

# 7 TUESDAY



## Technical Sessions Schedule

7:00–8:50 AM																																			
COFFEE WITH THE EXHIBITORS																																			
9:00–10:50 AM																																			
OPENING SESSION—LOEB THEATER																																			
BRIDGES		DESIGN/CONSTRUCTION		ELECTED OFFICIALS	LOCAL AGENCY	MAINTENANCE & OPERATIONS		MULTI-MODAL TRANSPORTATION	PAVEMENTS		PROJECT MANAGEMENT/ PLANNING	PUBLIC RELATIONS/ COMMUNICATIONS	ROAD SCHOLAR	SAFETY	TRAFFIC OPERATIONS																				
ST. THOMAS CLASSROOM 3	ST. THOMAS NEWMAN HALL	STEW 206	STEW 214AB	STEW 218CD	STEW 279	STEW 202	STEW 214CD	PMU 240	STEW 302	STEW 306	PMU 250	FOWLER	KRANNERT AUDITORIUM	STEW 310	STEW 218AB	STEW 278																			
11:00–11:50 AM		9. Construction Specifications and Special Provisions		14. The Evolution of Infiltration: Three Indianapolis Case Studies in Green Infrastructure		22. Streetscapes: Taking Main Street Mainstream		27. Pipeline Safety		32. Weather and Traffic Innovations for Municipal RWIS/ ITS Programs		44. Rosphalt Asphalt Mixture		57. Macroscopic Review of Crash Data		62. LED Streetlight Program in Northern Indiana		66. Visualizing the Potential Performance of Coordinated Signal Systems																	
12:00–12:50 PM																																			
EXHIBITOR LUNCHEON—PURDUE MEMORIAL UNION BALLROOMS																																			
1:00–1:50 PM		1. Screening Overweight Vehicles: Allowable Ranges of Axle Configurations		5. Load Capacity of Open-Ended Pipe Piles for Sagamore Parkway Bridge		10. 3D Design Models to Construction (Data-Centric Approach)		15. It's Never Too Late to Improve a Project		19. Asset Management for Elected Officials		23. Delphi Stellar Communities: Before and After		28. Optimizing ROW Vegetation Management for Wildlife, Farmers, and Taxpayers		33. Winter Operations		37. Transportation Assets: The Case for Rail Logistics in St. Joseph County		45. Using Innovative Materials to Improve Pavement Performance and Life		49. I-69 Ohio River Crossing: Project Update		58. Recent Developments in Traffic Signal Preemption/ Collision Avoidance		67. LiDAR-Based Mobile Mapping System for Lane Width Estimation									
2:00–2:50 PM		2. How to Make Your Way Through a Historic Bridge Project		6. The Indiana Peak Discharge Determination System		11. MASH Implementation for Guardrail		16. Changing the Face of a City		20. Financial Planning for Long-Term Road Improvements		24. Federal-Aid Funding Requirements for Local Public Agencies		29. Performance and Cost/Benefit Analysis of Plasma, CMH, and LEDs for Roadway Lighting		34. Recycle Your Roadway Full-Depth Reclamation With Cement		38. Regional Transportation Needs		41. Bio-Based Pavement Preservation		46. Explore Road Recycling That's Better Five Ways		50. Fiscal Constraint and the Central Indiana Regional Bikeways Plan		53. Ensuring Project Success by Managing Diverse Stakeholders		56A. Road Scholar Core Course #1: Transportation Asset Management		59. LiDAR for Traffic and Safety Studies		63. Innovation and Consensus Building With Traffic Simulation		68. Work Zone Traffic Management: Dynamic Dashboards and Alerts	
3:00–3:50 PM		3. Post-Tensioning Lessons Learned		7. Tools for Improved Decision Making in Project Delivery		12. Compliant Curb Ramp Solutions		17. Environmental Commitments Management on Large Projects		21. Indiana Bond Bank: A Local Government Funding Option		25. Cost-Effective County Road Reclamation in Northeast Indiana		30. Using Mobile Technology to Collect Pavement Asset Data		35. Green Infrastructure Retrofit and Maintenance Strategies in Indianapolis		39. Planning for a Healthier Indiana Through Transportation Facilities		42. Cold Constructed Asphalt Pavements (CCAP) With Gelled Asphalt		47. Fiberglass Fibers in Chip Seal and Hot Mix Overlays		51. Fresh Look: Perspectives From Newer Project Managers		54. Community Outreach and Engagement		60. Communicating the Safety Benefits of Alternative Intersections		64. Portable Traffic Signals: Design and Specification Requirements		69. Corridor Studies: One Size Does Not Fit All			
4:00–4:50 PM		4. MSE Wall Design and Construction Policy Updates		8. Ohio River Bridges East End Crossing Cable-Stayed Bridge Construction		13. RSP 205-R-636, Storm Water Quality Control Plans, Level Determinations...		18. Two Years Later: The State Street Redevelopment Project		26. Outsourcing Maintenance Operations: What Works and What Doesn't		31. CMP Metal Culvert Invert Repair With Geosynthetic Cementitious Composite		36. Green Infrastructure Operation and Maintenance Successes & Experiences		40. Indianapolis to Chicago by Passenger Rail—The Hoosier State		43. Building a Better Terminal Joint		48. Concrete Overlays: A Pavement Preservation Option		52. Engaging Stakeholder Engagement in Long-Range Planning		55. Plan Commission Basics for Engineers		61. FHWA Performance Management Rules for Traffic Safety		65. Solving Congestion and Safety Issues With Roundabouts		70. Methods for De-Identifying Work Zone Signage					

