Programme
May 17th

Registration 8:00-9:00 am
Please wear your badge visible during the entire conference.
Lunch is served in the hotel restaurant.

Opening Session

9:00-10:30 am. New York

Opening session

Dr. Magnus Hjálmdahl, Chairman for RS5C Organising Committee, VTI, Sweden

Mr. Jonas Bjelfvenstam, Director General, VTI, Sweden

Prof. Marcio de Almeida D’Agosto, President ANPET, Brazil

Ms. Natália Marcassa de Souza, Vice Minister at the Brazilian Ministry of Transport, Brazil

Mr. Elton Santa Fé Zacarias, Vice Minister at the Brazilian Ministry of Cities, Brazil

Lorena Bravo, OISEVI, Steering Committee Chair, Ecuador

Corina Puppo, OISEVI, Technical Secretary, Argentina

Coffee Break 10:30-11:00 am
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<th>May 17&lt;sup&gt;th&lt;/sup&gt;</th>
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<td>New York 1</td>
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<tr>
<td>9:00 am</td>
<td>Opening Session</td>
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<tr>
<td>11:00 am</td>
<td>Session 1: Safety Management</td>
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<td>2:00 pm</td>
<td>Session 4: Safety and Infrastructure</td>
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<td>Session 7: Safety Inspection</td>
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# Conference Programme Overview

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- **Note by**:
  - TI and Mohamed
  - University of Central Florida

- **Keynote by**: Fred Wegman, SWOV and TBD

## Coffee Break

## Session 11:
Vulnerable Road Users I

## Session 12:
Safe Road Design and Maintenance

## Session 16:
Infrastructure I

## Session 17:
Crash and Conflict Analysis

## Session 18:
Benchmarking Road Safety in Latin America

## Lunch

## Session 14:
Vulnerable Road Users II

## Session 15:
Safety Analysis

## Session 19:
The Importance of Road Infrastructure Safety in Achieving the SDG Goals

## Session 20:
Infrastructure II

## Closing Session

## Poster Session

## Conference Reception
Session 1

11:00 am–12:30 pm, New York 1

Safety Management
Chair(s): Terje Assum, Institute of Transport Economics (TOI), Norway

Adoption of EU Directive On Road Infrastructure Safety and Development of Additional Standards to Manage Safety On Ireland’s Roads
Desmond O’Connor, Transport Infrastructure Ireland, Ireland

Best Practice Versus ‘In Practice’: Insights into Improving Australian Industry Road Safety Management
Amanda Warmerdam, Monash University, Australia

Reducing the Incidence of Impaired Driving Through Globally Effective Countermeasures
Danielle Comeau, Alcohol Countermeasure Systems, Canada

Road Safety Implications and Opportunities for Regions Under Increasing Motorization
Jac Wismans, SAFER Vehicle & Traffic Safety Centre at Chalmers, Sweden

Critical Approaches to Road Injury Trends, Forecasts and Scenarios – Two Urban Cases in Norway
Stig Halvard Jørgensen, Norwegian University of Science and Technology, NTNU, Norway

Lunch 12:30-2:00 pm
### Session 2

**11:00 am–12:30 pm, New York 2**

**Education and Risk Perception**
Chair(s): Henriette Wallén Warner, VTI, Sweden

**Key Elements in The Development and Delivery of a Community Based Multi Stakeholder Approach to Road Safety Education for Young Adult Road Users**
Kerry Montero, RMIT University, Australia

**Traffic Safety Perception and its Potential Impact on Travel Demand Choices**
Ali Pirdavani, Hasselt University, Belgium

**Road Safety Education and Activities in Germany**
Anne Timmermann, University of Wuppertal, Germany

**Are Experienced Drivers Quicker to Regain Full Situation Awareness in Scenarios Involving Transfer of Control from the Automation to the Driver?**
Timothy J. Wright, University of Massachusetts Amherst, USA

**Mobile Phone Usage while Driving in Qatar: Prevalence and Influential Factors**
Abdel Magid Hamouda, Qatar Road Safety Studies Center, Qatar University, Qatar

**Attitudinal Segmentation of Drivers in Pakistan: The Potential for Effective Road Safety Campaigns**
Zahara Batool, Department of Transportation Engineering and Management, Pakistan

### Session 3

**11:00 am–12:30 pm, Las Vegas**

**Road User Behavioural Issues I**

The session will focus on discussions and understanding road user behaviour and how they act in the traffic systems covering traffic safety theories, models and real cases.

