

Opening Session Speakers	Welcome	Sandra Larson, Iowa Department of Transportation
Opening Session Speakers	Opening Remarks	Kevin Mahoney, Iowa Department of Transportation
Opening Session Speakers	Welcome	Shashi Nambisan, InTrans, Iowa State University
Opening Session Speakers	Opening Remarks	Sharron Quisenberry, Iowa State University
Opening Session Speakers	Welcome	Lubin Quinones, FHWA
Opening Session Speakers	"Financing Options for Transportation Systems"	Marty Wachs, Rand Corporation
Opening Session Speakers	"Remembering Tom Maze"	Ed Kannel, Iowa State University
1A Traffic and Safety	Development of Predictive Median Barrier Warrants	Madhav Chitturi, Andrew Ooms, David A. Noyce, University of Wisconsin-Madison
1A Traffic and Safety	Effectiveness of Localized Deer Management in Reducing Deer-Vehicle Crash Rates in Iowa - Some New Evidence	Michael Baird, Zachary Hans, InTrans, Iowa State University; Konstantina Gkritza, Iowa State University
1A Traffic and Safety	Evaluation Of Centerline Rumble Strips for Prevetion of Highway Crossover Accidents in Kansas	Daniel Karkle, Margaret Rys, Eugene R. Russell, Kansas State University
1A Traffic and Safety	Heavy Vehicle Crashes and Mitigation Strategies	Yue Li, Romika Jasrotia, Thomas Mulinazzi, Steven Schrock, Robert Rescot, University of Kansas; Kelly Hovey, Kansas Department of Transportation
1A Traffic and Safety	Identification of Contributory Factors for Cross Median Crashes	Madhav Chitturi, Ghazan Khan, David A. Noyce, University of Wisconsin-Madison
1B Structures and Construction	An Owner's Perspective on Implementing an Accelerated Bridge Construction Program	James McMinimee, Utah Department of Transportation
1B Structures and Construction	Development, Evaluation, and Implementation of a Precast Paving Notch System	Brent Phares, InTrans, Iowa State University; Dean Bierwagen, Iowa Department of Transportation; Mike LaViolette, HNTB Corporation
1B Structures and Construction	Mass Concrete Thermal Control Case Study: I-80 over the Missouri River Bridge Construction	James Nelson, Ahmad Abu-Hawash, Iowa Department of Transportation; John Gadja, CTL Group
1B Structures and Construction	Review of Precast Bridge Approach Slab Replacement Project in Denver Iowa	Dean Bierwagen, Ahmad Abu-Hawash, Wayne Sunday, Iowa Department of Transportation; Terry Wipf, Iowa State University
1B Structures and Construction	The Kansas Experience with Polymer Concrete Bridge Deck Overlays	Dave Meggers, Kansas Department of Transportation
1C PCC Pavements	Can Air be Entrained in Roller Compacted Concrete?	Haili Ceylan, InTrans, Iowa State University;
1C PCC Pavements	Curling of New Concrete Pavement and Long-Term Performance	Daba Gedafa, Mustaque Hossain, Kansas State University; Zahidul Q. Siddique, ARCADIS LNW; Kirk Fredrichs, FHWA Nebraska Branch; Dave Meggers, Kansas Department of Transportation;
1C PCC Pavements	Determining Pavement Damage Cost Attributed to Truck Traffic in Southwest Kansas	Yong Bai, Chunxiao Liu, The University of Kansas; Yingfeng Li, Texas Transportation Institute
1C PCC Pavements	Study of Iowa PCC Thermal Properties for Mechanistic-Empirical Pavement Design	Jiong Hu, Texas State University - San Marcos; Kejin Wang, Iowa State University; Zhi Ge, North Dakota State University
1C PCC Pavements	Laboratory and Field Testing of an Anti-Corrosion Admixture for Concrete	John Wojakowski, Kansas Department of Transportation
1D Planning, Modeling and Logistics	Review of Congestion Pricing Established Systems in Europe and Asia: Evaluation of Success	Aikaterini Rentziou, InTrans, Iowa State University; Konstantina Gkritza, Iowa State University
1D Planning, Modeling and Logistics	A Methodology for Estimating Economic Benefits Associated with Increased Seat Belt Use at the State Level	Sunanda Dissanayake, Kansas State University
1D Planning, Modeling and Logistics	The Actual Cost of Food Systems on Roadway Infrastructure	Inya Nlenanya, Omar Smadi, InTrans, Iowa State University
