LIST OF ACCEPTED PAPERS*

ACCOMMODATING USERS

• FHWA Alternative Intersection Informational Guides
• Transforming Design Policy: A Path to Practical Design Reform
• Developing an Effective Shoulder and Centerline Rumble Strips/Stripes Policy to Accommodate all Road
• Cyclist Safety: An Overview of Germany’s Design Guidelines, Research and Accident Statistics
• Designing Interchanges for all Users in the Urban/Suburban Context
• Effects of Road Geometry on the Interaction Between Cyclists and Vehicles on Two-Land Rural Highways
• Modeling Diverging Diamond Interchange under Constraints of Ramp Metering, HOV Lane and BRT Transit
• Guidelines for Designing Low/Mid Speed Roadways that Serve all Users – NCHRP Project 15-48 Update

ALIGNMENT SECTION

• Methodology for Planning Multi-Functional Transport Corridors
• Prevention of Overtaking Accidents on 2-Lane Rural Roads
• FHWA Alternative Intersection Informational Guides
• The Research of Location for Emergency Parking Strip of Mountain Area Expressway Tunnel
• Calculation of Water Film Paths as Geodesic Curves on a 3D Surface to Address Hydroplaning Phenomena
• All-Round Methodology for Upgrading Existing Rural Roads
• Highway Geometric Design Manual Argentina
• Investigating the Influence on Safety and Traffic Performance of 2+1 Road Sections in Poland
• Methodology for the Numerical Calculation of Racing Lines
• Safety Considerations for Cross-Sectional Design of 80km/h Rural Roads in the Netherlands
• A11 Zagreb – Sisak Highway
• Performance-Based Superelevation Transition Design
• Vertical Alignment Optimization
• Creating a Safe System Compliant State Highway Network
• Use of Side Friction in Horizontal Curve Design: A Margin of Safety Assessment
• Cross Section Requirements of Current Vehicle Combinations in Mexico
• Development of Intelligent Design Platform for International Roadway Projects
• Analyzing and Improving the Applicability of IHSDM Crash Prediction Model for Freeways in China
• Roadway Safety Evaluation: Methodology and Tools in China
• Three Dimensional Simulation and Application of Road Engineering Based on a Game Engine
• Road Safety Evaluation Based on 3-D Geometric Alignments
• Roadway Geometric Design in Two Countries: Similarities and Differences
• Insight in Horizontal Curves, Research on Behalf of the Update of the Dutch Road Design Guidelines
• Ramps in Interchanges, Relations between Geometric Design, Crash Rates and Driving Speeds
• Designing of 2+1 Road Bypasses of Towns
• I-90 Design Challenges and Innovations for a 22-Mile Section of the Jane Addams Tollway
• Design of Horizontal Curves Using Reliability Analysis
• Roadsense – Redesign of Transverse Profile on a 2 Lane Rural Road
• A Methodology for Estimation of Vertical-Alignment Geometric Parameters
• Stopping-Sight-Distance Simulation Using a New Probabilistic Approach
• Geometric Design for Rural Bridge Replacements at Historic Ferry Crossings
• British Columbia Highways: An Overview of Historical and Current Design Challenges
• Past-Present-Future of the Trans-Canada Highway in BC from Kamloops to the Alberta Border
• I-287 at Westchester Ave Interchange 8 Reconstruction
• Bottlenecks in Urban Main and Through Roads – Safe Design Required
• Effects of Hard Shoulder Lanes Configuration on Driver’s Behaviour
• Design of Multi-Level Interchange at Sewri, Mumbai, India

**CONTEXT SENSITIVE SOLUTIONS**

• Practical Design Implementation Challenges and Barriers
• Transforming Design Policy: A Path to Practical Design Reform
• Performance-Based Analysis of Geometric Design of Highways and Streets
• Design Exception Considerations for the State Highway Network
• Creating a Safe System Compliant State Highway Network
• Bridging the Gap, Overcoming Challenges in Highway Safety Manual Implementation
• Context Sensitive Design in Ljubljana
• Geometric Design for Rural Bridge Replacements at Historic Ferry Crossings
• Facing up to the need for Road Design Guidelines for Brownfield Sites
• Past-Present-Future of the Trans-Canada Highway in BC from Kamloops to the Alberta Border