Organised by: ICTCT

Chair(s): Fabio Ford Feris Racy, ABRAMET, Brazil

**Identified Risk Factors as The Basis for The Design of Road Safety Campaigns**
MagalyRomão, Escola de Engenharia de São Carlos/Universidade de São Paulo – EESC USP, Brazil

**CONSOL - Road Safety in The Ageing Societies**
Christine Chaloupka-Risser, FACTUM OG, Austria

**Public Transport for Vulnerable Road User –The Case of São Paulo**
Joaquim Lopes da Silva Jr - Metropolitan Urban Transport Company of São Paulo, Brazil

**Interaction Between Cyclists and Car Drivers and How to Contribute to Their Safety**
Ralf Risser, ICTCT/FACTUM OG, Austria

**Mapping Risk Behaviour and Accident Causation**
Raquel Almqvist, TRANSTECH Brazil, Brazil

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**Lunch 12:30-2:00 pm**
Session 4

2:00-3:30 pm, New York 1

Safety and Infrastructure

Chair(s): Ana Larocca, University of Sao Paulo, Brazil

Understanding Lighting and Safety: A Pilot Study of Arthabaska Region
Mustafa Aldulaimi, Concordia University, Canada

A Case Study of Safety Measures at Median Opening on Four-lane Trunk Roads in China
Chengcheng Tang, RIOH, China

Implementing Research Outputs On Safety Management from CEDR (Conference of European Road Directors) Research Programme
Desmond O'Connor, Transport Infrastructure Ireland, Ireland

Comparative Analysis of Safety Performance Measures for Hotspot Identification: A Case Study of an Urban Area in Fortaleza City, Brazil
Vanessa Jamille Mesquita Xavier, Universidade Federal do Ceará, Brazil

Interior Tunnel Design and Road Traffic Safety
Christopher Patten, VTI, Sweden

Coffee Break 3:30-4:00 pm

Session 5

2:00-3:30 pm, New York 2

Accident Analysis

Chair(s): Christine Nodari, UFRGS, Brazil

Crash Risk Analysis During Fog Conditions Using Real-Time Traffic Data
Mohamed Abdel-Aty, University of Central Florida, USA

Suicide and Accident Classification Methodology
Kenneth Svensson, The Swedish Road Administration, Sweden

Fatalities in Road Traffic, A Result of Accidents or Suicides
Anna-Lena Andersson, The Swedish Road Administration, Sweden

Pattern Mining and Causal Inference of Short-term Weather and Collisions Time Series Data
Yongsheng Chen, RIOH, China

Necessity Analysis of Setting Inside Shoulder for Multi-lane Freeway
Liande Zhong, RIOH, China
### Session 6

2:00-3:30 pm, Las Vegas

**Road User and Behavioural Issues II**

**Organised by:** ICTCT

**Chair(s):** Ralf Risser, ICTCT/FACTUM OG, Austria

**ITS and The Effects On Vulnerable Road Users: The Case of Motorcycles**
Terje Assum, Institute of Transport Economics (TOI), Norway

**Road Safety Performance in Brazil: Towards a Composite Indicator**
Jorge Tiago Bastos, Federal University of Paraná, Brazil

**Bus Drivers Working Hours and The Relationship to Driver Fatigue**
Anna Anund, VTI, Sweden

**The Strategic Highway Safety Plan in Puerto Rico: Accomplishments During the First Two Years of its Implementation**
Benjamin Colucci-Rios, University of Puerto Rico - Mayaguez Campus, Puerto Rico

**Safety Effects of Dynamic Speed Limits On Motorways**
Stijn Daniels, Hasselt University - Transportation Research Institute, Belgium

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### Coffee Break 3:30-4:00 pm

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### Session 7

4:00-5:30 pm, New York 1

**Safety Inspection**

**Chair(s):** Julio Urzua, iRAP Americas, Chile

**Geographic Information System as A Support Tool to Investigate Road Accidents**
Willian Kéviny Souza Berté, Instituto Federal do Espírito Santo, Brazil