1D Planning, Modeling and Logistics	Continuous Productive Urban Landscapes: a sustainable design option to growing urban communities in Iowa	Jason Grimm, Iowa State University
1E Finance	A Case-Based Approach to Economic Impact Assessment of Highway Investments	Steve Andrle, Transportation Research Borad

1E Finance	Financing Road Projects in India Using PPP Scheme	Satyanarayana Kalidindi, L. Boeing Singh, Indian Institute of Technology Madras
1E Finance	Alternative Gas Tax Options	Paul Hanley, University of Iowa
1E Finance	Comparative study of costs incurred by transportation users and charges compensated	Abhisek Mudgal, InTrans, Iowa State University
1E Finance	Highway Capacity Improvements and Land Value Responses: Some Estimates of the Economic Impacts of Upgrading Roads	Michael Iacono, David M. Levinson, University of Minnesota
1F Geotechnical Engineering	Advances in Intelligent Construction Methods in Geotechnical Engineering	David White, InTrans, Iowa State University
1F Geotechnical Engineering	SHRP2 R02 -- Geotechnical Solutions for Soil Improvement, Rapid Embankment Construction, and Stabilization of the Working Platform	Vernon Schaefer, Iowa State University
1F Geotechnical Engineering	Construction QA/QC Testing versus Selection of Pavement Design Parameter Values for Pavement Foundation Layers	Caleb Douglas, InTrans, Iowa State University; David White, Iowa State University; Jeffery Roesler, University of Illinois Urbana-Champaign
1F Geotechnical Engineering	A feasibility study for the use of propane as a subbase drying technique.	Michael Blahut, Chris Williams Iowa State University
1F Geotechnical Engineering	Use of Bio-Oil for Subgrade Soil Stabilization	Halil Ceylan, InTrans, Iowa State University;  Kasthurirangan (Rangan) Gopalakrishnan, Sunghwan Kim, Iowa State University
Lunch	Welcome	Jon Wickert, Iowa State University
Lunch	SHRP2: Accomplishments and Opportunities	Ann Brach, TRB
2A Traffic and Safety	Access Management Considerations for Roundabout Design and Implementation	Mark Johnson, MTJ Engineering, LLC; Hillary Isebrands, Iowa State University
2A Traffic and Safety	Iowa's Roundabout Experience	Tim Simodynes, Iowa Department of Transportation
2A Traffic and Safety	Improving the Safety of Rural Travel Through the Rural Safety Innovation Program	Theodore Smith, Noblis; Linda Dodge, United States Department of Transportation
2A Traffic and Safety	Update on Iowa's 2009 Roadway Departure Strategic Action Plan and Synthesis of Neighboring State Practices to Address Roadway Departure Crashes	Eric Fitzsimmons, Shashi Nambisan, Shauna Hallmark, InTrans, Iowa State University; Tom Welch, Iowa Department of Transportation
2B Structures and Construction	Laboratory and Field Evaluation of the 24th Street Bridge	Jake Bigelow, Travis Hosteng, Brent Phares, Iowa State University; Jim Nelson, & Ahmad Abu-Hawash, Iowa Department of Transportation
2B Structures and Construction	Application of Wireless Sensor Networks in Infrastructure Monitoring	Jin Zhu, MD Salim, University of Northern Iowa
2B Structures and Construction	Monitoring of an Integral Abutment Bridge Supported on Steel Piles/Concrete Drilled Shafts in Glacial Clay	Brent Phares, InTrans, Iowa State University; Ashley Disburg, Robert Abendroth, Lowell Greimann, Iowa State University; Ahmad Abu-Hawash, Kenneth Dunker, Iowa Department of Transportation
2B Structures and Construction	Monitoring of the Saylorville and Red Rock Reservoir Bridges for Wind Induced Vibrations	Travis Hosteng, InTrans, Iowa State University; Brent Phares, Doug Wood, Iowa State University; Ken Dunker, Ahmad Abu-Hawash, Bruce Brakke, Iowa Department of Transportation
2C Pavements (Sustainable Concrete Pavement Technologies, Part 1)	CP Roadmap, Sustainability Track	Peter Taylor, InTrans, Iowa State University
2C Pavements (Sustainable Concrete Pavement Technologies, Part 1)	Ternary Concrete Mixes	Kejin Wang, Iowa State University
