

111 Purdue Road School

Transportation Conference & Expo

Draft Technical Program
Last Updated February 6, 2025

Thursday

Ethics

TIME: 1:00-2:00 PM

ROOM: Indianpolis Convention Center, Room 234

PDH: 1

148A. Indiana Statutes and Rules for Professional Engineering Licensure

This session will explain the Indiana Code vs. the Indiana Administrative Code; selected statutes and rules applied to the practice of engineering; registration by comity; registrant's seal; computer-based testing for FE and PE exams; rules for continuing education, audits; board structure; and threats to professional licensure.

SPEAKER

Tim Jensen, Veridus Group, Inc.

TIME: 2:15-3:15 PM

ROOM: Indianpolis Convention Center, Room 234

PDH: 1

149A. Professionalism and Ethics in the Practice of Engineering

This presentation will provide participants with an overview of ethics, including how they're formed and how professional engineers use them to make decisions in every situation.

SPEAKER

Tim Jensen, Veridus Group, Inc.

Bridges

TIME: 1:00-1:50 PM ROOM: STEW 206

PDH: 1

1. Hamilton Bridge 310: Pleasant Street Over White River

Pleasant Street, Phase I, is now open through Noblesville! This exciting project has been over 40 years in the making. Phases I–III will eventually extend from SR 32 to SR 37, with Phase I now providing another way to cross the White River in the growing City of Noblesville. Join us in exploring the design and construction considerations that went into the new crossing over the White River, creating the longest bridge in Hamilton County's inventory.

SPEAKER

Jon Day, USI Consultants, Inc. Matt Lee, Hamilton County Brandon Arnold, USI Consultants, Inc.

TIME: 2:00-2:50 PM **ROOM:** STEW 206

PDH: 1

2. Implementation of SNBI for Bridge Inspections

Starting on January 1, 2025, FHWA and INDOT requires all bridge inspections and bridge inspection data collection to be done according to the specifications for the National Bridge Inventory (SNBI). The new specifications are a significant departure from the previous NBI Coding Guide. This presentation will provide an overall understanding of SNBI regulations and operations for the new SNBI data platform in the INDOT Total Assets Management System (iTAMS) database platform.

SPEAKER

Anthony Marino, INDOT Erich Hart, INDOT

Bridges

TIME: 3:00-3:50 PM **ROOM:** STEW 206

PDH: 1

3. The HBPA and the Project Development Process

The Historic Bridges Programmatic Agreement (HBPA) changed the way historic bridge projects are processed in Indiana. Not only did it streamline Section 106 and 4(f) review of these historic resources, it also created the INDOT-sponsored Indiana Historic Bridges Inventory. This presentation serves as a refresher on what the HBPA and Inventory are and the project development process for historic bridges.

SPEAKER

Haley Brinker, INDOT

TIME: 4:00-4:50 PM ROOM: STEW 206

PDH: 1

4. Assessing Bridge Inspection Consistency Using Virtual Reality

Indiana has over 18,900 bridges, with the Department of Transportation maintaining more than 5,600. This session investigates the consistency of bridge inspection reports for steel and concrete bridges using a virtual reality testbed.

SPEAKER

Luis Fernandez, Purdue University

Design/Construction

TIME: 11:00-11:50 AM ROOM: Fowler Hall

PDH: 1

5. A Digital Inspection System for Training Construction Inspectors

Construction inspection plays a pivotal role in ensuring the quality and long-term performance of infrastructure. This talk demonstrates the benefits of a digital inspection system that trains construction inspectors by providing on-demand answers to questions. A live demo will illustrate how inspectors can access instructions for inspection activities applicable to a particular pay item or construction process.

SPEAKER

Yeji Hong, Purdue University

TIME: 12:00-12:50 PM ROOM: Fowler Hall

PDH: 1

6. IYKYK: Better Understanding the INDOT PCSM Program

INDOT began requiring the implementation of Post-Construction Stormwater (PCSM) BMPs on qualifying projects in THE fall of 2022. This presentation will provide an update on the PCSM program. Following an explanation of the design requirements and resources, construction specifications, submittal guidance, frequently asked questions, and lessons learned, attendees will walk away with a better understanding of the INDOT PCSM program.

SPEAKER

Sandra Bowman, INDOT
Jessica Eichhorst, HNTB Corporation

Design/Construction

TIME: 1:00-1:50 PM ROOM: Fowler Hall

PDH: 1

7. SR22 Upland: Utility Challenges in Urban Roadway Reconstruction

INDOT projects all come with their own utility challenges, and these challenges can compound quickly in urban areas, particularly with a full roadway reconstruction. It is typically impossible to relocate all utilities outside the project limits, making defining and accommodating utilities during construction challenging. This presentation will discuss issues that arose during the reconstruction of SR 22 in Upland, Indiana, and suggest best practices for similar projects going forward.

SPEAKER

Mike Randolph, Parsons Corporation Kip Bunch, INDOT Charlie Schueler, Lochmueller Group

TIME: 2:00-2:50 PM ROOM: Fowler Hall

PDH: 1

8. Navigating the World of Urban Curb Ramps

Industry experts will share an insightful presentation on curb ramp design along SR 32 in the Greenfield District. Topics include the critical changes, challenges, and innovative solutions in enhancing accessibility for pedestrians. Attendees will gain a comprehensive understanding of the complexities involved in curb ramp design, explore real-world implementation examples, and learn about different approaches for addressing challenges in an urban environment.

SPEAKER

Jamie Stetzel, American Structurepoint, Inc. Marcie Henry, INDOT

Design/Construction

TIME: 3:00-3:50 PM ROOM: Fowler Hall

PDH: 1

9. Complex Roundabout at DDI Crossover

This presentation will review the project process for a multi-lane roundabout at a diverging-diamond crossover interchange. The project included complex traffic analysis modeling and outside-the-box geometry. We will discuss the project's many unique design solutions, including a multi-lane roundabout with bypass lanes, a traffic signal at a DDI crossover directly adjacent to the roundabout, shared-use paths, and raised pedestrian crossings for pedestrian safety and traffic speed control.

SPEAKER

Nicholas Murphy, American Structurepoint, Inc. Chase Myers, American Structurepoint, Inc.

TIME: 4:00-4:50 PM ROOM: Fowler Hall

PDH: 1

10. Threading an 8-ft Needle: Designing Blue Line's Trunkline

IndyGo's proposed Blue Line BRT project on Washington Street includes long sections of corridor draining to a combined sewer. When separating the corridor's runoff became the most viable option, where to put the trunkline became a crucial question. Add in thousands of new inlets needed for spread requirements and this bus project quickly became an exercise in juggling timelines, relocation costs, and real-time design changes as designers coordinated with utilities.

SPEAKER

Brian Carpenter, WSP Joe Feuerstein, WSP

Design/Construction

TIME: 1:00-1:50 PM ROOM: Loeb Theater

PDH: 1

11. Utility and Environmental Coordination on INDOT Projects

Utility impacts on INDOT projects require ongoing coordination. INDOT has enhanced this collaboration and released requirements to better integrate utility relocations with environmental resource protection. This presentation will discuss case studies that incorporated utility relocations impacts into the environmental document early in project development while also coordinating with the INDOT project managers and area engineers through appropriate constructability documentation.

SPEAKER

Dan Delgado, Lawson-Fisher Associates, Consulting Firm Lisa Vale, HW Lochner Laura Hilden, INDOT

TIME: 2:00-2:50 PM ROOM: Loeb Theater

PDH: 1

12. Lessons Learned From INDOT's Second DLT Intersection

INDOT's second displaced left-turn intersection at SR 66 and Epworth Road in Warrick County experienced unique challenges during design and construction. This session will focus on the lessons learned throughout the creation of this innovative intersection constructed on a high-speed six lane thoroughfare in an urban area.

SPEAKER

Brian Malone, INDOT Ben Carnahan, AECOM

Design/Construction

TIME: 3:00-3:50 PM ROOM: Loeb Theater

PDH: 1

13. Help! We Need Accurate Utility Information

The construction industry urges project owners to provide accurate utility information in contract documents. Accurate utility facility information is critical to minimizing risks during bidding and construction. Presenters will provide project examples, challenges, and solutions to convince attendees of the importance of accurate utility information.