**Systemic Safety Methodologies Risk Factor Evaluation on Low-Volume Rural Paved Roadways**
Georges Elias Bou-Saab, Iowa State University - Institute for Transportation, USA

**Implementation of Road Safety Inspections; A Proactive Tool to Model Risk On a Road Network**
Desmond O’Connor, Transport Infrastructure Ireland, Ireland

**Experiences with Road Safety Audit and Inspection Courses and Reports**
Juergen Gerlach, University of Wuppertal, Germany
Session 8

4:00-5:30 pm, New York 2

Speed, Speed Limits and Safety
Chair(s): Christopher Patten, VTI, Sweden

The Relationship Between Road Characteristics and Speed Collected from Floating Car Data
Camilla Sloth Andersen, Aalborg University, Denmark

Development of a Strategy to Prioritize Candidate Locations for Speed Limit Increases on a High-Speed, Undivided Highway Network
Timothy Barrette, Iowa State University, USA

Traffic Safety Effects of New Speed Limits in Sweden
Anna Vadeby, VTI, Sweden

From Structural Equation Modeling to Macroscopic Fundamental Diagram Estimation: Investigating the Impact of Road Segments Safety on Network Level Efficiency
Justin P. Schorr, The George Washington University, USA

Session 9

4:00-5:30 pm, Las Vegas

Assessing Driver Ability, Vehicle Adaption and Driver Training – Can Simulators Contribute?
The aim of this session is to address some essential aspects of safe mobility for all, i.e. including persons with physical, perceptual and cognitive impairments, with an international perspective and specifically the use of driving simulators for assessment, adaptation and training.

Organised by: VTI

Chair(s): Björn Peters, VTI, Sweden

Accessibility of People with Physical Disabilities in Motorized Traffic. The Brazilian Experience
Marcelo Tambasco, ABRAMET, Brazil

The North American Experience: Current Trends for Adaptive Driving
Jenny Nordine, Driving to Independence & ADED, USA

Drive Simulator Training in Brazil: Legislation, Requirements and Effectiveness
Raquel Almqvist, TRANSTECH Road Safety Advisory and Consulting, Ribeirão Preto, Brazil

Towards a Safer Fitness to drive and Driving Ability Assessment Procedure with Joystick Controlled Experimental Tools
Juan Dols Ruiz, Universitat Politècnica de Valencia, Spain

Simulator Based Assessment of Driving Ability
Björn Peters, VTI, Sweden

End of Day One
Forum of European Road Safety Research Institutes (FERSI) is a non-profit association that unites road safety research institutes from 22 European countries. The objective of FERSI is to contribute to road safety research and enhance the road safety by ensuring that the relevant problems are addressed by the best available experts and that solutions recommended by researchers are implemented in the most effective and appropriate way. The Association acts in close cooperation with other European surface transport research organizations.

The main mission of the Association is to promote/coordinate high quality research on road safety issues, consult on implementation of research results and scientifically evaluate implementation outcomes.

In April 2014 FERSI approved its Position Paper “Towards Safer Roads in Europe: Nine Key Challenges for Road Safety Research for the Next Decade”). The paper formulates main research directions that were determined following an analysis of the existing and looming challenges and the demand for corresponding policy solutions.

- Ageing society
- Vulnerable road users
- Cultural diversity
- Vehicle automation and ITS
- The burden of injuries
- Safe road design
- Educating & training road users
- Behavioural change
- Road safety management

Find research on Swedish traffic safety and other transport related areas via the Swedish Transport Research Portal or contact the Library and Information Centre (BIC) at VTI for professional assistance.

www.transportportal.se
www.vti.se/en/library
bic@vti.se
**Keynote session**

9:00-10:30 am, New York

**Traffic Violations: Causes and Cures**
Dr. Sonja Forward, VTI, Sweden

**Pro-active Road Safety Research and Application Including the Use of Big Data**
Prof. Mohamed Abdel-Aty, University of Central Florida, USA

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**Session 10**

11:00 am-12:30 pm, New York 1

**Health and Injuries**

Chair(s): Jennifer Oxley, Monash University, Australia

**Exploring The Clinical Metrics to Assess the Health Cost Impact of Traffic Injuries**
Sara Maria Pinho Ferreira, Faculty of Engineering University of Porto, Portugal