**DESIGN CONSISTENCY**

• Consistency Analysis of a Multilane Highway Through the Safety Criteria - Preliminary Results
• Highway Geometric Design Manual Argentina
• New Guidelines for the Geometric Design of Rural Roads in Germany
• Identification of Horizontal Alignment Inconsistencies of Czech Rural Roads
• Three-Dimensional Stopping Sight Distance Control on Left-Turn Curves of Freeways
• Implementation of Human Factors in Road Design
• Performance-Based Analysis of Geometric Design of Highways and Streets
• Vertical Alignment Optimization
• Design Exception Considerations for the State Highway Network
• Creating a Safe System Compliant State Highway Network
• Roadway Safety Evaluation: Methodology and tools in China
• Three Dimensional Simulation and Application of Road Engineering based on a Game Engine
• Performance Based Design Criteria and knowledge in a New Road Design Manual for the State of Qatar
• Acceleration and Deceleration Models on Horizontal Curves on Two-Lane Rural Roads
• Application of System Reliability Analysis in Geometric Design
• Effects of Transition Curves on Sight Distances
• A Methodology for Estimation of Vertical-Alignment Geometric Parameters
• British Columbia Highways: An Overview of Historical and Current Design Challenges
• Past-Present-Future of the Trans-Canada Highway in BC from Kamloops to the Alberta Border
• Safety Evaluation for Highway Geometric Design based on Vehicle Dynamics Simulation
• A Comparative Study on Turbo-Roundabout and Spiral Roundabouts
• Studying the Effect of Sidewalk/Bicycle-Lane gaps on Pedestrian Safety
• Operating Speed Profile Model for Rural Two-Lane Roads in Egypt
• Designing for Consistency: Matching Applications to Scenarios in the use of Pavement Markings