SPEAKER

Dan Osborn, Indiana Constructors, Inc. Andrew Schouten, Phend & Brown Natalie Parks, Kimley-Horn

TIME: 4:00-4:50 PM ROOM: Loeb Theater

PDH: 1

14. Level Up: New Tools for Stormwater During Construction

INDOT is making significant upgrades to its Construction Stormwater General Permit program (CSGP) to meet new permit requirements. This presentation will provide an update on the CSGP program and introduce some new tools that INDOT and the consulting community will use to manage stormwater during construction. Design requirements and resources, construction specifications, submittal guidance, frequently asked questions, and lessons learned will be highlighted.

SPEAKER

Reed Hathaway, INDOT Eleanor Prescott, INDOT Richard Connolly, HNTB Corporation

Design/Construction

TIME: 11:00-11:50 AM ROOM: STEW 302

PDH: 1

15. Seeing is Believing: BIM for Infrastructure in Indiana

FHWA has developed a National Strategic Roadmap for the implementation of BIM for infrastructure that identifies multiple inefficiencies that can be improved via the use of BIM processes and technologies. This presentation will demonstrate applications of BIM for workflows, such as design and constructability review, asset data collection, and Digital As-Built. Interoperability across systems via the use of Industry Foundation Classes (IFC) will be highlighted.

SPEAKER

Scott Lecher, HNTB Corporation Andrew Pangallo, INDOT

TIME: 12:00-12:50 PM ROOM: STEW 302

PDH: 1

16. CSGP/Rule 5 Erosion Control Tips and Tricks

This presentation will walk through the revised erosion control rule, highlight commonly overlooked items, and provide tips for working through this permit.

SPEAKER

Gretchen Meyer, United Consulting

Design/Construction

TIME: 1:00-1:50 PM **ROOM:** STEW 302

PDH: 1

17. Sherman Minton: A Look Back

The Sherman Minton Corridor Project began in 2018 with a goal to inject 30 additional years of life into this major river crossing. Join us for a discussion of the hurdles encountered and the successes gained during this design-build best value delivery of these six bridges and the MOT associated with the effort.

SPEAKER

Mary Jo Hamman, Michael Baker International, Inc. Daniel Corbin, INDOT

TIME: 2:00-2:50 PM ROOM: STEW 302

PDH: 1

18. Renew Richmond: Revitalizing a Critical Structure in Downtown

Renew Richmond is a unique project that replaces the 17-span US 27 bridge over Norfolk Southern Railroad and five Richmond streets in the middle of downtown. This presentation from the INDOT project manager and design staff will give an overview of the project's unique aspects from start to finish.

SPEAKER

Sean Porter, Parsons Corporation Nathan Riggs, INDOT Matthew Kohut, Parsons Corporation

Design/Construction

TIME: 3:00-3:50 PM **ROOM:** STEW 302

PDH: 1

19. I-70 Hancock County: Overcoming Challenges in a Design-Build

The I-70 Design-Build Added Travel Lanes project in Hancock County presented many challenges throughout the design and construction that required thorough coordination and teamwork. An added travel lane in each direction was added to I-70, and four bridges were reconstructed in the project limits. The audience will learn about specific challenges and lessons learned during this project, and how the designer, contractor, and owner all worked together as a team to overcome these challenges.

SPEAKER

Matthew Kohut, Parsons Corporation Dave Denisiuk, Milestone Contractors Jonathan Wallace, INDOT

TIME: 4:00-4:50 PM **ROOM:** STEW 302

PDH: 1

20. Emergency Repair of the US 50 Blue Mesa Bridge

On April 19, 2024, the Colorado Department of Transportation (CDOT) closed the US 50 Blue Mesa Bridge after critical discoveries during a mandatory inspection of the T-1 steel structure. The bridge closure significantly impacted local travel, with the recommended detour route being over 300 miles. This presentation will discuss the project team's efforts to identify weld defects, evaluate the existing structure, and formulate interim and permanent fixes for the bridge.

SPEAKER

Johann Aakre, Michael Baker International, Inc. Francisco Bonachera Martin, Michael Baker International, Inc.

Elected Officials

TIME: 1:00-1:50 PM **ROOM:** STEW 320

PDH: 1

21. Effective Media Strategies: Tips for Communicating With the Press

In today's fast-paced media landscape, local agencies must be equipped to effectively communicate with the press. This session will provide essential tips and strategies for local officials to manage media interactions confidently and transparently. Learn how to craft clear messages, handle tough questions, and maintain a positive relationship with journalists. Whether addressing routine matters or navigating crises, these expert insights will help ensure your agency's story is told accurately and professionally, while strengthening public trust.

SPEAKER

Kevin Elliott, Applied Research Associates, Inc.

TIME: 2:00-2:50 PM ROOM: STEW 320

PDH: 1

22. How to Create Funding Sources for Transportation Projects

Road construction continues to get more expensive, and modern LPAs need to leverage all potential revenue sources to keep up with increasing costs. This presentation explores how to use road impact fees, utility rate fees, and park impact fees as potential funding sources for LPAs on transportation projects.

SPEAKER

Johnathon Nail, City of Westfield

Electric & Connected Vehicles

TIME: 1:00-1:50 PM ROOM: STEW 214 CD

PDH: 1

23. Connected Vehicle Data: Uses and Benefits

Impact of Privacy Filters and Fleet Changes on CV Trajectory Datasets for Intersection and Freeway Use Cases: Commercially available crowdsourced connected vehicle (CV) trajectory data provides stakeholders with actionable and scalable roadway mobility infrastructure performance measures. Transportation agencies and automotive original equipment manufacturers (OEMs) share a common vision of ensuring the privacy of motorists that anonymously provide their journey information. Some OEMs have introduced additional fuzzification of CV data around 0.5 miles of frequently visited locations. This presentation compares the estimated Indiana market penetration rates (MPRs) between historic nonfuzzified CV datasets from 2020 to 2023 and a 2024 CV dataset with fuzzified records and a reduced fleet.

SPEAKER

Rahul Sakhare, Purdue University Jairaj Desai, Purdue University Jijo Mathew, Parsons Corporation

Connected Vehicle Data: Improving Critical Infrastructure Asset Management: This informative session demonstrates the value of using connected vehicle data to proactively manage roadside assets. We will review how to use AI and ML techniques; apply data science to automatically determine the condition of assets; integrate data insights into operations by triggering work order maintenance tickets for assets requiring attention; and identify the value of ingesting OEM data into an ATMS.

SPEAKER

Devin Work, Parsons Corporation Jodi Bare, Parsons Corporation

Electric & Connected Vehicles

TIME: 2:00-2:50 PM ROOM: STEW 214 CD

PDH: 1

24. Charging Indiana's Crossroads: INDOT's Latest

Join us for an insightful update on INDOT's Charging the Crossroads Program. Speakers will highlight the latest program activities, key milestones and challenges with Round 1 and Round 2 projects, and offer a glimpse into activities beyond the stations themselves. Learn how Indiana is paving the way for a sustainable, accessible, and equitable deployment of DC fast charging infrastructure.

SPEAKER

George McCue, INDOT Jack Sinton, HNTB Corporation Kerri Garvin, HNTB Corporation

TIME: 3:00-3:50 PM **ROOM:** STEW 214 CD

PDH: 1

25. Assessing the Coverage of Commercial Truck Dash Cam Images on Interstate Roads

Over 64,000 commercial trucks have the capability to share on-vehicle dashboard camera images sourced from a third-party data provider. These images provide agencies with an agile framework for the monitoring, assessment, and inspection of work zone activity; sign placement; incidents; roadside assets; guardrails, lane markings; shoulder widths; winter road conditions; and pavement conditions. This presentation reports on the coverage of these trucks on national interstate roads.

