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Nota di contenuto	Intro -- Organization -- Preface -- Contents -- Measurements and Control in Transport Networks -- Post-Pandemical Regional Transport Demand Variations -- 1 Introduction -- 2 Problem Area Description -- 2.1 Location -- 2.2 Public Transport Supply -- 3 Methodology -- 4 Results -- 4.1 Daily Variation -- 4.2 Weekly Variation-Working Days -- 4.3 Weekly Variation-Weekend -- 5 Discussion -- 6 Conclusions -- References -- Signature of Vehicles Crossing a Detection Field Composed of Image Blocks -- 1 Introduction -- 2 Input Images -- 3 Detection Field -- 4 Parameters of Image Blocks -- 5 Background Blocks -- 6 Classification of Blocks -- 7 Vehicle Signature -- 8 Background Updating -- 9 Experimental Results -- 10 Conclusions -- References -- Passengers Satisfaction with Commuter Rail: A Case Study of Rhine-Ruhr Metropolitan Region -- 1 Introduction -- 2 Literature Review -- 3 Characteristics of the Commuter Rail System Managed by VRR and the Research Methodology -- 4 Analysis of the Results of Passenger Satisfaction Surveys from Commuter Rail -- 5 Analysis of the Results of Passenger Satisfaction Surveys from Individual Operators -- 6 Discussion -- 7 Conclusions -- References -- Traffic Flow Modelling, Optimization, and Simulation -- A Microsimulation-Based Modelling Approach for Connected and Automated Vehicles on Roundabouts -- 1 Introduction -- 2

Microsimulation Modelling with AVs and CAVs -- 3 Data and Methodology -- 3.1 Data Collection -- 3.2 Setting up the Roundabout in Aimsun Next -- 3.3 The Simulation Framework in Aimsun Next -- 3.4 Results -- 4 Discussion and Conclusions -- References -- Modeling of Total Occupancy Curves with Integrated Single Parking Times as Input for Microscopic Traffic Simulation -- 1 Introduction -- 2 Input Data -- 2.1 Regular Parking Ticket Counts by the Park-and-Ride Facility Operator. 2.2 Continues Spot State Observation by Pressure-sensitive Sensors -- 3 Prediction of Daily Occupancy Curves by a Neural Network -- 3.1 Design of the Neural Network -- 3.2 Training and Testing Procedure -- 3.3 Solution Quality and Exemplary Results -- 4 Generation of Parking Procedures Based on Spot State Data -- 4.1 Analysis of Historical Spot State Data -- 4.2 Generation of Random Parking Procedures -- 5 Fusion of Parking Occupancy and Parking Time Data -- 5.1 Problem Analysis and Conceptual Model -- 5.2 Formulation of an Optimization Model -- 5.3 Solving the Optimization Problem -- 5.4 Optimization Results -- 6 Conclusions and Outlook -- References -- Road Traffic Safety Assessment-Strategies, Programs, and Solutions -- The Use of Simulation Tools to Minimize the Risk of Dangerous Events on the Airport Apron -- 1 Introduction -- 2 The Decision Model Minimizing the Risk of Hazardous Events -- 2.1 The Main Assumptions -- 2.2 Data Input and Decision Variables -- 2.3 Limits and the Criterion Function -- 3 The Ant Algorithm -- 3.1 The Main Assumptions -- 3.2 The Steps of Algorithm -- 4 Case Study -- 4.1 Data Input -- 4.2 Determining the Theoretical Distribution of Occupancy of Sections and Nodes -- 4.3 The Results -- 5 Conclusions -- References -- Numerical Investigation on the Piston Effect in Subway Tunnels -- 1 Introduction -- 2 Numerical Model -- 3 Results -- 4 Conclusions -- References -- Problems of Studies on Emotions in Road Traffic -- 1 Introduction -- 2 Malleable Types of Anxiety in Road Traffic -- 3 Limits of Interpretation -- 4 Measurement Methodology -- 5 Research Hypotheses -- 6 Potential Measurement Data -- 7 Conclusions -- References -- Author Index.