**Undiagnosed Attention Deficit Hyperactivity Disorder (ADHD) among unionized drivers in Ghana: Public Health and Policy implications**
Thaddeus P. Ulzen, University of Alabama, USA

**Sight Measurability and Impact On Safe Driving**
Birgitta Thorslund, VTI, Sweden

**Exploring Different Impacts of Socioeconomic Characteristics on Road Traffic Injuries**
Ali Pirdavani, Hasselt University, Belgium

**ADHD Teen Driver Evaluation**
Melissa Paciuilli, UMass Amherst, USA

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Coffee Break 10:30-11:00 am

Lunch 12:30-2:00 pm
### Session 11

**11:00 am-12:30 pm, New York 2**

**Vulnerable Road Users I**

Chair(s): Marilita Braga, Federal University Rio de Janeiro, Brazil

**Social Network Effects on Attitudes about Pedestrian Street Crossing Behavior: Preliminary Findings**
John N. Ivan, University of Connecticut, USA

**A Methodology to Quantify Pedestrian Crash Rates against Statewide Averages**
Hatem Abou-Senna, University of Central Florida (UCF), USA

**A Behavioural Study of Quadbike Drivers**
Henriette Wallén Warner, VTI, Sweden

**The First Integrated Traffic Calming Program Benefitting Vulnerable Road Users in Bangladesh: Results and Implications for LMICs**
Jasper Vet, Safe Crossings, The Netherlands

**A Case Study of Using iRAP Model to Improve Non-Motorised Transport in Tianjin, China**
Han Hu, Research Institute of Highway (RIOH), China

### Session 12

**11:00 am-12:30 pm, Las Vegas**

**Safe Road Design and Maintenance**

Forum of European Road Safety Research Institutes (FERSI) and Forum of European National Highway Research Laboratories (FEHRL) are networks of European road transport research institutions, whereas FERSI focuses explicitly on road safety and FEHRL is dealing with road engineering, maintenance and operation. Safe road design and maintenance is a research priority of both session organisers.

Organised by: FERSI and FEHRL Chair(s): Horst Schulze, FERSI and Thierry Goger, FEHRL

**Opening statement**
Horst Schulze, FERSI, Germany and Thierry Goger, FEHRL, Belgium

**Barriers to Transport Safety and Prospects for Overcoming Them – The Case of Norway**
Terje Assum, Institute of Transport Economics (TOI), Norway

**ECORoads Project**
Thierry Goger, FEHRL, Belgium

**Traffic Safety Effects of 2+1 Roads in Sweden with Median Barrier**
Anna Vadeby, VTI, Sweden

**Research and Application of Systematic Traffic Engineering Technology Approach in China**
Wei Zhou, Ministry of Transport, China

**Simulations with Average Male and Female Dummy Models with Two Seat Concepts in The Euro NCAP Low Severity Rear Impact Test Configuration**
Astrid Linder

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**Lunch 12:30-2:00 pm**
Session 13

2:00-3:30 pm, New York 1

Field Studies, Methods and Results
Chair(s): Maria Alice Jacques, ANPET, Brazil

Naturalistic Driving Scene Categorization Judgments from Crowdsourcing for Driving Automation Systems
Christopher D. Cabrall, HFauto (Human Factors of Automated Driving), Delft University of Technology, The Netherlands

Analyzing Stopping Behavior at Rural Intersections Using SHRP 2 Naturalistic Driving Data
Georges Bou Saab, Iowa State University, USA

Evaluation of Methods for The Assessment of Attention While Driving
Katja Kircher, VTI, Sweden

Assessing Daily Driving and Working Hours for Commercial Drivers in A Naturalistic Study
Richard Hanowski, Virginia Tech Transportation Institute, USA

Session 14

2:00-3:30 pm New York 2

Vulnerable Road Users II
Chair(s): John Ivan, University of Connecticut, USA

Lecture
Jennifer Oxley, Monash University Accident Research Centre, Australia

Accidents Between Cyclists and Heavy Vehicles Turning Right. Conflict and Behavioral Studies in Intersections in Central Stockholm
Karin Hassner, WSP Parsons Brinckerhoff, Sweden

Randomized Trials and Self-Reported Accident as A Method to Study Safety-Enhancing Measures for Cyclists – Two Case Studies
Harry Lahrmann, Traffik Research Group, Aalborg University, Denmark

