFIC service, road condition data such as road friction, geometry data such as curve radii, and weather data.

LINKING ALL DATA IN MODELS AND ANALYSING ACCIDENT EVENTS

Using specially developed risk models – our Accident Prediction Models – we combine all factors and conduct in-depth analyses of accidents and causes. In addition, we analyse information about vehicles and drivers. In order to evaluate critical driving manoeuvres, we measure vehicle dynamics limits using specially-equipped vehicles.

EVALUATION OF THE ACCIDENT RISK AND DEVELOPING FUTURE MEASURES

The results allow risk assessment for existing and planned roads, such as the investigation of hazards posed by certain curve radii. In addition, we evaluate measures such as vehicle restraint systems along lanes and develop forecasts for vehicle trends and traffic strategies, which allows us to define the dangers of new technologies.



TRANSPORT INFRASTRUCTURE IS PARAMOUNT

Traffic conditions are becoming increasingly complex due to the varying individual use of road space, increasing interaction between road users and the use of new technologies. An efficient and safe transport infrastructure is of crucial importance and requires strategies and applicable targeted measures.



SAFE PROVIDES BETTER SAFETY FOR YOUR ROADS

Thanks to our accurate and extensive analyses and evaluation of measures, you know exactly where the dangerous spots in your road network are and what precautions you need to take to increase road safety.



RISKANT: The RISKANT project included evaluating measures to secure stationary objects.

SAFE: YOUR BENEFITS

- Evaluation of effective measures for accident prevention
- Detailed accident statistics
- Meaningful visualisation of accident events
- Guidance for recording and processing accident data
- Detailed accident root cause analysis based on road condition, road geometry, and driving dynamics
- Analysis of accident black spots and traffic conflicts utilising data from mobile devices
- Prediction of site-specific accident risk



OBSERVE: The goal of this research project is to develop a risk-based evaluation process for unregulated pedestrian crossing.