# 8 WEDNESDAY

	AVIATION	BRIDGES	DESIGN/CONSTRUCTION		ELECTED OFFICIALS	ETHICS	HUMAN CAPITAL	LOCAL AGENCY	MAINTENANCE & OPERATIONS		MULTI-MODAL TRANSPORTATION	PAVEMENTS		PROJECT MANAGEMENT/ PLANNING	PUBLIC RELATIONS/ COMMUNICATION	PUBLIC SAFETY	ROAD SCHOLAR	SAFETY		TRAFFIC OPERATIONS						
	STEW 204	ST. THOMAS NEWMAN HALL	STEW 206	STEW 214AB	STEW 218CD	LOEB	STEW 278	STEW 279	STEW 202	STEW 214CD	PMU 240	STEW 302	STEW 306	PMU 250	FOWLER	ST. THOMAS CLASSROOM 3	KRANNERT AUDITORIUM	FOWLER	STEW 310	STEW 218AB						
8:30–9:20 AM	<b>71.</b> Waiting Line Analysis of an Airport's Customs Facility	<b>78.</b> ABC Techniques for Rapid Bridge Replacement	<b>82.</b> Recent Drainage Updates to the Indiana Design Manual	<b>89.</b> Ohio River Bridges East End Crossing	<b>96.</b> Economic Development 101		<b>101.</b> Preparing for Boomer Retirements	<b>106.</b> Critical Path Thinking on Local Projects	<b>110.</b> Using Collector for ArcGIS for Field Surveys	<b>117.</b> Advancements in Automatic Vehicle Location (AVL) Technology		<b>125.</b> Identifying Cracking Potential in the Lab and Field	<b>128.</b> How to Design and Build Smoother Pavements	<b>133.</b> Handle Stress Before It Handles You!	<b>138.</b> An Engineer in Washington: Involvement in the Policy Game	ST. THOMAS CLASSROOM 3	KRAMMERT AUDITORIUM	FOWLER	STEW 310	<b>146.</b> Collision Diagram Builder for Documenting Crash Patterns at Intersections	<b>151.</b> Using Crowdsourced Probe Data					
9:30–10:20 AM	<b>72.</b> Structural Modifications to Airport Runway Pavements		<b>83.</b> Establishing and Maintaining Mitigation Wetlands for Construction Projects	<b>90.</b> SR 37 Fishers Corridor Improvement Project Update	<b>97.</b> ADA and Title VI for the Elected Official		<b>102.</b> Changemakers: Relationships and Influence	<b>107.</b> Pavement Management for Rural and Urban Communities	<b>111.</b> Autonomous and Inexpensive Condition Assessment of Road Surfaces and Bridges	<b>118.</b> Pavement Preservation Begins With a Target Goal		<b>123.</b> Building a Better Pedestrian and Biking Infrastructure	<b>126.</b> Air-Cooled Blast-Furnace Aggregate Application	<b>129.</b> Automation in Highway Construction: Success, Challenges, and Guidance	<b>134.</b> IndyGo Red Line Electric Bus Rapid Transit (eBRT) Project Update					<b>139.</b> Communications on the Ohio River Bridges: Best Practices	<b>142.</b> IN-TIME Executive Session	ST. THOMAS CLASSROOM 3	KRAMMERT AUDITORIUM	FOWLER	STEW 310	<b>147.</b> Utilizing the Interactive Highway Safety Design Model
