

6 TUESDAY



Technical Sessions Schedule 2018

Visit With the Exhibitors

North & South Ballrooms, Purdue Memorial Union

- Coffee With the Exhibitors, 7:00–8:50
- Exhibitor Luncheon, 11:00–1:50

58. Road Scholar Core Course #12: Estimating Construction Cost and Quantity

Fowler Hall, Stewart Center

8:00–10:50

Opening Session

LOEB Theater, Stewart Center

9:00–10:50

Student Poster Session

Purdue Memorial Union

11:00–1:50

	BRIDGES	CONNECTED AUTONOMOUS VEHICLES	DESIGN/CONSTRUCTION		ELECTED OFFICIALS	FINANCE/ADMINISTRATION	HUMAN CAPITAL	LOCAL AGENCY		MAINTENANCE & OPERATIONS	MULTI-MODAL TRANSPORTATION	PAVEMENTS	PROJECT MANAGEMENT/PLANNING	PUBLIC RELATIONS/COMMUNICATIONS	ROAD SCHOLAR	TRAFFIC OPERATIONS	
	STEW 206	FOWLER	STEW 302	STEW 306	STEW 214CD	STEW 279	PMU 240/FACE	STEW 202	STEW 218AB	STEW 214AB	STEW 278	PMU 250/FACW	LOEB	STEW 218CD	FOWLER	STEW 310	
11:00–11:50 AM	1. Identifying and Mitigating Pack Rust in Steel Bridges		8. Intersections and Interchanges: Indiana Design Manual Updates	13. Today's Mapping Toolbox				29. Transformation of a County Highway Department	33. LTAP Data Management System		41. Let's Take a Walk: How to Conduct an Effective Walk Audit		50. Meet Your Environmental Agency/Regulatory Staff	53. Rebuilding Momentum: Tactile Urbanism and Ground-Up Engagement	59. Indiana LTAP Technology Showcase: LTAP Direct™ App	60. Truck Parking Information Management System (TPIMS)	
1:00–1:50 PM	2. I-70 Over SR 121 Bridge Slide	6. An Introduction to Automated Vehicle (Basic 101)	9. Light Weight Deflectometer and Its Updated Deflections on Subgrade Treatments and Aggregates	14. Principles of Writing Construction Specifications and Special Provisions	18. Indiana Bond Bank: A Local Government Funding Option	22. Indiana's Long Range Infrastructure Funding Drives Performance Metrics	25. Changing the Culture Through Logistics	30. Doing Business With INDOT: A Comprehensive Guide for Indiana Cities and Towns	34. Top 10 Reasons It's Time to Update Your County's Land Use Codes	37. Cured-in-Place Pipe (CIPP) and Culvert Rehabilitation: Minimizing Risks	42. Analyzing Walkability	46A. HMA Specification Revisions and Testing 2018	51. How to Write Your Purpose and Need	54. Increasing Community Outreach Through Youth Activities		61. Measuring Performance of Traffic Signal Operations and Signalized Arterial Corridors	
2:00–2:50 PM	3. Design and Launching of Redundant Truss Over RR Yard	7. Electric Vehicle and Connected Autonomous Vehicle Opportunities	10. INDOT Office of Hydraulics Updates and the Upcoming Prequalification Requirements	15. I-465/I-69 Project Update	19. The Best Decision by Design: Selection of Professional Services	23. Avoiding Contract Audit Citations by Improving Billing Submissions	26. Actively Creating the Diverse Workplace of Today		35. Navigating the Local Planning Process for Engineers	38. The Planning, Design, and Construction of a New Highway Department Facility in Harrison County	43. Bicycle Soup: Bike Sharing, Safety Improvements, and Shared Facilities	47. Full-Depth Reclamation With Cement Slurry		52. Transportation Performance Management: A New Era of Accountability and Reporting		55. Using Mixed Reality for Public Outreach and Stakeholder Engagement	62. Peak Hour Traffic and Queuing at Schools: A Paradigm Shift in Trip Generation
3:00–3:50 PM	4. Life-Cycle Cost Analysis for Short-Span Bridges		11. IRI, INDOT's New Smoothness Measure	16. Practical Overview of Revised Section 918, Geosynthetics	20. Asset Management for Local Elected Officials	24. Local Federal Aid Funding Topics	27. Lifting Leadership: Compass, Clarity, and Capacity		31. Access Equity: A Foundation of Healthy Communities	39. Creating Supply Chain Management in an Operations World	44. Rapid Bus Transit Design Challenges, and Are Streetcars a Viable Option?	48. Thin Concrete Overlays		56. Bridging the Communications Gap: From Inspiration to Implementation		63. US 23 Flex Route: First ATM System in Michigan	
4:00–4:50 PM	5. Introduction to INDOT Bridge Asset Management Procedures		12. I-69 at 106th Street Interchange	17. I-64 New Albany Emergency Culvert Repair	21. LTAP Jeopardy		28. Connecting Compounds	32. Greensbranch Sewer Rehabilitation Project	36. Three Reasons Your Agency Should Be Incorporating Community Logos on Your Street Name Signs	40. From Simple Salt Water to Super Ice Melter	45. The Nation's First Transit Startup and How the QLINE Became the New Model for Public-Private Partnership	49. Void Reducing Asphalt Membrane: Project Review	57. PUSH-ing Construction Communications and Going Viral for Safety		64. Speed Limit Policies Versus Mobility on Indiana Freeways		