**OPERATIONS & SAFETY**

• Examination of the Trafficability of at Grade Intersections with Truck Trailer Combinations
• Prevention of Overtaking Accidents on Two-Lane Rural Roads
• Safety Effects of Height of Central Islands, Sight Distances, Markings and Signage at Roundabouts
• Practical Design Implementation Challenges and Barriers
• Highway Geometric Design Manual Argentina
• Investigating the Influence on Safety and Traffic Performance of 2+1 Road Sections in Poland
• Reference Trajectories of Vehicles on Road Alignments
• Video-Tracking Techniques for the Analysis of Operating Conditions on Acceleration Lanes
• Roundabout Design Optimization for Safety and Operations
• Cyclist Safety: An Overview of Germany’s Design Guidelines, Research and Accident Statistics
• Levels of Service of 2+1 Roads Based on Operational Measures of Effectiveness
• Characterization of Passing Zones Based on Curvature Change Rate: Operational Impact
• Operational and Safety Attributes of an Alternative Design, Space-Efficient One-Sided Interchange
• Effects of Cross-Slope Break Roadway Departure Recovery of Trucks on Horizontal Curves
• Safety Considerations for Cross-Sectional Design of 80km/h Rural Roads in the Netherlands
• Area-wide Analysis of Right-Turn Crashes at Intersections
• Safety Effectiveness of the Conversion of Two-Lane Roadways to Four-Lane Divided Roadways
• Accident Prediction Models for Hungarian Two-Lane Rural Main Roads using Geometry Data
• Performance-Based Analysis of Geometric Design of Highways and Streets
• Creating a Safe System Compliant State Highway Network
• Investigating the effect of Intersection Geometric Features on Red Light Running (RLR) Crashes
• Roadway Geometric Design and Safety: Chinese Experience
• The Role of Intersection Influences on Signalized Traffic Operation
• Road Safety Evaluation Based on 3-D Geometric Alignments
• Bridging the Gap, Overcoming Challenges in Highway Safety Manual Implementation
• Insights from the ISATe Methodology on Freeway and Interchange Design Policy
• Multivariate Evaluation about the Influence of Road Quality on Fatal Accidents
• An Overview of Road Safety in the Mena Region
• Performance Based Design Criteria and knowledge in a New Road Design Manual for the State of Qatar
• Evaluation of Safety Performance of Inter-City Highway under Heterogeneous Traffic
• Insight in Horizontal Curves, Research on Behalf of the update of the Dutch Road Design Guidelines
• Ramps in Interchanges, Relations between Geometric Design, Crash Rates and Driving Speeds
• Application of System Reliability Analysis in Geometric Design
• Effects of Transition Curves on Sight Distances
• Rumble Strip Performance in Washington State
• Design of Horizontal Curves Using Reliability Analysis
• Roadsense – Redesign of Transverse Profile on a 2 Lane Rural Road
• Stopping-Sight-Distance Simulation Using a New Probabilistic Approach
• Suitability Analysis of Reliability Theory Applied in Highway Geometric Design
• Effects of Road Slope and Vehicle’s Weight on Truck’s Fuel Consumption
• On the Transferability of Crash Modification Factors for Highway Geometric Design Elements
• Simulation Modeling for Prioritizing Highway Sections for Placement of Median Barriers
• I-287 at Westchester Ave Interchange 8 Reconstruction
• Development of a Conceptual Model of Curve Driving for Isolated Rural 2 Lane Curves using SHRP 2 NDS
• Exploring the impact of Roundabouts Design Consistency on Safety: Roundabouts Vs. Other Circular Intersections
• Bottlenecks in Urban Main and through Roads – Safe Design Required
• “Road Safety Audit Light” for setting up School Route Maps
• Effects of Hard Shoulder Lanes Configuration on Driver’s Behaviour
• Evaluation of the Side Friction of Vehicles in Coinciding of Horizontal and Crest Vertical Curves
• Analyzing the influence of Coinciding Horizontal Curves and Vertical Sag Curves on Side Friction Factors
• The Side Friction of Vehicles in Coinciding of Horizontal Curves and Crest Vertical Curves
• Effect of Shoulder Width and Drop-Off on Vehicle Rollover and Shoulder Crossover
• Analyzing the influence of Foreslope Design on Errant Vehicle Safety using Dynamics Simulations
• Critical Geometric Parameters Causing High Fatalities in Karachi Pakistan
• Designing for Consistency: Matching Applications to Scenarios in the use of Signing
• Designing for Consistency: Matching Applications to Scenarios in the use of Pavement Markings

**Human Factors**

• All-Round Methodology for Upgrading Existing Rural Roads
• Highway Geometric Design Manual Argentina
• Methodology for the Numerical Calculation of Racing Lines
• Introducing a New formula for Vertical Curves based on the Passenger Comfort Factor
• Implementation of Human Factors in Road Design
• Influence of Night-Time Lighting Restrictions on Road Design
• An Overview of Road Safety in the Mena Region
• Performance Based Design Criteria and knowledge in a New Road Design Manual for the State of Qatar
• Ramps in interchanges, Relations between Geometric Design, Crash Rates and Driving Speeds
• Roadsense – Redesign of Transverse Profile on a 2 Lane Rural Road
• Using a Driving Simulator to Assess the Driver-Road Sign's Communication. A Case Study in Brazil
• Development of a Conceptual Model of Curve Driving for Isolated Rural 2 Lane Curves using SHRP 2 NDS
• Effects of Hard Shoulder Lanes Configuration on Driver’s Behaviour