SPEAKER

Rahul Sakhare, Purdue University

Electric & Connected Vehicles

TIME: 4:00-4:50 PM ROOM: STEW 214 CD

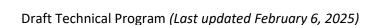
PDH: 1

26. Capital Program Prioritization With Probe Data

This presentation explores how probe data can identify congestion challenges in INDOT intersections and help in identifying a priority list of intersections for capital programs. Subsequently, the probe data is also helpful for the identification of speeds, reliability, and ranges across arterial routes in Indiana.

SPEAKER

Rahul Sakhare, Purdue University Christopher Gartner, Purdue University Nathan Shellhamer, INDOT



Finance/Administration

TIME: 11:00-11:50 AM ROOM: WTHR 104

PDH: 1

27. Needs and Gap Assessment of INDOT Workforce Development

This presentation outlines the key findings and recommendations from INDOT's Training Gap Analysis. We will identify workforce development needs, evaluate current training programs, and propose executive courses for new, frontline, and supervisory staff. This presentation will analyze workforce data, including turnover rates and skills gaps, and presents a strategic plan for INDOT's workforce development over the next 5 years.

SPEAKER

Eunhan Ka, Purdue University

TIME: 12:00-12:50 PM ROOM: WTHR 104

PDH: 1

28. NextLevel Grants Management

NextLevel Grants Management is an initiative from the OMB and the State Budget Agency (SBA) to improve how Indiana manages federal grants. Under IC 4-3-24-5, approval must be granted by SBA to apply for federal grants administered by the state on behalf of and/or in conjunction with local call funds. This session will provide an update on the latest developments of the NextLevel Grants initiative, explore the remaining discretionary grant opportunities from the BIL Act, and share lessons learned from previous grant applications.

SPEAKER

Paul Reed, INDOT

Ryan Phelps, Madison County Council of Governments

Finance/Administration

TIME: 2:00-2:50 PM ROOM: WTHR 104

PDH: 1

29. Changing Considerations for Funding Road and Transportation Projects

As LTAP's recent analysis shows, nearly \$1 billion of additional funds are needed to maintain roads and bridges. Traditional revenue streams to funds these projects from gas tax are eroded by more energy-efficient vehicles. This panel will discuss funding strategies and considerations for completing these projects, including developing and maintaining a robust inventory of transportation projects, searching for federal grant dollars, prioritizing legally available revenue streams, and credit and market considerations for funding projects.

SPEAKER

Susan Reed, Crews & Associates Chou-il Lee, Taft Law Firm Mark Shublak, Taft Law Firm

TIME: 3:00-3:50 PM **ROOM:** WTHR 104

PDH: 1

30. Tell Your Story, Demonstrate Your Value With KPIs

Purdue University Administrative Operations Integrated Analytics (AOIA) is an analytics leader in the Big Ten that fields requests from other universities about data and reporting. Learn how AOIA was established, how key data and reports were created, and ways AOIA helps demonstrate the value of Administrative Operations. Reports and KPIs covering capital projects, space, staffing, and more will be shared.

SPEAKER

Amanda Carlson, Purdue University

Finance/Administration

TIME: 4:00-4:50 PM ROOM: WTHR 104

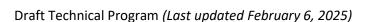
PDH: 1

31. Indiana Bond Bank: Financing Road Infrastructure and Equipment

Learn how the Indiana Bond Bank can support your community's road projects through innovative financing solutions. This session will explore project and equipment financing options, fuel price protection strategies, and other resources designed to help municipalities fund road infrastructure improvements, maintenance, and expansions. Discover how to make the most of these financial tools to keep your community's roads safe, reliable, and well-maintained.

SPEAKER

Jacob Blasdel, Indiana Bond Bank Ron Mangus, Indiana Bond Bank Marisa Weimer, Indiana Bond Bank



Human Capital/Leadership

TIME: 11:00-11:50 AM ROOM: STEW 278

PDH: 1

32. Engineers Without Borders: Mission and Indiana Project Updates

Join us for an informative presentation about the mission, sustainable design practices, needs, and opportunities of Engineers Without Borders (EWB). This 17,000-member organization addresses clean water, sanitation, and other core living needs of small, disadvantaged international communities. This presentation will give an update of the Indiana Chapter's ongoing project in Laurel Gompuene, Ecuador and share future involvement opportunities for civil, environmental, and electrical engineers.

SPEAKER

Katherine Kreienkamp, Engineers Without Borders-Indianapolis Chapter

TIME: 12:00-12:50 PM ROOM: STEW 278

PDH: 1

33. The Power of Presence

In the high-paced environment of today's business world, it can be difficult for leaders to maintain a steady, calming presence. Remote work, mobile-oriented software, leaner processes, and often a leaner staff can make authentic connections almost impossible to maintain. This presentation will examine principles of leadership and illustrate how these principles foster the perception and the reality of leadership presence. Together, we will imagine a preferred future where employees find not only purpose and support in their workplace environment, but also hope and solace.

SPEAKER

Eric Bass, INDOT Doug Burgess, INDOT Jordan Beaver, INDOT

Human Capital/Leadership

TIME: 1:00-1:50 PM **ROOM:** STEW 278

PDH: 1

34. Public Speaking 101: Overcoming the Fear Factor

Strong communications matters and can help you in daily tasks and in growing your career, but does the thought of public speaking make you break out into a cold sweat? You're not alone. This interactive session is all about finding your confidence and your comfort level. We'll focus on practical tips, tricks, and guidelines to help you conquer your public speaking fears or grow the experience you already have.

SPEAKER

Richard Gilyeat, INDOT Alex Schwinghamer, INDOT Mindy Peterson, Parsons Corporation

TIME: 2:00-2:50 PM ROOM: STEW 278

PDH: 1

35. It's Them, Not You: Navigating Difficult Work Relationships

Are there people at work that you dread talking to or working with? You are not alone. Although we can't control another person's behavior, we can control our behavior and mindset to cultivate a more productive working relationship. This presentation will provide attendees with examples of challenging situations and tools to navigate these situations with emotional intelligence and self- and social-awareness.

SPEAKER

Jennifer Sharkey, Purdue University Karen Wood, United Consulting

Human Capital/Leadership

TIME: 3:00-3:50 PM **ROOM:** STEW 278

PDH: 1

36. Deposition 101

At some stage in their careers, most professional engineers will be deposed. During the discovery phase of civil litigation, attorneys gather sworn testimony to build their case. For civil engineers, effective preparation is crucial, which includes reviewing project documentation, becoming familiar with applicable codes, and anticipating questions from opposing counsel. This presentation will outline best practices for deposition preparation.

SPEAKER

Kara Boyles, City of South Bend Michael Schmidt, City of South Bend

TIME: 4:00-4:50 PM ROOM: STEW 278

PDH: 1

37. The Evolution of Civil Engineering

As the world becomes more technologically advanced, design methods have changed. Engineers have moved away from hand calculations and hand-drawn plans towards computer-aided design and models using AI and 3D modeling. This presentation will overview the evolution of plan production and design calculations and explore the past, current, and future tools civil engineers use to optimize solutions within the infrastructure industry.

SPEAKER

Caroline Arnold, Parsons Corporation Holli Buretta, Parsons Corporation Brian Shattuck, INDOT

Legal

TIME: 1:00-1:50 PM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

38. Whose Maintenance Responsibility is it, LPA or INDOT?

Whose responsibility it is to maintain public right of way within incorporated limits. What if it is within limited access right of way? Is a permit needed? Join us for an overview of Indiana law concerning maintenance responsibilities for mowing, drainage facilities, sidewalks, and more. Learn if and when a permit is needed to maintain the right of way.

SPEAKER

Marjorie Millman, INDOT Becky Packer, INDOT

TIME: 2:00-2:50 PM ROOM: WALC 1055

(Hiler Thtr) **PDH:** 1

39. Artificial Intelligence: Impacts on You and Your Job

IT professionals will discuss AI, what it really is, and how it could impact you. They will address the foundations for AI, current AI regulatory requirements for state government agencies, some approved AI systems, and considerations in state governance that must be applied to use AI.