2C Pavements (Sustainable Concrete Pavement Technologies, Part 1)	Concrete Overlays	Dale Harrington, Snyder and Associates
2D Planning, Modeling and Logistics	A Large-Scale Traffic Simulation Model for Hurricane Evacuation of Hampton Roads, Virginia	Praveen Edara, University of Missouri, Columbia
2D Planning, Modeling and Logistics	Iowa's Multi-level Linear Referencing System	Steven Kadolph, Ryan Wyllie, Iowa Department of Transportation
2D Planning, Modeling and Logistics	Linking Highway Improvements to Changes in Land Use with Quasi-Experimental Research Design: A Better Forecasting Tool for Transportation Decision-making	Richard G. Funderburg, University of Iowa; Hilary Nixon, San Jose State University; Marlon G. Boarnet, University of California-Irvine

2D Planning, Modeling and Logistics	Microsimulation of Goods Movement in America: Methodology and Data	Amir Samimi, Kouros Mohammadian, Kazuya Kawamura, University of Illinois at Chicago
2E Asphalt Pavements	Development of Mix Design Process for Cold In-place Recycling	Hosin Lee, Yongjoo Kim, University of Iowa
2E Asphalt Pavements	Missouri's Use of Recycled Asphalt Shingles (RAS) in Hot Mix Asphalt	Joe Schroer, William Stone, John Wenzlick, Missouri Department of Transportation
2E Asphalt Pavements	Warm Mix Asphalt: Laboratory Evaluation and Pavement Design	Zhanping You, Shu Wei Goh, Michigan Technological University
2F Modes	An Overview of Passenger Transportation in Iowa	Amanda Martin, Iowa Department of Transportation
2F Modes	Rider and Non-rider Opinions of Rural Public Transportation	Brian Geiger, Sunanda Dissanayake, Kansas State University
2F Modes	Development of a Freight Analysis Framework for the Kansas City Metropolitan Area	Yong Bai, University of Kansas
2F Modes	Freight bottlenecks in the Upper Midwest: Identification, Collaboration, and Alleviation	Andrew Obernesser, Qi Gong, Jessica Guo, University of Wisconsin-Madison
3A Traffic and Safety	Effectiveness of Driver Improvement Programs	Wei Zhang, Shashi Nambisan, InTrans, Iowa State University;
3A Traffic and Safety	Recent U.S. Research on Younger Drivers' Driving Behavior Causing Fatal Crashes	Bhuiyan Alam, The University of Toledo, Ohio
3A Traffic and Safety	Drivers Preferences for LED Vehicular and Pedestrian Signals	Madhav Chitturi, University of Wisconsin-Madison; Rahim F. Benekohal, Ali Hajbabaie, Juan C. Medina, University of Illinois
3A Traffic and Safety	Safety Analysis for Older Drivers at Signalized Intersections in Kansas	Daba Gedafa, Kansas State University
3B Structures and Construction	Modified Sheet Pile Abutments for Low Volume Road Bridges	Ryan Evans, David White, Wayne Klaiber, Terry Wipf, Caleb Douglas, Iowa State
3B Structures and Construction	Post Grouted Drilled Shafts Loat Test Program in Iowa	Curtis Monk, FHWA , Iowa
3B Structures and Construction	Review of Ultra High Performance Concrete (UHPC) PI Girder Bridge in Buchanan Co., Iowa	Dean Bierwagen, Ahmad Abu-Hawash, Iowa Department of Transportation; Terry Wipf, Iowa State University; Brian Keierleber, Buchanan County, Iowa
3B Structures and Construction	Self-Centering Bridge Piers with Structural Fuses	Jon Rouse, Wayne Klaiber Iowa State University; Mark Currie, HNTB
3C Pavements (Sustainable Concrete Pavement Technologies, Part 2)	Two-lift Paving	Tom Cackler (replaced by Peter T., InTrans, Iowa State University
3C Pavements (Sustainable Concrete Pavement Technologies, Part 2)	Surface Characteristics	Paul Wiegand, InTrans, Iowa State University
3C Pavements (Sustainable Concrete Pavement Technologies, Part 2)	Pervious Concrete Pavements	Vern Schaefer, Iowa State University
3C Pavements (Sustainable Concrete Pavement Technologies, Part 2)	Measurement of Constructions Systems	Tom VanDam, Applied Research Associates
3D Planning, Modeling and Logistics	Iowa's New Statewide Travel Demand Model	Phil Mescher, Iowa Department of Transportation