INTERCHANGES/FREeway
• FHWA Alternative Intersection Informational Guides
• Highway Geometric Design Manual Argentina
• Traffic Impact Assessment of Partial Cloverleaf Interchange
• Designing Interchanges for all users in the Urban/Suburban Context
• Operational and Safety Attributes of an Alternative Design, Space-Efficient One-Sided Interchange
• Operational and Environmental Comparisons between Left-Turn Bypass, Diverging Flow and Displacement
• Design of Connector Roads in Four-Way interchanges regarding Driving Behavior and Road Safety
• Insights from the Isate Methodology on Freeway and Interchange Design Policy
• Insight in Horizontal Curves, Research on Behalf of the update of the Dutch Road Design Guidelines
• Ramps in interchanges, relations between Geometric Design, Crash Rates and Driving Speeds
• I-90 Design Challenges and Innovations for a 22-Mile section of the Jane Addams Tollway
• Hybrid Interchange Designs: Evolving Something New from Something Old
• British Columbia Highways: An Overview of Historical and Current Design Challenges
• Modeling Diverging Diamond Interchange under Constraints of Ramp Metering, HOV Lane and BRT Transit
• Past-Present-Future of the Trans-Canada Highway in BC from Kamloops to the Alberta Border
• I-287 at Westchester Ave Interchange 8 Reconstruction
• Diverging Diamond Interchanges and their Relation to Sustainable Design
• Improvement of the Existing Interchange at I-15 and Railroad Canyon Road in City of Lake Elsinore
• Effects of Hard Shoulder Lanes Configuration on Driver’s Behaviour
• Design of Multi-Level Interchange at Sewri, Mumbai, India

INTERSECTIONS
• FHWA Alternative Intersection Informational Guides
• Safety effects of height of Central Islands, Sight Distances, Markings and Signage at Roundabouts
• OR213: I-205 to Redland Road Overcrossing (OR213 Jug-handle Project)
• Highway Geometric Design Manual Argentina
• Traffic Impact Assessment of Partial Cloverleaf Interchange
• Roundabout Design Optimization for Safety and Operations
• A Case for Geometrically-Based Roundabout Capacity Equation Modeling
• Auxiliary Lane for Minor-Road Left-Turning Vehicles on Stop-Controlled T-Intersections
• Design Considerations of Modern Roundabouts
- Designing Interchanges for all users in the Urban/Suburban Context
- Towards Safer Intersections
- Innovative Designs for Mid-Countryside Junctions
- Operational and Environmental Comparisons between Left-Turn Bypass, Diverging Flow and Displacement
- Development of Warrants for Unsignalized Intersection turn Treatments
- Operational Comparison of Conventional Intersections and Jug-handle Intersections
- The role of Intersection Influences on Signalized Traffic Operation
- Safety Verification of Design Elements in Intersections along Rural Roads
- Hybrid Interchange Designs: Evolving Something New from Something Old
- British Columbia Highways: An Overview of Historical and Current Design Challenges
- Modeling Diverging Diamond Interchange under Constraints of Ramp Metering, HOV Lane and BRT Transit
- A Comparative Study on Turbo-Roundabout and Spiral Roundabouts

**Performance Based Design**

- Challenges Associated with Transferring Proven Countermeasures to Low and Middle Income Countries
- Transforming Design Policy: A Path to Practical Design Reform
- Highway Geometric Design Manual Argentina
- Investigating the Influence on Safety and Traffic Performance of 2+1 Road Sections in Poland
- Performance-Based Superelevation Transition Design
- Performance-Based Analysis of Geometric Design of Highways and Streets
- Development of Intelligent Design Platform for International Roadway Projects
- Performance Evaluation of "2+1" Lane Highway in Hokkaido, Japan
- Bridging the Gap, overcoming Challenges in Highway Safety Manual Implementation
- Insights From the ISATe Methodology on Freeway and Interchange Design Policy
- Performance Based Design Criteria and Knowledge in a New Road Design Manual for the State of Qatar
- Using a Driving Simulator to Assess the Driver-Road Sign's Communication. A Case Study in Brazil
- Past-Present-Future of the Trans-Canada Highway in BC from Kamloops to the Alberta Border