SPEAKER

Max Black, INDOT

Legal

TIME: 3:00-3:50 PM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

40. A Closer Look at INDOT's Alternative Delivery Procurement Processes

This session is an in-depth discussion of INDOT's revised alternative delivery program, specifically the pilot Construction Manager/General Contractor ("CM/GC") and Progressive Design-Build ("PDB") delivery models. Attendees will learn more about INDOT's policy and risk positions and will come away with a better understanding of the alternative delivery procurement and contract processes.

SPEAKER

John Smolen, Ballard Spahr Adam Sheets, Garver Jennifer Jansen, INDOT

TIME: 4:00-4:50 PM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

41. How to Be Compliant and Avoid the Pregualification Committee

Want to avoid coming before the Prequalification Committee? Join us to learn tips and best practices to become compliant, issues we are currently encountering, and how you can avoid them.

SPEAKER

Michele Steele, INDOT Matt Sutton, INDOT Greg Pankow, INDOT

Local Agency

TIME: 11:00-11:50 AM ROOM: STEW 306

PDH: 1

42. Local Agency QC/QA Specifications and Resources

Indianapolis DPW will take you on an in-depth dive of their collaboration with the Asphalt Pavement Association of Indiana to develop a well-rounded QC/QA program by revising their local specifications and procedures. Attendees will discover APAI's powerful resources that are tailored for local agencies and be equipped with editable contract documents, essential checklists, and information on the liquid asphalt binder changes to prepare for the 2025 construction season.

SPEAKER

Elizabeth Pastuszka, Asphalt Pavement Association of Indiana Jayson Watt, City of Indianapolis DPW

TIME: 12:00-12:50 PM ROOM: STEW 306

PDH: 1

43. Road Slide Challenges for LPA

Using the Old Vincennes Road in Floyd County as a case study, attendees will learn what to look for when correcting road slides and likely challenges that will occur.

SPEAKER

Heather Kilgore, United Consulting Ben Lauletta, Patriot Engineering and Environmental, Inc.

Local Agency

TIME: 2:00-2:50 PM **ROOM:** STEW 306

PDH: 1

44. Great Expectations: Employee Evaluations

Employee evaluations help set target goals and maximize limited resources. Using all the available tools in your toolbox will help boost the quality of performance. This presentation will focus on goal setting, prioritizing objectives, offering helpful feedback, and improving service standards.

SPEAKER

Joe Pearcy, Purdue University

TIME: 3:00-3:50 PM ROOM: STEW 306

PDH: 1

45. PASER Certification

This presentation will provide insight into the future of the PASER training and changes to the program.

SPEAKER

Patrick Conner, Purdue University

Local Agency

TIME: 4:00-4:50 PM **ROOM:** STEW 306

PDH: 1

46. CDL Training and Test Modernization

This session will explain how to meet the 2022 Entry Level Driver Training (ELDT) requirements for a commercial driver's license (CDL). We will focus on the IN LTAP's Train the Trainer program designed to assist municipalities in providing in-house training and discuss the 2023 modernization of the Basic Controls Skills Test by the Indiana BMV.

SPEAKER

Todd Morrison, University of Kentucky Joe Pearcy, Purdue University

TIME: 11:00 AM-12:50 PM

ROOM: STEW 314

PDH: 2

47. INLTAP's Local Agency Roundtables for Street Commissioners

Join us for a dynamic roundtable discussion designed to address the pressing challenges faced by local elected officials today. Facilitated by subject matter experts, this session offers a unique opportunity to engage in collaborative, solution-focused conversations on communication strategies, road funding, workforce development, and retention. Connect with peers, share experiences, and gain valuable insights from both experts and fellow officials in an open forum designed to foster innovative solutions and shared learning.

SPEAKER

Rich Domonkos, Purdue University

Local Agency

TIME: 1:00-1:50 PM **ROOM:** STEW 314

PDH: 1

48. From Data to Decisions: Enhancing Pavement Asset Management

This presentation shares how pavement data can be used to report current inventory and state of condition, future funding needs, and the impact of that financial investment. We will also look at how to use the data to prioritize what projects get the most benefit.

SPEAKER

Patrick Conner, Purdue University

TIME: 2:00-2:50 PM ROOM: STEW 314

PDH: 1

49. Major Bridge Inspection Program Changes

The FHWA's release of the new National Bridge Inspection Standards was the biggest program change since 2004. Find out how these major changes are being implemented in Indiana and how they will affect bridge inspectors and bridge owners.

SPEAKER

Jonathan Olson, Butler, Fairman & Seufert, Inc. Jacob Gould, INDOT

Local Agency

TIME: 3:00-3:50 PM **ROOM:** STEW 314

PDH: 1

50. How to Prepare for Change in the Field of Technicians

As technology in the automotive industry continues to evolve, local agency technicians must adapt to new advancements. In this session, Tom Rayk from AVI Automotive Video Innovations LLC will provide insight into strategies and processes that focus on recruiting, training, and retaining top talent. While cutting-edge tools and technology are essential, the success of any organization ultimately depends on the skilled professionals performing the work. Attendees will learn best practices for workforce development, ensuring they are equipped to meet the demands of an ever-changing industry.

SPEAKER

Tom Rayk, AVI Automotive Video Innovations LLC

TIME: 4:00-4:50 PM ROOM: STEW 314

PDH: 1

51. Communicating Your Transportation Projects to the Public

Join members of the INDOT public relations team to learn best practices for engaging the public and media in your transportation projects. This session will include tips and tricks to leverage social media, write news releases, capture photo and video content, and work with the press—all within a limited to non-existent PR budget. We'll show you tools everyone can use, whether a statewide agency or a local municipality.

SPEAKER

Cassy Bajek, INDOT Hunter Petroviak, INDOT Gary Brian, INDOT

Maintenance & Operations

TIME: 11:00-11:50 AM

ROOM: UC 114

PDH: 1

52. Spray Injection Patch Your Problems Before You Repave!

Spray injection repair delivers permanent solutions to potholes, cracks, alligatored areas, utility cuts, bridge deck approaches, water prone areas, and many other types of road and street repairs. It is critical to repair these underlying problems before you resurface to ensure a long pavement service life. Patch before you pave!

SPEAKER

Cliff Dickehut, Equipment Marketing Company

TIME: 12:00-12:50 PM

ROOM: UC 114

PDH: 1

53. Alternative Deep Learning Strategies for Semantic Segmentation of Mobile LiDAR Data Along Transportation Corridors

This talk presents a comparative evaluation of different deep learning strategies for semantic segmentation of mobile LiDAR data along transportation corridors. A visualization portal for illustrating the semantic segmentation results and potential applications will be discussed.

SPEAKER

Ayman Habib, Purdue University

Maintenance & Operations

TIME: 2:00-2:50 PM ROOM: UC 114

PDH: 1

54. Friction Performance of Pavement Markings: A Laboratory Evaluation

Pavement markings play a crucial role in promoting road safety by providing visual guidance to drivers. However, the friction/skid resistance of markings, an important safety factor, is often neglected. This presentation unpacks a research study evaluating the friction characteristics and performance of pavement marking materials used by INDOT. The study findings contribute to a deeper understanding of pavement marking friction and support the development of future standards and specifications.

SPEAKER

Shuo Li, INDOT David Boruff, INDOT

TIME: 3:00-3:50 PM ROOM: UC 114

PDH: 1

55. Web Portal Development for Visualization of Mobile LiDAR/Image Data Along Indiana's Transportation Corridors

Mobile Mapping Systems (MMS) equipped with integrated sensors of GNSS/INS units, RGB cameras, and LiDAR sensors can collect geospatial data along transportation corridors. The Purdue research team developed a web portal that provides end-users with easy access to the data and allows users to easily visualize, manipulate, and analyze the data utilizing several built-in/developed functions based on the application's need.