Turning Accidents Between Vehicles and Cyclists Driving Straight Ahead
Janina-Charline Sachs, Technische Universität Berlin, Germany

Pedestrian Crossing Behavior and Compliance at Signalized Intersections
H. Joon Park, New York City Department of Transportation, USA

Coffee Break 3:30-4:00 pm
Session 15

2:00-3:30 pm, Las Vegas

Safety Analysis

Chair(s): Sara Ferreira, University of Porto, Portugal

Leveraging High-Resolution Traffic Data to Understand the Impacts of Congestion On Safety
Tingting Huang, Iowa State University, USA

Factors in Differential Safety Performance Across Different Income Levels
Luana Ozelim, University of Alabama, USA

Evaluation of Safety Performance in Urban Networks: A Case Study of Fortaleza City/Brazil
Flavio Cunto, Universidade Federal do Ceará, Brazil

Violent Events On the Road: Risk Perception of Traffic-Related and Non Traffic-Related Situations
Marilita Gnecco de Camargo Braga, COPPE/UFRJ - Federal University of Rio de Janeiro, Brazil

Coffee Break 3:30-4:00 pm

NORDIC ROAD AND TRANSPORT RESEARCH

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nordicroads.com/subscribe

Nordic Road & Transport Research contains news from:

Norwegian Public Roads Administration
VTI
TOI
VTT
4:00-5:30 pm. New York, Las Vegas

At 4:00 pm the poster session will begin with a brief presentation from each author.

**Predicting Local Road Crashes Using Socio-economic and Land Cover Data**
John N. Ivan, University of Connecticut, USA

**The Effect of Speed Limits on Drivers’ Speed Choice: A Random Parameters Seemingly Unrelated Equations Approach**
Panagiotis Ch. Anastasopoulos, University at Buffalo, The State University of New York, USA

**Exploring Cyclist Accidents and Potential of Road Safety Measures**
Shlomo Bekhor, Technion - Israel Institute of Technology, Israel

**Safety Assessment of Extended Highway Corridors**
Alexei Tsyganov, Virginia Department of Transportation, USA

**Guidance as to Appropriate Sample Sizes for the Estimation of Safety Performance Functions for Local Conditions**
Peter Savolainen, Iowa State University, USA

**High Friction Surface Treatment for High Crash Locations: Site Selection Process**
Omar Smadi, Iowa State University, USA

**A Grouped Random Parameters Bivariate Probit Analysis of Perceived and Observed Aggressive Driving Behavior: A Driving Simulation Study**
Panagiotis Ch. Anastasopoulos, University at Buffalo, The State University of New York, USA

**Systemic Safety Methodologies Risk Factor Evaluation on Low-Volume Rural**

**Paved Roadways**
Georges Elias Bou-Saab, Iowa State University, USA

**Safety Effects of Exclusive and Concurrent Signal Phasing for Pedestrian Crossing**
John N. Ivan, University of Connecticut, USA

**Infrastructure Solutions to Improve Elderly Pedestrian Safety**
Shlomo Bekhor, Technion - Israel Institute of Technology, Israel

**Traffic Safety in Urban Highways: A Literature Overview**
Cássio Leandro do Carmo, Universidade Federal de São Carlos, Brazil

**A Random Thresholds Random Parameters Ordered Probit Analysis of Highway Accident Injury-severities**
Panagiotis Ch. Anastasopoulos, University at Buffalo, The State University of New York, USA

**Methods to Determine of Crest Vertical Curves Parameters: Literature Review**
Aurenice Da Cruz Figueira, São Carlos School of Engineering – EESC/USP, Brazil

**Setting up School Route Maps**
Anne Timmermann, University of Wuppertal, Germany

**Deaf/Blind Pedestrians**
Gregory Kent Smith, Headsup Enterprise, Bermuda

“Buddies” and “Rookies”: A New

End of Day Two
Method of Education and Training for Motorcyclists
Klaus Robatsch, Kuratorium für Verkehrssicherheit, Austria

Suicide and Accident Classification Methodology
Kenneth Svensson, Swedish Transport Administration, Sweden