**Roadside Safety**

- Highway Geometric Design Manual Argentina
- Safety Considerations for Cross-Sectional Design of 80 km/h Rural Roads in the Netherlands
- Integrating Encroachment angles from Google Street View in a Roadside Safety Assessment Framework
- Innovative Designs for Mid-Countryside Junctions
- Verification of the Existing Model for Passing Sight distance on Single Two Lane Rural Carriageways
- Analysis of Roadside Crashes & Mitigation Measures to Highways in Mountainous Terrain in China
- Creating a Safe System Compliant State Highway Network
- Multivariate Evaluation about the Influence of Road Quality on Fatal Accidents
- An Overview of Road Safety in the Mena Region
• Rumble Strip performance in Washington State
• Roadsense – Redesign of Transverse Profile on a 2 Lane Rural Road
• British Columbia Highways: An Overview of Historical and Current Design Challenges
• Simulation Modeling for Prioritizing Highway Sections for Placement of Median Barriers
• Some factors in the Design of Rural Highway Curves
• How to Quantify Roadside Features in Crash Prediction Models?
• Effect of Shoulder Width and Drop-Off on Vehicle Rollover and Shoulder Crossover
• Analyzing the Influence of Foreslope Design on Errant Vehicle Safety using Dynamics Simulations

**SAFETY MANAGEMENT**

• Challenges Associated with Transferring Proven Countermeasures to Low and Middle Income Countries
• Investigating the Influence on Safety and Traffic Performance of 2+1 Road Sections in Poland
• Integrated Evaluation of Rural Road Networks
• Development of Highway Safety Analysis Method and Field Application using Mobile Mapping System
• Roadway Geometric Design and Safety: Chinese Experience
• Safety in the Geometric Design of Highways
• Road Safety Evaluation based on 3-D Geometric Alignments
• Bridging the Gap, Overcoming Challenges in Highway Safety Manual Implementation
• Roadsense – Redesign of Transverse Profile on a 2 Lane Rural Road
• Combination of Countermeasure Selection Methods for use in Road Safety Management
• Road Safety Audit Management
• “Road Safety Audit Light” for Setting up School Route Maps

**SIGHT DISTANCE**

• Prevention of Overtaking Accidents on Two-Lane Rural Roads
• Safety Effects of Height of Central Islands, Sight Distances, Markings and Signage at Roundabouts
• Standardization of the Criteria in determining the Minimum Distance allowed for passing in Portugal
• Highway Geometric Design Manual Argentina
• Sight Distance for a Headlamp-Only Illumination Condition
• Verification of the Existing Model for Passing Sight Distance on Single Two Lane Rural Carriageways
• Three-Dimensional Stopping Sight Distance Control on Left-Turn Curves of Freeways
• Roadway Safety Evaluation: Methodology and Tools in China
• Application of System Reliability Analysis in Geometric Design
• Effects of Transition Curves on Sight Distances
• I-90 Design Challenges and Innovations for a 22-Mile Section of the Jane Addams Tollway
• A Methodology for Estimation of Vertical-Alignment Geometric Parameters
• Development of a New Time-Gap Based Intersection Sight Distance Model for Heavy Vehicles
• Stopping-Sight-Distance Simulation Using a New Probabilistic Approach
• Geometric Design for Rural Bridge Replacements at Historic Ferry Crossings
SIMULATION & VISUALIZATION

- Methodology for Planning Multi-Functional Transport Corridors
- All-Round Methodology for Upgrading Existing Rural Roads
- Methodology for the Numerical Calculation of Racing Lines
- Operational and Environmental Comparisons between Left-Turn Bypass, Diverging Flow and Displacement
- Proposed Watertown Plan Road Interchange Evaluation using full Scale Driving Simulator
- Roadway Safety Evaluation: Methodology and Tools in China
- Three Dimensional Simulation and Application of Road Engineering based on a Game Engine
- Modeling Crash Probability in Large Traffic Simulators
- A Methodology for Estimation of Vertical-Alignment Geometric Parameters
- Using a Driving Simulator to Assess the Driver-Road Sign's Communication. A Case Study In Brazil
- Modeling Diverging Diamond Interchange under Constraints of Ramp Metering, HOV Lane and BRT Transit
- Simulation Modeling for Prioritizing Highway Sections for Placement of Median Barriers
- Safety Evaluation for Highway Geometric Design Based on Vehicle Dynamics Simulation
- Evaluation of the Side Friction of Vehicles in Coinciding of Horizontal and Crest Vertical Curves
- A Field Test and Computer Simulation Study on the Wind Blade Trailer
- Design of Multi-Level Interchange at Sewri, Mumbai, India
- Analyzing the influence of Coinciding Horizontal Curves and Vertical Sag Curves on Side Friction Factors
- Traffic Scheme making and Evaluation for Urban Road Work Zone Based on VISSIM
- The Side Friction of Vehicles in Coinciding of Horizontal Curves and Crest Vertical Curves
- Effect of Shoulder Width and Drop-Off on Vehicle Rollover and Shoulder Crossover
- Analyzing the Influence of Foreslope Design on Errant Vehicle Safety using Dynamics Simulations