3D Planning, Modeling and Logistics	Infrastructure Asset Management In Hillsborough County, Florida	Michael Maltezos, Hillsborough County Public Works Dept
3D Planning, Modeling and Logistics	Assessing Transportation Impediments to Medicaid Members in the State of Iowa	Nikhil Sikka, Paul Hanley, University of Iowa
3D Planning, Modeling and Logistics	Lessons learned from 100% airport network condition survey	Jose Villarreal, Mustaque Hossain, Kansas State University; George Laliberte, Kansas Department of Transportation
3E Ashpalt Pavements	Early Permeability Test for Asphalt Acceptance	William Stone, Joe Schroer, Missouri Department of Transportation;
3E Ashpalt Pavements	Measurement and Evaluation of Tack Coat Application Rate for 4.75 mm NMA Superpave Mix Overlay	Farhana Rahman, Mustaque Hossain, Kansas State University; Stefan Romanoschi, University of Texas at Arlington
3E Ashpalt Pavements	Some Observations on Sorption-Desorption Behaviors of Roller Compacted Concrete Mixtures	Halil Ceylan, Chetan Hazaree, Kasthurirangan Gopalakrishnan, Iowa State University
3E Ashpalt Pavements	Utilization of the Mechanistic-Empirical Pavement Design Guide in Moisture Susceptibility Prediction	Tamer Breakah, Chris Williams, Iowa State University
3F Technology Considerations	Evaluating the Return on Investment of Non-Motorized Transportation Infrastructure: A Desktop-based GIS Tool	Sasanka Gandavarapu, Jessica Guo, University of Wisconsin-Madison
3F Technology Considerations	Combining Lidar and NAIP Imagery at Iowa DOT	Karen Carroll, Ryan Wyllie, Iowa Department of Transportation
3F Technology Considerations	IaRTN and 511	Michael Jackson, Iowa Department of Transportation

3F Technology Considerations	Where's the nearest outlet to recharge my CAR? Readiness for plug-in hybrid electric vehicles	Tony Smick, Jie Zheng, Jessica Guo, University of Wisconsin-Madison
Banquet	Welcome	Shashi Nambisan, InTrans, Iowa State University
Banquet	Introduction	Mark Dunn, Iowa Department of Transportation
Banquet	Leadership and the Challenge of Maintaining a Successful Organization	Bill Fennelly, Iowa State University Women's Basketball
4A Traffic and Safety	Characteristics of Fatal Truck Crashes in USA	Nishitha Bezwada, Sunanda Dissanayake, Kansas State University
4A Traffic and Safety	Development of a Statewide Horizontal Curve Database for Crash Analysis	Zachary Hans, Reg Souleyrette, InTrans, Iowa State University; Rachael Larkin, Iowa State University
4A Traffic and Safety	Review of Crashes at Bridges in Kansas	Mark Hurt, Steven D. Schrock, Robert Rescot, University of Kansas
4A Traffic and Safety	Spatial Analysis of Crash Location Relative to Population Change	Lei Sun, Jieli Sun, Adwetta Joshi, Paul Hanley, University of Iowa
4A Traffic and Safety	Effect of Exposure in Vehicle Miles Traveled on Fatal Crash Rates of Elderly Drivers in US	Abhiteja Rallabandi, Sunanda Dissanayake, Kansas State University
4B Hydrology	The Iowa Floods of 2008-Des Moines	Bill Stowe, City of Des Moines
4B Hydrology	The Iowa Floods of 2008-Iowa City	Ron Knoche, City of Iowa City
4B Hydrology	The Iowa Floods of 2008-Cedar Rapids	Dave Elgin, City of Cedar Rapids
4B Hydrology	Connecting Self-similarity in Channel Network Topology to Scaling of Flood Data	Ricardo Mantilla, University of Iowa
4B Hydrology	Iowa's Floods of 2008 and the Iowa DOT's use of BridgeWatch to Monitor Scour Critical Bridges	Dave Claman, Iowa Department of Transportation
4B Hydrology	Sedimentation ad Multi-barrel Culverts	Marian Muste, IHR-Hydroscience & Engineering
4C Road Maintenance	Development of updated guidelines and Specifications for Roadway Rehabilitation	Charles Jahren, InTrans, Iowa State University; Paul Wiegand, Larry J. Stevens, Ryan Shropshire, Iowa State University
4C Road Maintenance	Iowa DOT Winter Maintenance Research	Dennis Burkheimer, Iowa Department of Transportation
4C Road Maintenance	Evaluation of Chip Seal Performance on Kansas Highways	Litao Liu, Mustaque Hossain, Kansas State University