SPEAKER

Ayman Habib, Purdue University Jinha Jung, Purdue University

Maintenance & Operations

TIME: 4:00-4:50 PM ROOM: UC 114

PDH: 1

56. The Future of Roadside Mowing Operations

Automated Monitoring of Roadside Mowing Operations: Traditional methods of roadside mowing are dangerous and expensive. Autonomous mowing technology could help address these issues, but little quantitative data about current practices is available for comparison. Programmable action-sports cameras and standard agricultural telematics loggers can be used to record useful data for understanding operations and informing future developments. Join us for a discussion.

SPEAKER

Timothy Wiegman, Purdue University Nathan Sprague, Purdue University

Digital Twin Roadside Vegetation Management and Real-World Verification: Roadside mowing operations are high risk for all crew members working alongside moving traffic and challenging terrain. Autonomous mowers could remove the need for a human presence along the right-of-way. To study the feasibility of this technology, a digital-twin robotic simulator was developed for testing and evaluating real-world Indiana test segments. Real-world verification was then performed on unmanned mowing platforms to validate the simulated results. Join us to learn more.

SPEAKER

Michael Mardikes, Purdue University Nathan Sprague, Purdue University

Multimodal Transportation

TIME: 2:00-4:50 PM ROOM: CL50 224

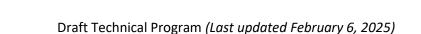
PDH: 3

57. Transit Planning 101

Attendees will enjoy hand-on engagement with Prairieville, an activity that puts participants in the shoes of a transit planner designing a transit system from scratch. This interactive small-group activity allows each team to design their version of the best transit network and then compare and discuss the networks to demonstrate trade-offs.

SPEAKER

Jen Higginbotham, Indianapolis Metropolitan Planning Organization



Pavements

TIME: 11:00-11:50 AM **ROOM:** STEW 218 AB

PDH: 1

58. Thin Concrete Overlays: Implementation and Lessons Learned

Presenters will explore how to find a good candidate for a thin concrete overlay (TCO), recent TCO revisions to the Indiana Design Manual Part 6—Pavement Design, and contract document improvements based on the lessons learned from the previous +1.5 million SYS of thin concrete overlay projects built in Indiana.

SPEAKER

Gina Sessions, American Structurepoint, Inc. Dave Beale, FH Paschen Molly Mooney, INDOT

TIME: 12:00-12:50 PM **ROOM:** STEW 218 AB

PDH: 1

59. Indiana's First Glow-in-the-Dark Asphalt Greenway

Nestled in an unlit section of Spades Park in Indianapolis, the Pogues Run Greenway illuminates each night with thousands of photoluminescent stones. This presentation covers the inspiration behind the idea, glow-stone data, installation processes, and the finished product's results and challenges.

SPEAKER

Charlie Starling, CHA Consulting, Inc. Gretchen Zortman, City of Indianapolis DPW

Pavements

TIME: 1:00-1:50 PM ROOM: STEW 218 AB

PDH: 1

60. INDOT Sustainability: FHWA Climate Challenge and LCTM Grants

INDOT and industry have begun to explore the use of lower embodied carbon materials in asphalt and concrete pavements through participation in two FHWA grant programs: Climate Challenge and Low Carbon Transportation Materials (LCTM). This presentation will describe the way CO2 is measured for construction materials utilizing Environmental Product Declarations (EPDs) and the Life Cycle Assessment (LCA). We will summarize what we have learned through the Climate Challenge, and lay out the road ahead with the LCTM grant.

SPEAKER

Matt Beeson, INDOT Elizabeth Pastuszka, Asphalt Pavement Association of Indiana John Leckie, American Concrete Pavement Association—Indiana Chapter

TIME: 2:00-2:50 PM ROOM: STEW 218 AB

PDH: 1

61. The Fundamentals of Geogrids in Trafficked Applications

This talk reviews the benefits that geogrids offer to paved and unpaved roads. We will discuss the impact that materials and manufacturing processes have on geogrid performance and how they affect lateral restraint and radial stiffness. The progression from biaxial, to triax, to 3D triplanar geogrids will be explained with examples. Punched and drawn polypropylene geogrids will be covered in greater detail.

SPEAKER

Doug McCluskey, EJ Prescott

Pavements

TIME: 3:00-3:50 PM **ROOM:** STEW 218 AB

PDH: 1

62. REBEL™ IoT Sensors for Real-Time Concrete Strength Determination

The current compressive strength testing methods are inefficient, expensive, and time-consuming, which often causes construction delays or schedule overruns. Purdue developed an in-situ nondestructive sensing method that enables direct measurement of concrete stiffness and strength using the electromechanical impedance (EMI) method coupled with piezoelectric sensors. The Alaugmented technique enables real-time strength sensing, and the patented datalogger for EMI signal reading and interpretation is portable and fully automated. Join us to learn more.

SPEAKER

Rui He, Purdue University Na Lu, Purdue University

TIME: 4:00-4:50 PM ROOM: STEW 218 AB

PDH: 1

63. Enhancing Road Performance With Void Reducing Asphalt Membrane

The Impact of Rumble Strips on Longitudinal Joint Performance: This presentation will discuss how using the technology of a void reducing asphalt membrane can improve performance by creating a more durable asphalt surface that resists cracking and reduces permeability. The session will also highlight how Highway Safety Improvement funds can be used.

SPEAKER

Todd Thomas, Asphalt Materials, Inc. Tim Zahrn, Asphalt Materials, Inc.

Void Reducing Asphalt Membrane (VRAM) Specifications: VRAM reduces voids in longitudinal joints, which improves the longevity of a quality road surface. INDOT has already required VRAM on certain road designs, with further specifications and requirements likely upcoming. We will review the current specifications for VRAM and outline specifications that may update with the technology.

SPEAKER

Randy Miller, Evergreen Roadworks

Project Management/Planning

TIME: 11:00-11:50 AM ROOM: STEW 202

PDH: 1

64. How to Conduct a Successful Utility Joint Bore and Why You Should Do It

This presentation offers in-depth guidelines to develop a plan for a joint utility bore from the design phase of a project through construction. We will also explore cost savings, reduction in utility relocation timeline, damage prevention benefits, and benefits to overall project success.

SPEAKER

Aaron Day, American Structurepoint, Inc. Steve Melson, EEG

TIME: 1:00-1:50 PM ROOM: STEW 202

PDH: 1

65. Project Management: Navigating a Public Private Partnership

Project Management of a Public Private Partnership (PPP) requires a high level of collaboration and communication. Representing the City of Noblesville, IN as their development strategic advisor, CHA Consulting partnered with the Indiana Pacers to build an arena for their NBA-G league team. Three major stakeholders, many players, and an aggressive schedule was managed to get the deal done. This project will illustrate leadership lessons, managing deliverables, and managing stakeholder wants, needs and expectations to deliver a successful project.

SPEAKER

Jeff Birenbaum, CHA Consulting, Inc.

Project Management/Planning

TIME: 2:00-2:50 PM **ROOM:** STEW 202

PDH: 1

66. Data Visualization to Empower Great Transportation Decision Making

This session demonstrates tools and dashboards developed using Microsoft Power BI and ArcGIS Experience Builder and will outline how they are used by planners, engineers, and the public to make well-informed transportation decisions related to safety, traffic operations, transportation planning, and project programming. The session will also highlight best practices for practitioners who want to start using these tools and identify data sources worth analyzing more closely.

SPEAKER

Dan Malsom, Kimley-Horn Meg Hunter, Kimley-Horn

TIME: 3:00-3:50 PM ROOM: STEW 202

PDH: 1

67. The Epic Quest for Utility Easement Knowledge

This presentation will overview the importance of researching utility easements and the impact it can have on a project, delay-wise and cost-wise, when utility easement research is not thoroughly conducted to determine if a utility is reimbursable on a project.

SPEAKER

Steven Knies, WSP Sandra Jones, WSP

Project Management/Planning

TIME: 4:00-4:50 PM **ROOM:** STEW 202

PDH: 1

68. Understanding the FHWA Cost and Schedule Risk Assessment (CSRA) Process

Major projects (over \$500 million) are often more complex and riskier than other projects, and careful attention must be provided when preparing cost estimates. Traditional estimating methods may not be appropriate in all cases. Using the Revive I-70 and I-69 ORX projects as examples, project team members from INDOT and their consultant will describe how the CSRA process works and how to complete a CSRA level risk assessment.