An Empirical Exploratory Analysis of Factors Determining High-Crash Locations Using the Random Parameters Ordered Probit Model
Panagiotis Ch. Anastasopoulos, University at Buffalo, The State University of New York, USA

Peter Savolainen, Iowa State University, USA

Safety Impacts of Travel Information Centers in Texas
Jose Weissmann, University of Texas at San Antonio, USA

Traffic Crashes in Work Zones: An Overview of the Brazilian Federal Highways
Camila Belleza Maciel Barreto, Laboratório de Transportes e Logística - LabTrans/UFSC, Brazil

Traffic Crashes in Work Zones: An Overview of the Brazilian Federal Highways
Gonzalo Guillermo Moreno Contreras, Federal University of Santa Catarina, Brazil and University of Pamplona, Colombia

End of Day Two
May 18th

Conference Reception

Welcome to enjoy an evening of tasty food, entertainment and the possibility to socialize with the other conference delegates!

7:20 pm
Transfer buses provided by XX will depart in front of the Windsor Flórida Hotel to take us to the nearby conference reception venue Rio Scenarium.

8:00 pm
Conference reception at Rio Scenarium.

You will be provided with a wristband to show that you are a part of the RS5C conference reception party. Keep this wristband on until midnight to gain entrance to the RS5C standing buffet and beverages. You’re welcome to stay after midnight, but at your own expense.

More about the conference reception venue can be found on www.rioscenarium.com.br
Keynote session

9:00-10:30 am, New York

Next Steps When Improving Road Safety in Low- And Middle-Income Countries
Fred Wegman, Delft University of Technology, The Netherlands

Road Safety in Latin-America
Hilda María Gómez, CAF, Colombia

Coffee Break 10:30-11:00 am
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<td><strong>Infrastructure I</strong></td>
<td><strong>Crash and Conflict Analysis</strong></td>
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<td>Chair(s): Leif Sjögren, VTI, Sweden</td>
<td>Chair(s): Flavio Cunto, Federal University of Ceará, Brazil</td>
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<td><strong>Length of Arrester Beds of Truck Escape ramps Based on Simulation</strong></td>
<td><strong>Pedestrian-Vehicle Conflict Analysis at Mid Block Crossings using Micro-Simulation</strong></td>
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<td>Zhang Gaoqiang, RIOH, China</td>
<td>Essam Radwan, University of Central Florida (UCF), USA</td>
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<td><strong>Maintenance Model of Highway Emergency and Rescue System</strong></td>
<td><strong>Developing Crash Models with Supporting Vector Machine for Urban Transportation Planning</strong></td>
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<td>Zhu Liwei, RIOH, China</td>
<td>Xiaoduan Sun, University of Louisiana, USA</td>
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<td><strong>Using Weigh-In-Motion Technology to Predict the Likelihood of Exceeding the Capacity of a Road Safety Barrier</strong></td>
<td><strong>Collision Prediction Models with Longitudinal Data: An Analysis of Contributing Factors in Collision Frequency in Road Segments in Portugal</strong></td>
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<td>Andrew Burbridge, CARRS-Q, Queensland University of Technology and Queensland Government, Department of Transport and Main Roads, Australia</td>
<td>Jocilene Costa, University of Minho, Brazil</td>
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<td><strong>Research On Feasibility of Computational Fluid Dynamics (CFD) Method for Traffic Signs Board Calculation</strong></td>
<td><strong>An Explanatory Mechanism for Right-hook Crashes at Signalized Intersections</strong></td>
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<td>Gaoqiang Zhang, RIOH, China</td>
<td>David S Hurwitz, Oregon State University, USA</td>
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<td><strong>Development of a Crash Modification Factors Model in Europe</strong></td>
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<td>Janina-Charline Sachs, Technische Universität Berlin, Germany</td>
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Lunch 12:30–2:00 pm
### Session 18

**11:00 am-12:30 pm, Las Vegas**

**Benchmarking Road Safety in Latin America**

This project initiated by the International Transport at the OECD and the Ibero America Road Safety Observatory (OISEVI), with support from the FIA, aims at developing a methodology to assess road safety performance in a selection of Latin America countries and benchmarking their performance against a set of indicators and best practices. The expected outcome is to offer policy makers in Latin America a tool to assess the weaknesses and strengths of each country and identify areas deserving policy attention and where the experience of other countries could usefully been used.