4C Road Maintenance	Stabilization Procedures to Mitigate Edge Rutting for Granular Shoulders	Charles Jahren, InTrans, Iowa State University; David J White, Chase Westercamp, Thang Phan, Peter Becker, Iowa State University
4D Environment	Comparison of On-Road Biodiesel Emissions in Transit Buses	Shauna Hallmark, Abhisek Mugdal, Massiel Orellana, InTrans, Iowa State University
4D Environment	Asset Management Tool for Collecting and Tracking Environmental Commitments	Stacy Cook, Wisconsin Transportation Center; Teresa Adams, University of Wisconsin-Madison
4D Environment	Effect of Pavement Type on Fuel Consumption and Emissions	Sia Ardekani, Palinee Sumitsawan, University of Texas at Arlington
4D Environment	Deploying Hybrid Electric School Buses in Iowa	Shauna Hallmark, InTrans, Iowa State University; Dennis Kroeger, FHWA Motor Carriers; Brittany L. Hallmark, Ankeny High School
4D Environment	Cost Analysis of Alternative Culvert Installation Practices in Minnesota	Bradley Hansen, John Nieber, University of Minnesota; Chris Lenhart, Minnesota State, Mankato
4D Environment	Evaluating of emissions reduction potential of biodiesel blend in transit buses	Abhisek Mudgal, Shauna Hallmark, InTrans, Iowa State University
4E Asphalt Pavements	A Framework for Performance-based Permeability and Density Acceptance Criteria for HMA Pavements in Wisconsin	Sam Owusu-Ababio, Robert Schmitt, University of Wisconsin-Platteville
4E Asphalt Pavements	Dynamic Modulus of HMA: Preliminary Criteria to Prevent Field Rutting of Asphalt Pavements	Zhanping You, Shu Wei Goh, Michigan Technological University; Christopher Williams, Iowa State University
4E Asphalt Pavements	Development of Accelerated Superpave Mix Testing Models	Chandra Manandhar, Mustaque Hossain, Kansas State University; Paul Nelson, Kansas State University; Cliff Hobson, Kansas Department of Transportation
4E Asphalt Pavements	Simulation of Flexible Pavement Design in Kansas Using M-EPDG	Daba Gedafa, Mustaque Hossain, Kansas State University; Stefan A.
4F Technology Considerations	Iowa DOT Pavement Marking Practices	Iowa Department of Transportation Pavement Marking Task Force
4F Technology Considerations	GIS Related Presentation	Eric Abrams, Iowa Department of Transportation
4F Technology Considerations	An Overview of ITS Research Project by the Iowa DOT	Willy Sorenson, Iowa Department of Transportation

4F Technology Considerations	Analysis of An Emergency Warning Message Delivery Scheme in WAVE Systems	Hong Nie, University of Northern Iowa; Weidong Xiang, University of Michigan
4F Technology Considerations	Feasibility of Using Cellular Telephone Data to Determine the Truckshed of Intermodal Facilities	Ming-Heng Wang, Steven D. Schrock, Thomas Mulinazzi, University of Kansas
5A Traffic and Safety	Determining the Effectiveness of Portable Changeable Message Sign in Work Zone	Yong Bai, University of Kansas
5A Traffic and Safety	Effectiveness of Dynamic Messaging on Driver Behavior for Late Merge Lane Road Closures	Bob Sperry, Tom McDonald, Shashi Nambisan, InTrans, Iowa State University
5A Traffic and Safety	Evaluation of Technology-Enhanced Flagger Devices in Work Zones: Focus Group and Survey Studies in Kansas	Steven Schrock, Chen Fei See, Oswald Chong, Yong Bai, Jamila Saadi, University of Kansas
5A Traffic and Safety	Characteristics of Work Zone Crashes in the SWZDI Region: Differences and Similarities	Sunanda Dissanayake, Sreekanth Reddi Akepathi, Kansas State University
5B Structures and Construction	I35W Bridge: Accelerated Procurement Design and Construction	Kevin Western, Mn Department of Transportation
5B Structures and Construction	Multimodal Condition Assessment of Bridge Decks by NDE and Its Validation	Nenad Gucunski, Ruediger Feldmann, Francisco Romero, Rutgers University;  Ahmad Abu-Hawash, Mark J. Dunn, Iowa Department of Transportation