SPEAKER

Daniel Corbin, INDOT
Toby Randolph, Parsons Corporation

TIME: 11:00-11:50 AM ROOM: STEW 279

PDH: 1

69. Lessons Learned on the US 30 ProPEL Study

The US 30 ProPEL Study stretches from Valparaiso to the Ohio state line along US 30. The US 30 West and US 30 East teams will discuss multiple areas of the PEL study from their distinct perspectives, including initial data collection, existing conditions analysis, environmental constraints, alternatives analysis, and initial recommendations.

SPEAKER

Scott Sandstrom, CDM Smith Rusty Holt, WSP Sandra Flum, INDOT

Project Management/Planning

TIME: 1:00-1:50 PM **ROOM:** STEW 279

PDH: 1

70. Nexus Between NEPA and Utilities

Integrating utility coordination within the NEPA framework is crucial for ensuring environmental compliance while also meeting project timelines. This presentation will explore the intersection of these processes, identify key challenges, and outline best practices to streamline coordination. Case studies from recent projects will illustrate effective collaboration and procedural efficiency and offer insights into achieving regulatory compliance and project goals.

SPEAKER

Natalie Parks, Kimley-Horn Kate Williams, Kimley-Horn

TIME: 2:00-2:50 PM **ROOM:** STEW 279

PDH: 1

71. Balancing Act: Creating Safe, Legal, and Complete Streets

When it comes to urban reconstruction projects, creating a single vision from multiple stakeholder perspectives can be challenging. This presentation shares the real-world example of a local municipality's hesitancy to incorporate bicycle accommodations and pedestrian safety enhancements within an urban corridor to explore how to build a consensus around a project while still adhering to surface transportation laws.

SPEAKER

Aaron Bubb, Kapur and Associates

Project Management/Planning

TIME: 3:00-3:50 PM **ROOM:** STEW 279

PDH: 1

72. Navigating NEPA for Engineers

Are you often mystified by NEPA requirements? We'll dive into the most common conflict points engineers and environmental practitioners face. We'll share tips on how to collaborate better, explain why right-of-way amounts and types are so important, discuss the importance of communication when changing project limits, and provide valuable insight into building the best purpose and need statement.

SPEAKER

Leigh Montano, CHA Consulting, Inc. Charlie Starling, CHA Consulting, Inc.

TIME: 4:00-4:50 PM ROOM: STEW 279

PDH: 1

73. Planning for Resilience: Assessing Indiana's Transportation Network

Planning for transportation resilience is a complex endeavor. What weather patterns can we expect in the future? How might existing infrastructure perform under extreme conditions? What resilience improvements should be prioritized? How should INDOT prepare as an organization? Presenters will discuss how INDOT tackled these issues in the context of FHWA's PROTECT Program.

SPEAKER

Louis Feagans, INDOT
Loreana Marciante, HNTB Corporation

Safety

TIME: 1:00-1:50 PM **ROOM:** STEW 218 CD

PDH: 1

74. Safer Streets With Asphalt Art

The City of South Bend partnered with a neighborhood group and a local artist to install an asphalt art traffic calming project. The demonstration included temporary bump outs and crosswalks for parallel mid-block crossings between the Notre Dame Civic Innovation Lab and the Indiana University Civil Rights Heritage Center. The artwork was inspired by, chosen, and painted by the neighborhood to bring attention to the high pedestrian area. The process, results, and data insights will be shared.

SPEAKER

Kara Boyles, City of South Bend Lidya Abreha, City of South Bend

TIME: 2:00-2:50 PM **ROOM:** STEW 218 CD

PDH: 1

75. National Wildlife Crossings Program: Enhancing Roadway Safety

Wildlife crossings are an emerging creative infrastructure solution that enhance road safety by providing safe passage for wildlife across busy highways, which significantly lowers the risk of severe wildlife-vehicle collisions. Join us as Lochner's Roadway Ecologists share their nationwide experience with wildlife crossing projects and the funding sources available to bring these solutions to Indiana. By learning from successful models across the country, we can protect ecosystems while improving roadway safety.

SPEAKER

Lisa Vale, HW Lochner Tony Miller, HW Lochner Kevin Connor, HW Lochner

Safety

TIME: 3:00-3:50 PM ROOM: STEW 218 CD

PDH: 1

76. Comparing Safety Data on a Constructed Hard Shoulder Running (HSR) Project

HSR uses road shoulders to improve congestion, but reducing the lateral width to obstructions when the shoulder is a travel lane creates the perception of compromised safety. Few HSR projects have existed long enough to compare safety data to determine if this is a legitimate concern. This presentation will compare the crash trends before and after the implementation of Ohio's first HSR project and discuss gaps in the current practice.

SPEAKER

Brian Toombs, Burgess & Niple, Inc.

TIME: 4:00-4:50 PM ROOM: STEW 218 CD

PDH: 1

77. Shelbyville Safety Action Plan: USDOT SS4A Grant Success Story

The Bipartisan Infrastructure Law's Safe Streets and Roads for All (SS4A) program designates \$5 billion over 5 years to enhance roadway safety by reducing fatalities and serious injuries. Focused on developing comprehensive safety action plans (CSAP), SS4A has spurred significant progress nationwide. Our presentation highlights how Indiana communities, including Shelbyville, have embraced this initiative and are working towards the goal of zero roadway fatalities.

SPEAKER

Hardik Shah, American Structurepoint, Inc. Alex Crandall, American Structurepoint, Inc. Adam Rude, City of Shelbyville

Traffic Operations

TIME: 11:00-11:50 AM ROOM: STEW 310

PDH: 1

78. Winter Operations Beyond Indiana: Clearing New Orleans and Reopening I-10

This presentation will show how connected vehicle data can be used to assess national mobility. Attendees will hear first-hand from Levi Jett from Franklin, IN. He mobilized a fleet of trucks to travel to New Orleans and help re-open the city after Winter Storm Enzo.

SPEAKER

Levi Jett, Jett Facility Consultants LLC Jairaj Desai, Purdue University

TIME: 12:00-12:50 PM ROOM: STEW 310

PDH: 1

79. Innovative Intersection Public Involvement: Strategies That Work

This presentation will share best practices for effectively engaging the public and local stakeholders during the development of innovative treatments. We will cover why innovative treatments work; their selection process; case studies from finished projects; and tips and tricks for effective, positive engagement and collaboration. This presentation will benefit project managers, public involvement professionals, and engineers involved in developing innovative treatments.

SPEAKER

Nathan Shellhamer, INDOT David Reamer, INDOT

Traffic Operations

TIME: 1:00-1:50 PM **ROOM:** STEW 310

PDH: 1

80. No More Building! Move Those Cars!

Ranked priority #9 in a statewide plan, traffic engineers are focused on maximizing road capacity without adding lanes by using tools like traffic signals and turn restrictions. The US 31E Bardstown Road Corridor study highlighted this challenge. As development surpassed road capacity, it led to delays and frustration. This presentation explores highway safety, capacity enhancement, and infrastructure management to address these growing issues.

SPEAKER

Lindsay Walker, HMB Professional Engineers, LLC Kristan Curry, HMB Professional Engineers, LLC Brad Johnson, HMB Professional Engineers, LLC

TIME: 2:00-2:50 PM **ROOM:** STEW 310

PDH: 1

81. Real-Time Positioning of Pan-Tilt-Zoom Roadside ITS Camera for Traffic Incident Management

Pan-tilt-zoom roadside cameras have been widely adopted in ITS and ATMS. This presentation covers the development of a real-time, automated repositioning system implemented across 80 cameras in the Indianapolis metropolitan area. This novel approach aids TMC operators in monitoring for incidents, locating the nearest camera(s) with the best view, repositioning, and alerting operators. This process aims to reduce several necessary tasks in the traffic incident management procedure, saving valuable minutes for response coordination.