The Workshop will present the values of a benchmarking exercise, the methodologies to conduct the analysis in Latin America and preliminary findings from the study.

**Organised by:** ITF, OISEVI, FIA  
**Chair(s):** Corina Puppo, OISEVI, Argentina and Véronique Feypell, ITF, France  
**Concept of Road Safety Benchmarking: Example of SUNFLOWER / Objectives of the ITF/FIA/OISEVI Project**  
Fred Wegman, Delft University of Technology, the Netherlands

- Case Study on Pedestrians  
- Case Study on Motorcyclists  
- Case Study on Infrastructure, Analysis of iRAP Data

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### Session 19

**2:00-3:30 pm, New York**

**The Importance of Road Infrastructure Safety in Achieving the SDG Goals**

This session aims at providing political leaders and policy makers with practical advice on what is a three-star road and the social and economic benefits of achieving the minimum three star standard. It further aims to share Government and toll-road targets to maximise travel on three-star, four-star and five-star roads for pedestrians, cyclists, motorcyclists and vehicle occupants.

The session includes an interactive session on maximising travel on three-star or better roads.

**Organised by:** iRAP  
**Chair(s):** Julio Urzua, iRAP Americas, Chile  
Valter Tani, Universidade Federal de Santa Catarina, Brazil  
Hilda María Gómez, Dirección de Análisis y Programación Sectorial, CAF, Colombia  
Zhou Wei, Ministry of Transport, China
### Session 20

**2:00-3:30 pm, Las Vegas**

**Infrastructure II**

Chair(s): Antonio Couto, University of Porto, Portugal

**Data Quality Management Related to Road Infrastructure Condition and Safety**
Leif Sjögren, VTI, Sweden

**High Friction Surface Treatment for High Crash Locations: Site Selection Process**
Omar Smadi, Iowa State University, USA

**Rutting Potential of Elvaloy® Terpolymer and Polyphosphoric Acid-Modified Asphalt Binders Based On The MSCR Test and The Burgers Model**
Matheus David Inocente Domingos, University of Sao Paulo, Brazil

**Research On Express Highway Safety Features and Improvement Measures**
Gaoqiang Zhang, RIOH, China

**Influence of Skid Resistance in Simulated Vehicular Conflicts**
Flavio Cunto, Federal University of Ceará, Brazil

### Closing Session

**3:30-4:00 pm, New York**

**Closing Session**

Dr. Magnus Hjälmdahl, Chairman for RS5C Organising Committee, VTI, Sweden

Mr. Erik Bromander, State Secretary to the Swedish Minister for Infrastructure, Sweden

Prof. Flavio Cunto, Federal University of Ceará, Brazil

Oh Young-tae, President of Korea Transportation Safety Authority, Korea

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**End of Day Three**
VTI, the Swedish National Road and Transport Research Institute

VTI is an independent and internationally prominent research institute in the transport sector. The Institute is a government agency under the Swedish Government.

VTI's principal task is to conduct research and development related to infrastructure, traffic and transport. We work with all modes of transport and the fields of pavement technology, infrastructure maintenance, vehicle technology, traffic safety, traffic analysis, people in the transport system, environment, planning and decision making processes, transport economics and transport system. The knowledge that the institute provides gives a basis for decisions for players in the transport sector and in many cases finds direct application in both national and international transport policies.

VTI conducts commissioned research in an interdisciplinary organisation. The institute works with investigations, provides consultancy services, and performs different kinds of measurement and testing services. The institute has a great deal of technically advanced equipment and world-class driving simulators. There is also a laboratory for road materials and a crash test laboratory.

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ANPET

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Fundada em 1986, a Associação Nacional de Pesquisa e Ensino em Transportes - ANPET - é uma instituição sem fins lucrativos, criada com o propósito de atuar como um fórum especializado para discussão da pesquisa e ensino em transportes no Brasil. Sua missão é servir como meio de representação e integração de pesquisadores, estudantes e profissionais de instituições de ensino e pesquisa, órgãos e empresas, visando a geração e difusão do conhecimento no setor de transportes para aperfeiçoar a produção técnico-científica, qualificar o ensino e a pesquisa e formatar a transferência de tecnologia gerada nos centros de pesquisa para o setor produtivo do país.
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