SUSTAINABLE DESIGN

- Methodology for Planning Multi-Functional Transport Corridors
- Challenges Associated with Transferring Proven Countermeasures to Low and Middle Income Countries
- Transforming Design Policy: A Path to Practical Design Reform
- A New Step in Sustainable Safety in the Netherlands
- Cyclist Safety: An Overview of Germany’s Design Guidelines, Research and Accident Statistics
- Safety Considerations for Cross-Sectional Design of 80 km/h Rural Roads in the Netherlands
- Improving Sustainable Transportation Mobility in Peoria, Illinois
- Implementation of Human Factors in Road Design
- Vertical Alignment Optimization
- Design Exception Considerations for the State Highway Network
- Geometric Design of Hill Roads to Minimize Natural Disaster Damages
- Diverging Diamond Interchanges and their Relation to Sustainable Design
**Urban Streets**

- Transforming Design Policy: A Path to Practical Design Reform
- Cyclist Safety: An Overview of Germany’s Design Guidelines, Research and Accident Statistics
- Comfort-Based Sidewalk Width Design
- Bottlenecks in Urban Main and through Roads – Safe Design Required
- “Road Safety Audit Light“ for Setting Up School Route Maps
- Urban Street Design Criteria to Accommodate all users and Improve Liveability, Aesthetics and Safety

**Work Zones**

- Temporary Signing of Road Works under Traffic
- Traffic Characteristics, Capacity and Conflicts of One-Way Closed Work Zone on Freeway
- New Regulations and Design for Work Zones in Germany
- I-90 Design Challenges and Innovations for a 22-Mile Section of the Jane Addams Tollway
- I-287 At Westchester Ave Interchange 8 Reconstruction
- Evaluation of Lane Operation Restriction Design at Work Zone along the Staten Island Expressway
- Traffic Scheme making and Evaluation for Urban Road Work Zone Based on VISSIM
- Geometric Design of Detours for a Major Freeway-Port Mann Highway 1 Project in Vancouver

**Miscellaneous Topics**

- I-90 Design Challenges and Innovations for a 22-Mile Section of the Jane Addams Tollway
- Prevention of Overtaking Accidents on Two-Lane Rural Roads
- Calculation of Water Film Paths as Geodesic Curves on a 3D Surface to Address Hydroplaning Phenomena
- Transforming Design Policy: A Path to Practical Design Reform
- Ramps in interchanges, relations between Geometric Design, Crash Rates and Driving Speeds
- Effects of Hard Shoulder Lanes Configuration on Driver’s Behaviour
- Past-Present-Future Of the Trans-Canada Highway In BC From Kamloops to the Alberta Border
- Highway Geometric Design Manual Argentina
- Modeling Diverging Diamond Interchange under Constraints of Ramp Metering, HOV Lane and BRT Transit
- Designing for Consistency: Matching Applications to Scenarios in the use of Pavement Markings
- Highway Geometric Design Manual Argentina
- An Evaluation of the Maximum Uphill and Downhill Grades for Low Clearance Vehicles
- Effects of Hard Shoulder Lanes Configuration on Driver’s Behaviour
- I-90 Design Challenges and Innovations for a 22-Mile Section of the Jane Addams Tollway
- A Comparative Study on Turbo-Roundabout and Spiral Roundabouts
- A Field Test and Computer Simulation Study on the Wind Blade Trailer
- Traffic Impact Assessment of Partial Cloverleaf Interchange
- Evaluation of Different Geometric Design Patterns for weaving areas with Insufficient Length

* Papers may be listed in more than one topic as they cover overlapping subject areas.*