7 WEDNESDAY

		CONNECTED AUTONOMOUS VEHICLES		DESIGN/CONSTRUCTION		ETHICS	FINANCE/ ADMINISTRATION	HUMAN CAPITAL	LOCAL AGENCY	MAINTENANCE & OPERATIONS		MULTI-MODAL TRANSPORTATION	PAVEMENTS	PROJECT MANAGEMENT/PLANNING		PUBLIC RELATIONS/ COMMUNICATIONS	PUBLIC SAFETY	SAFETY	TRAFFIC OPERATIONS	WINTER WEATHER OPERATIONS
	AVIATION	BRIDGES	FOWLER	STEW 302	STEW 306	LOEB	STEW 311	PMU 240/FACE	STEW 202	STEW 214AB	STEW 214CD	STEW 314	PMU 250/FACW	LOEB	STEW 279	STEW 320	STEW 204	STEW 218CD	STEW 310	STEW 218AB
8:00–8:50 AM	65. Rehabilitation Techniques for Airport Pavements and Evaluating Runway Surface Friction	72. Modular Temporary Steel Panel Bridge for Maintenance of Traffic on US 41 Evansville, Indiana	79. Pavement Markings and Signing Strategies for Autonomous Vehicles	86. Stormwater QCPs: 16 Months of Lessons Learned	93. Critical Thinking in Transportation Design		103. Community Crossings Program Update and Ways to Generate the Matching Fund		109. APWA Indiana Chapter: Opportunities Within Reach	116. Integrated Analytics at INDOT Using Tableau	123. Moving Toward a Solid State Future: INDOT's Lighting Design Procedure	128. INDOT's Freight Plan	131. Determining the Optimized Traffic Opening Time Using Piezoelectric Sensors	137. Environmental Programmatic Agreements in Indiana	140. Bridging the Gap: From Bridge Engineer to Manager	147. Communicate to Lead	148. School Zone Flashers in Indianapolis, Indiana	153. Crash Location Improvement Program	159. South Bend Smart Streets: Before and After Study	165. Road Weather Information System (RWIS) and Winter Operations Performance Measures
9:00–9:50 AM	66. Using Aircraft Transponder Data to Assess Airport Activities, and Strategies to Mitigate Bird Strikes	73. Analysis and Design of a Double-Composite Steel Tub Girder Bridge	80. Modeling Adoption of Emerging Freight Transportation Vehicle Technologies	87. Full-Depth Reclamation for Preventative Maintenance: SR 65 Analysis	94. LED Street Lighting Evaluation Research, Development, and Implementation			105. RISE: Embracing the Transitioning Workforce Into the Civilian Workforce	110. Indiana Local Asset Management Guide	117. Roadside Seeding for Beauty and Function	124. Roadside Integrated Vegetation Management BMPs: Right Tool for the Right Job	129. Northern Indiana Commuter Transportation District Capital Program: Making the Plan a Reality	46B. HMA Specification Revisions and Testing 2018	138. US 36 Truss Bridge Rehabilitation (Schedule-Critical Deadline Met With Teamwork and Innovation)	141. Essential Project Management Processes and Tools to Succeed		149. Deployment of License Plate Recognition Cameras: Hammond, Indiana	154. Traffic Safety: Past, Present, and Future	160. Slow Down! Reducing Downtown Bloomington's Progression Speed	166. Automated Winter Road Condition Analysis and Prediction
10:00–10:50 AM	67. Funding Opportunities and Strategies for Indiana Airports	74. Rockville Road Over I-465 Emergency Superstructure Replacement	81. Transportation Workforce	88. Standard INDOT DBB Inspection Versus DBBV Inspection	95. When to Use Midwest Guardrail System (MGS) W-Beam Guardrail		104. Opportunities and Challenges for Biofuels in the Midwest	106. Women in Public Works: Managers, Engineers, Role Models!	111. Indiana LTAP Technology Showcase: Everyday GIS for Public Works	118. Noble County Culvert Rehabilitation With Geosynthetic Cementitious Composite Mat	125. Implementation of Lean Methodology in Maintenance and Operations	130. Creating a Place Within the Right-of-Way	132. Performance of Full-Depth Reclamation (FDR) and Cold-in-Place Recycle (CIR) Projects in Columbus, Indiana	139. Dos and Don'ts: Lessons Learned in Maintaining Mitigation	142. INDOT Prequalification		150. Crash Scene Documentation With Consumer-Grade Unmanned Aircraft Systems	155. Walking Toward Safety	161. Incorporating ADA and APS Work on Traffic Contracts	167. Automated Vehicle Locating System: Who's Working for Who?