10:30–11:20 AM	<b>73.</b> General Aviation Land Use Planning	<b>79.</b> Declassifying Fracture Critical Members Using System Redundancy	<b>84.</b> IR-35914, US 31/ SR 28 Interchange Delivery	<b>91.</b> "The Other Left": 96th Street @ Allisonville Road	<b>98.</b> Funding Road and Bridges Through the Motor Fuels Tax and a Mileage User Fee		<b>103.</b> Women in Leadership Panel	<b>108.</b> Asset Management for LPAs	<b>112.</b> Leveraging Snow Plow Dashboard Cams and Connected Vehicle Speed Data	<b>119.</b> Seeding for Monarchs, Pollinators, and Living Snow Fence		<b>124.</b> Weigh-in-Motion Activities in Indiana	<b>127.</b> FDR and Local Roads		<b>135.</b> INDOT Design Memo 16-04					<b>140.</b> Your Communications Toolbox: Effective Email Communications	<b>143.</b> Evaluation of Potential Benefits From Rural Bicycle Climbing Lanes					ST. THOMAS CLASSROOM 3
11:30–12:50 PM	<b>2017 PURDUE ROAD SCHOOL LUNCHEON—PURDUE MEMORIAL UNION BALLROOMS</b>																									
1:00–1:50 PM	<b>74.</b> Improving Airport Safety and Operations Through Cost-Effective Planning	<b>80.</b> Michigan DOT M-100 Superstructure Slide	<b>85.</b> Benefits of UAS in Roadway Design: A Case Study	<b>92.</b> I-69, Section 6 From Martinsville to Indianapolis			<b>104.</b> Leveraging a Multi-Generational Workforce	<b>109.</b> The Nitty Gritty: INDOT and Title VI	<b>113.</b> Winter Operations at the Local Level	<b>120.</b> Effects of Cracks in Reinforced Concrete Pipe											<b>149.</b> Temporary Portable Rumble Strip Arrays Reduce Crashes: Two Studies	<b>154.</b> Emerging Tools for After-Action Review of Major Traffic Incidents				
2:00–2:50 PM	<b>75.</b> Using Unmanned Aerial Systems (Drones) to Improve Airport Operations		<b>81.</b> Moving Bridge Painting Into the 21st Century	<b>86.</b> Restore Sagamore			<b>93.</b> Slide Correction Case Study: SR 105 in Huntington County		<b>105.</b> Transportation Performance Metrics and the Employee Contribution	<b>114.</b> Biodiesel Consumer Education and Industry Update											<b>121.</b> How to Rehabilitate Bridge and Terminal Joints Economically	<b>130.</b> Introduction to Cold Central Plant Recycling (CCPR)	<b>136.</b> Performance-Based Planning	<b>144.</b> Pedestrian Safety Planning: The City of Indianapolis Experience	<b>131.</b> Concrete Pavement Repair and Restoration	<b>137.</b> The Future of the MUTCD
3:00–3:50 PM	<b>76.</b> Airport Storm Water and Wildlife Management		<b>87.</b> Drainage Structures: Concrete Pipe and Box Culvert Design and Installation	<b>94.</b> Project Bundling: Design and Construction			<b>99B.</b> Indiana Statutes and Rules	<b>115.</b> Why Now is the Time to Use Organic-Based Performance Enhancers	<b>122.</b> Transportation Vulnerability Assessment for Owen County, Indiana	<b>132.</b> INDOT GPR Case Studies											<b>145.</b> Jane Doe v. Your Agency: A Lesson in Tort Liability					
4:00–4:50 PM	<b>77.</b> Airport Runway Pavement Design and Resolving Contractor Pavement Disputes		<b>88.</b> Introduction to Portable Traffic Signals	<b>95.</b> Fluvial Erosion Impacts on Infrastructures Along Indiana Streams	<b>100B.</b> Ethics and the Indiana Law for Professional Engineers	<b>116.</b> Cloud Technology and On-Demand Solutions for Citizen Needs																				