SPEAKER

Christopher Gartner, Purdue University Jijo Mathew, Parsons Corporation Jairaj Desai, Purdue University

Traffic Operations

TIME: 3:00-3:50 PM **ROOM:** STEW 310

PDH: 1

82. Evaluation of LiDAR Technology for Traffic Signal Performance Measures

This presentation will cover methodologies to estimate vehicle and pedestrian traffic signal performance measures using LiDAR trajectory data from over 15,000,000 vehicle waypoints and 170,000 pedestrian waypoints detected during a 24-hour period at a Utah intersection. Vehicle-based Purdue Probe Diagrams (PPDs) were used to estimate movement level turning counts, 85th percentile queue lengths, arrivals on green, highway capacity manual level of service, split failures, and downstream blockage by the time of day (TOD). Pedestrian-based PPDs were used to estimate wait times and the proportion of people that traverse multiple crosswalks and to evaluate pedestrian walking speeds.

SPEAKER

Jairaj Desai, Purdue University

TIME: 4:00-4:50 PM **ROOM:** STEW 310

PDH: 1

83. Diverging Diamond Interchange Optimization With Big Data Validation

Diverging diamond interchanges (DDIs) is a design innovation that has many proven safety and mobility benefits. That said, finding appropriate traffic signal timings to operate DDIs can be challenging; queues must remain low and arterial coordination must be maintained to facilitate efficient operations and traffic progression. This presentation discusses traffic signal optimization practices used to optimize several DDIs in Illinois and in Kansas using both traditional methods and big data to validate results.

SPEAKER

Christos Achillides, Iteris, Inc. Brien Funk, Iteris, Inc. Adam Danczyk, Iteris, Inc.

Urban Planning

TIME: 1:00-1:50 PM ROOM: STEW 214 AB

PDH: 1

84. Navigating Urban Forestry Requirements for Road Projects

Not sure how to navigate the complexities of managing urban forests for your road design projects? Beautify your road project by incorporating tree planting and management from the start. Learn how urban forestry management can be incorporated early in the design process, whether to meet specific permit requirements or to meet community-based urban forest guidance.

SPEAKER

Zachary Root, Metric Environmental, LLC Amy Noel, Metric Environmental, LLC

TIME: 2:00-2:50 PM **ROOM:** STEW 214 AB

PDH: 1

85. Indiana Transportation Equity Atlas: Progress and Directions

The Indiana Transportation Equity Atlas (ITEA) is a recently developed mapping and screening tool for identifying disadvantaged areas of Indiana across multiple dimensions of transportation. In this presentation, we discuss its implementation, utilization, and potential for ranking areas for prioritizing transportation investments.

SPEAKER

Rajat Verma, Purdue University Rishika Tumula, Purdue University

Urban Planning

TIME: 3:00-3:50 PM ROOM: STEW 214 AB

PDH: 1

86. Indianapolis Neighborhood's Tactical Urbanism Project Prevents Crashes

The Community Heights neighborhood in Indianapolis used the city's tactical urbanism policy to redesign a minor arterial using water walls and street trees. The temporary experiment encouraged drivers to go the speed limit, which lowering the 85% percentile speed from 43 mph to 36 mph and prevented crashes. Most drivers, pedestrians, and bus riders felt unsafe before the experiment, but feelings shifted, and now the majority of users report feeling safe.

SPEAKER

Leslie Schulte, Community Heights
Jill Palmer, City of Indianapolis DPW

TIME: 4:00-4:50 PM ROOM: STEW 214 AB

PDH: 1

87. Regional Stormwater Detention Basins: Treating Urban Runoff Efficiently

As urban development continues to surge, available space for infrastructure within the public right-of-way becomes scarce. The need for stormwater management projects is ever increasing, and additional regulations and treatment requirements are emerging throughout the country. When all onsite alternatives are infeasible, municipalities and agencies can investigate offsite treatment for stormwater management. This presentation will investigate the approach used for the City of Columbus Regional Basins project.

SPEAKER

Kari Mackenbach, ms consultants inc. Chad Boyer, ms consultants inc.

Aviation

TIME: 8:00-8:50 AM ROOM: WTHR 104

PDH: 1

88. Advanced Air Mobility at Purdue: Opportunity Meets Capability

Advanced Air Mobility (AAM) is a phrase describing the emerging aerospace sector that brings together new and evolving technologies to revolutionize aviation. The conjunction of electric aircraft propulsion, autonomy and automation, and advanced materials and manufacturing holds the potential for the safe, lower-cost, higher-reliability transportation of passengers and cargo in urban and regional settings. This session will discuss how Purdue's problem-solving abilities enable AAM.

SPEAKER

Bill Crossley, Purdue University

TIME: 9:00-9:50 AM **ROOM:** WTHR 104

PDH: 1

89. Fort Wayne International Airport Project Gateway Terminal Transformation

The Fort Wayne Airport started a west terminal expansion project in June 2021. An east terminal expansion is now underway, and the project includes an expanded ticket area, new baggage handling, new gates, new jet bridges, a children's play area, a relocated and expanded TSA checkpoint, added restrooms, service animal relief area, and more. Join to learn more.

SPEAKER

Scott Hinderman, Fort Wayne International Airport Joseph Marana, Fort Wayne International Airport

Aviation

TIME: 10:00-10:50 AM ROOM: WTHR 104

PDH: 1

90. Airfield vs. Roadway Pavements: Evaluation and FAA Impacts

This presentation explores the critical differences in ASTM requirements for evaluating airside pavements vs. roadway and parking lot pavements. Attendees will learn about different pavement rating methods, their application in airport environments, recent updates to pavement strength reporting, and how PCI and PCR impact FAA grant funding eligibility—all essential knowledge for optimizing compliance and securing financial support.

SPEAKER

Tim Mentel, Resource International, Inc. James Howell, Kimley-Horn

TIME: 11:00-11:50 AM ROOM: WTHR 104

PDH: 1

91. Improving Air Transport Operations

Characteristics of Helicopter Air Ambulance Services in Indiana: Helicopter air ambulances provide an essential service by reducing the time required for medical attention to individuals needing urgent care. This session will analyze reasons for transport, response times, seasonality, and the healthcare infrastructure of Emergency Medical Services (EMS) activities in Indiana from 2020 to 2023.

SPEAKER

Mary Johnson, Purdue University Gustavo Sanchez Cortes, Purdue University

Navigating the Perils: Operational Safety in Conflict Zones: This presentation will explore operational safety challenges for airlines operating in conflict zones, with a focus on risk factors, mitigation strategies, and case studies. The goal is to provide industry professionals and policymakers with actionable strategies to improve operational safety and minimize risks in conflict-affected areas, thus ensuring safer air transport operations.

SPEAKER

Caroline Marete, Purdue University

Aviation

TIME: 1:00-1:50 PM **ROOM:** WTHR 104

PDH: 1

92. Lessons Learned From the Warsaw Airport

Warsaw Airport Taxiway E Full Depth Reclamation (FDR) Reconstruction: Warsaw Airport recently reconstructed Taxiway E using FDR to refurbish access to the airport's larger corporate hangars. This informative session delves into the details of the project, including the poor drainage in the area, concrete aprons at the hangars, and access drives.

SPEAKER

Nick King, City of Warsaw Nathan Lienhart, CHA Consulting, Inc.

Warsaw Airport Runway 27 Approach Power Line Relocation: For roughly 20 years, the Warsaw Airport has discussed the relocation of a high-tension power line in the Runway 27 approach to allow for approach protection. An FAA grant is now in place to provide for the relocation. The presentation will review the project and its challenges.

SPEAKER

Nick King, City of Warsaw Nathan Lienhart, CHA Consulting, Inc.

Aviation

TIME: 2:00-2:50 PM ROOM: WTHR 104

PDH: 1

93. Purdue Takes Flight: Commercial Air Service, Airport Improvements

Commercial air service returned to the Purdue University Airport in May 2024, through the new Amelia Earhart Terminal. We will walk through the steps required to return air service to the Greater Lafayette community, what air service looks like today, lessons learned, an overview of airport construction, and the latest progress on the new terminal building.