5B Structures and Construction	Web-based Collaboration for Iowa DOT Bridge Construction	Aaron Zutz, Iowa State University; Jim S. Nelson, Iowa Department of Transportation; Charles T. Jahren, InTrans, Iowa State University
5C Highway Engineering & Construction	Methods at Iowa DOT--Flooded Backfill and Plastic Pipe	Chris Poole, Deanna Maifield, Iowa Department of Transportation
5C Highway Engineering & Construction	Construction Project Administration and Management for Mitigating Work Zone Crashes and Fatalities: An Integrated Risk Management Model	Daniel Enz, Jennifer Shane, Kelly Strong, Iowa State University
5C Highway Engineering & Construction	Identification of Practices, Design, Construction, and Repair Using Trenchless Technology	Charles Jahren, Muhannad T. Suleiman, Halil Ceylan, Larry Stevens, Bill Conway, InTrans, Iowa State University
5F Materials	Antioxidant effect of bio-oil additive ESP on asphalt binder	Sheng Tang, R. Christopher Williams, Ryan Shroshire, Iowa State University
5F Materials	Determination of Pre-Treatment Temperature Required for Developing Bio-binders from Bio-oils	Mohamed Abdel Raouf, R. Christopher Williams, Iowa State University
5F Materials	Investigation of Warm-Mix Asphalt Using Iowa Aggregates	Ashley Buss, Iowa State University
5F Materials	Nanotechnology to Manipulate the Aggregate-Cement Paste Bond. Impacts on Concrete Performance	Jose Munoz, University of Wisconsin-Madison
Posters	Meeting the Workforce Development Challenge in Iowa	Duane Smith, InTrans, Iowa State University
Posters	The Use of Hydroacoustics and Sediment Coring in Bathymetric Mapping and Modeling	Doug Schnoebelen, Nate Young, University of Iowa
Posters	Developing Low-Power Systems for Automated Traffic Monitoring	Amit Pande, Iowa State University; Abhisek Mudgal, InTrans, Iowa State University
Posters	Improving On-site Construction Productivity Using the WRITE System	Yong Bai, The University of Kansas
Posters	Integration Safety Assessment and Web-based Visual Analytics	Xiao Qin, Shuguang Hao, University of Wisconsin-Madison
Posters	Crash Experience--What Makes Low-Volume Roads Different and What Can Be Done About It	Mehmet Caputcu, Iowa State University
Posters	Factors Related to Older Drivers Safety: A Survey Based Study	Hewage Perera, Sunanda Dissanayake, Kansas State University
Posters	Identifying Thresholds for Run-Off Road Events	Abhisek Mudgal, Shauna Hallmark, InTrans, Iowa State University
Posters	Preliminary Results from Evaluation of Dynamic Speed Feedback Signs on High Speed Curves	Shauna Hallmark, Omar Smadi, Neal Hawkins, InTrans, Iowa State University
Posters	Trajectory Analysis of Vehicles Approaching Speed Feedback Signs	Madhav Chitturi, Kelvin Santiago, Xiao Qin, University of Wisconsin-Madison
Posters	Reducing Excessive Delay to Drivers at Mid-Block Pedestrian Crossing by using a HAWK Beacon Signal	Ranjit Prasad Godavarthy, Eugene R Russell, Kansas State University
Posters	Analysis of Traffic Sign Retroreflectivity in National Wildlife Refuges in the Midwest	Yilei Huang, Steven D. Schrock, The University of Kansas; Mark Hurt, Kansas Department of Transportation

Posters	Can Consumer Sentiments and Changes in Fuel Economy Explain the Recent Shift in Travel Behavior?	Nikhil Sikka, Jieli Sun, Paul Hanley, University of Iowa
Posters	Neural Networks Modeling of Biodiesel Emissions from Transit Buses	Abhisek Mudgal, InTrans, Iowa State University; Shauna Hallmark, Kasthurirangan Gopalakrishnan, Iowa State University
Posters	Iowa DOT's Pavement Management Information System (PMIS) and the Mechanistic-Empirical Pavement Design Guide	Halil Ceylan, Kasthurirangan (Rangan) Gopalakrishnan, Sunghwan Kim, Iowa State University
Posters	Inverse Analysis of Pavement Systems Using Bio-Inspired Hybrid Meta-heuristics and Cooperative Strategies	Kasthurirangan Gopalakrishnan, Iowa State University
Posters	Using Recycled Concrete Aggregates in HMA	Zhanping You, Julian Mills-Beale, Michigan Technological University