



## PROF. DR.-ING BERNHARD FRIEDRICH

### Key Experience and Background

Dr. Bernhard Friedrich has over 30 years of experience in Transportation Consultancy, Research, and Training & Education. Dr. Friedrich has a strong background in traffic demand modelling, traffic flow theory, optimization and data analytics. He is researcher and practitioner at the same time. As a practitioner he was involved in more than 200 transport consultancy projects with Roads & Transport Authorities in a national and international context. As researcher he is head of one of the leading transportation research institutes in Germany with a record of more than 100 successfully accomplished research projects.

He published more than 150 peer-reviewed journal articles & conference papers, taught more than 80 specialized transport academic courses and organizes and teaches since 17 years a summer school on traffic management to professionals/senior managers.

#### Profession

- Transportation Planning and Modelling Expert

#### Qualifications

- 1997 – Ph.D. Technische Universität München, Germany.
- 1990 – Diploma in Civil Engineering, Technische Universität München, Germany.

#### Memberships

- German Academy of Technical Sciences – acatech
- Braunschweig Academy of Sciences
- German Research Society for Road and Traffic Engineering
- Automotive Research Center Niedersachsen
- Association of European Operational Research Societies
- ITS Bavaria

#### Areas of Expertise

- Transport Modelling
- Transport Planning
- Traffic Engineering
- Public Transportation
- Intelligent Transport Systems
- Traffic Safety

#### Publications

- [> 100 reviewed journal- und book contributions](#)
- ORCID-ID: 0000-0003-4290-3614

#### Awards

- BMW Scientific Award '99
- Biannual Medal of the German Road and Transportation Research Association

### Professional History

- since 2019** Dean of the Faculty for Architecture, Civil Engineering and Environmental Sciences at Technische Universität Braunschweig
- since 2018** Co-founders and Managing Director of **TRAPLAN** Consultancy, Hannover
- since 2007** University Professor at Technische Universität Braunschweig and Director of the Institute of Transportation and Urban Engineering
- 2008 - 2017** Managing Director of TransVer Consultancy, Munich
- 2000 - 2007** University Professor for Planning, Design and Operation of Road Transport Systems and Director of the Institute of Transport, Road Engineering and Planning at the Leibniz Universität Hannover
- 1995 - 2000** Managing Director of TransVer Consultancy, Munich
- 1990 – 1995** Researcher at Technische Universität München, Traffic Planning and Transport Operation Unit

### Key Projects

- Strategic Master Plan for the Regional Development of the Munich Airport, Germany;
- Traffic Development Plan for the Research and Engineering Center of BMW AG in Munich, Germany;
- Traffic Development Plan for the New Engineering Center of Audi AG in Ingolstadt, Germany
- Cairo Festival City – Smart Parking Application, Egypt;
- ATVAM Handover Plan for ITS-Infrastructure in KSA;
- Planning and Optimizing Traffic Signal Control for the City of Munich in the Context of a Frame Contract
- Evaluation of ITS Measures on the German Motorway Network by Microsimulation
- Transportation Master Plan Modelling, and ITS application for Jeddah Ring Roads, KSA
- Internal and External Traffic Development Plan for the Volkswagen Plants in Wolfsburg, Germany
- Masterplan Traffic for the Urban Development of Green Dragon City Baoji, China.