1:00–1:50 PM	68. Yeager Airport Runway Safety Area Collapse and Response	75. Inspection and Load Rating of P-T Segmental Bridges	82. Business Opportunities for the Connected and Autonomous Vehicle Industry	89. Constructing Urban Corridors: Ambulances, Commuters, and Students! Oh My!	96. An Update on the State Street Project and How It Is Changing Purdue and the City of West Lafayette			107. Escape a Culture of Busy	112. Community Crossings Procurement Training	119. Extreme Precipitation Events, Impacts, Trends, and Projections for Indiana	126. Enough Is Enough: Green Infrastructure Retrofit Case Study		133. Identifying Pavement Failures and Effective Base Preparation		143. What Utilities Wish We Knew		151. The State of LED Tariffs and LED Lighting Deployment by Investor-Owned Utilities in the State of Indiana	156. ADA Compliance in Work Zones: Guidelines and Case Studies	162. How to Implement a Transit Signal Priority Project and Use Vehicle Probe Trajectory Data in Signal Design	168. Detailed Weather Forecasting for Your Community
2:00–2:50 PM	69. Increasing Community Engagement With Airport Operations and Understanding Environmental Permitting	76. Skew Effects On Steel Highway Bridges	83. Panel: Regulation of Autonomous and Connected Vehicles	90. Vegetated Reinforced Soil Slopes in the Fluvial Environment	97. INDOT's First Best Value Design Build	100. Office of the Indiana Attorney General: Perspectives on Professional Licensing Enforcement and Disciplinary Actions		108. Finding and Developing Hidden Talent	113. Revised Annual Operational Report for Highway Departments	120. Transforming Your Pavement Ratings Into an Asset Management Plan Tool	127. Drainage on Kosciusko County Roads: From Start to Finish		134. Impact of Subgrade Strength on HMA Section Thickness		144. Utilizing GIS Tools for Asset Management		157. Systemic Safety Projects	163. Utilization of Drone Technology in Transportation Engineering	169. Winter Solutions in "Pure Michigan"	
3:00–3:50 PM	70. A New Guidebook for Managing Small Airports and What to Consider With Corporate Aircraft Operations	77. Rehabilitation of Central Avenue Historic Stone Arch	84. High-Efficiency Control Systems for Connected Class 8 Trucks	91. Infrastructure Mobile Mapping and Work Zone Traffic Impacts	98. I-69 Section 6 Project Update	101B. Indiana Statutes and Rules for Professional Engineers			114. A Path to Enlightenment: Local Transportation Policies and Standards	121. Evaluating Economic Development Impacts of Preservation Projects			135. Asphalt Specifications for Local Paving Projects		145. Right-of-Way Acquisition Strategies for Infrastructure Projects		152. Indiana School for the Blind: Navigating Pedestrian Facilities	158. Designing Safer Work Zones	164. Tolling Today	170. Winter Solutions: One Step at a Time
4:00–4:50 PM	71. A Review of the Indianapolis International Airport Taxiway Rehabilitation Project, and What About Heated Helipads?	78. Drone Support: Preparing for New Standard Operating Procedures	85. Intelligent Materials Enabling Intelligent Infrastructure	92. Concrete 101: The "Need to Know" for Ready-Mix Concrete	99. Implementing Innovation Through the Every Day Counts Program	102B. Ethics and the Practice of Engineering and Surveying			115. Motor Vehicle Highway, Local Road, and Street: Funding for Tomorrow	122. Traffic Control Solutions for Common Work Zone Dilemmas			136. Is Today a Good Day to Pave?		146. Travel Demand Modeling for Environmental Justice Analysis				171. Snowplow Roadeo? Training Makes a Difference in Crawfordsville	