SPEAKER

Adam Baxmeyer, Purdue University Jessica Robertson, Purdue University Don Petersen, Purdue University

TIME: 3:00-3:50 PM ROOM: WTHR 104

PDH: 1

94. Virtual Tower Siting at the Purdue Airport

This talk will discuss the UAS site survey and virtual siting process used by the FAA to evaluate candidate sites for a new control tower at the Purdue Airport.

SPEAKER

Adam Baxmeyer, Purdue University

Bridges

TIME: 8:00-8:50 AM ROOM: STEW 206

PDH: 1

95. Evaluation and Remediation of KYTC T-1 Steel Members

In 2021, FHWA issued a directive requiring the inspection of T-1 steel. Toward this end, the KYTC partnered with Michael Baker to develop and execute a plan to accomplish this federal mandate. Through early coordination and steady determination, over 2,500 welds on seven bridges across the state were tested and evaluated. This presentation will review this partnership and the steps taken to meet the federal mandate in a calculated, fiscally responsible, and safe manner.

SPEAKER

Jason Stith, Michael Baker International, Inc. Paul Cozzens, Michael Baker International, Inc.

TIME: 9:00-9:50 AM ROOM: STEW 206

PDH: 1

96. Built-Up Press-Brake Formed Tub Girders: Concept to Demonstration

Built-up press-brake-formed tub girders are comprised of cold bent webs bolted to flat flange plates, providing a new approach for the accelerated fabrication of steel bridges with internal member redundancy. This presentation provides an overview of the design, construction, and behavior of two demonstration bridges built in Indiana and will conclude with a discussion of a kit-of-parts system to facilitate broader adoption of this technology.

SPEAKER

Ashley Thrall, University of Notre Dame Tom Bieneman, HNTB Corporation Stephanie Wagner, INDOT

Bridges

TIME: 10:00-10:50 AM ROOM: STEW 206

PDH: 1

97. The Next Generation of Slab Bridges

The 2024 Northeast Solid Deck Beam Guide Details developed by PCI Northeast Bridge Technical Committee takes advantage of recent research on deck-level connections. Join this session to learn how these beams marry the reinforced closure joint developed for the NEXT D beam to a solid deck beam that utilizes a box beam form. These beams are a precast alternative to shallow box beams and an accelerated bridge construction (ABC) alternative to cast-in-place reinforced concrete slab bridges.

SPEAKER

Jordan Luther, CHA Consulting, Inc. Mike Culmo, CHA Consulting, Inc.

TIME: 11:00-11:50 AM ROOM: STEW 206

PDH: 1

98. A Dyer Story: US 30 Bridge Replacement

Discover how a utility company, contractor, designer, and utility coordinator collaborated to safely and successfully execute a bridge replacement project right next to a gas pipeline. This session will provide an in-depth look at the challenges faced, the strategies employed, and the teamwork that made it all possible. Don't miss this opportunity to learn from a project that utilized available resources to mitigate risks and achieve a successful bridge replacement.

SPEAKER

Josshé Palm, INDOT Anthony Fadke, Superior Construction Landon Morris, Marathon Karl Krukenberg, WSP

Bridges

TIME: 1:00-1:50 PM ROOM: STEW 206

PDH: 1

99. I-65 Over White River: First UHPC Repair in Indiana

The I-65 over White River Bridge Preventive Maintenance project is the first INDOT project of its kind to use Ultra-High Performance Concrete (UHPC) to repair a damaged steel girder. The downtown Indianapolis bridge sees 72,000 VPD, and the UHPC repair allowed the girder to be repaired under live load at a fraction of the cost of a girder segment replacement. This session will highlight the design and construction of the UHPC encasement and lessons learned from construction.

SPEAKER

Dan Taylor, INDOT John Rodrick, HNTB Corporation

TIME: 2:00-2:50 PM ROOM: STEW 206

PDH: 1

100. Foundation Review Form: Concepts and Best Practices

The INDOT Foundation Review Form is a crucial part of many bridge projects. This presentation will focus on why the form is important, how it is used within INDOT, best practices to properly complete the form for different substructure types, and common mistakes for consultants to avoid. Attendees will leave armed with the knowledge get the form approved on the first submittal.

SPEAKER

Rose Walther, DCCM James Tradup, DCCM Randall Brooks, DCCM

Bridges

TIME: 3:00-3:50 PM **ROOM:** STEW 206

PDH: 1

101. An Analysis of MSE Wall Engineering Behavior

As part of contract R-39231, INDOT specified construction of an instrumented MSE wall at the CR550S overpass of I-65 in Boone County. The instrumentation has yielded continuous measurements of stresses/strains that INDOT is using to better understand MSE wall engineering behavior. Results from those measurements and their potential implications for MSE wall design/analysis procedures will be presented.

SPEAKER

Peter Becker, INDOT
Michael Barnhart, Purdue University

TIME: 4:00-4:50 PM ROOM: STEW 206

PDH: 1

102. Innovations in Bridge Inspection Methods

USI Consultants will present bridge inspection technology and technique advancements. The cospeaker(s) will be LPA representatives who have benefited from these techniques and can speak to their efficacy. Topics such as timber density testing, thermal deck examinations, and UAS (drone) and sonar assisted inspections will be highlighted.

SPEAKER

Rob Coop, USI Consultants, Inc.

Bridges

TIME: 8:00-8:50 AM ROOM: STEW 214 AB

PDH: 1

103. Temporary Bridge Construction

In light of DM 24-08 (MOT on high-volume interstate highways), the use of temporary bridges and runarounds may be the solution for phased construction. This solution has been proven to reduce time and dollars while reducing risk and improving the safety and quality of bridge construction. Join us for a discussion.

SPEAKER

Bobby Steele, E & B Paving Michael Black, INDOT Bryan Wright, Butler, Fairman & Seufert, Inc.

TIME: 9:00-9:50 AM ROOM: STEW 214 AB

PDH: 1

104. ORX Section 2

ORX Section 2, the planned project to connect I-69 between Indiana and Kentucky is gaining momentum. Please join us for an update on the plans for this new major crossing of the Ohio River.

SPEAKER

Daniel Corbin, INDOT Amanda Spencer, KYTC Patricia Dunaway, Michael Baker International, Inc.

Bridges

TIME: 10:00-10:50 AM **ROOM:** STEW 214 AB

PDH: 1

105. Structural Health Monitoring of Bridges for Lifecycle Asset Management

The US infrastructure is aging. Enhanced assessment is needed to extend the service life of existing assets. Both new construction and rehabilitation projects offer opportunities for the use of structural health monitoring (SHM). This presentation examines the use of three types of SHM systems applied to Indiana Toll Road bridges—live-load testing, long-term monitoring, and InSAR satellite data.

SPEAKER

Brittany Bullard, University of Notre Dame Brian Cherry, Indiana Toll Road

TIME: 11:00-11:50 AM **ROOM:** STEW 214 AB

PDH: 1

106. Bridges of the Monon South Trail

This presentation details the rehabilitation of bridges on the Monon South Trail, a component of the Next Level Trail initiative. The project confronted several challenges, including balancing long-term structural maintenance with short-term timelines, coordinating with the partial trail opening in 2024, and designing a signature bridge to showcase the project.

SPEAKER

Drew Storey, Clark Dietz, Inc.

Design/Construction

TIME: 8:00-8:50 AM ROOM: Fowler Hall

PDH: 1

107. Managing Risk to Successfully Let a Project

Successfully letting a project requires proactive risk management throughout all phases of development. This presentation will explore effective strategies for identifying, assessing, and mitigating risks that can impact project schedules, budgets, and overall success. Topics will include design, environmental risks, right-of-way acquisition, utility coordination, and contractor engagement. Through real-world examples, attendees will gain practical insights into collaborating with stakeholders, anticipating potential roadblocks, and ensuring a smooth letting process.

SPEAKER

Gina Sessions, American Structurepoint, Inc. John Kruekeberg, INDOT

TIME: 9:00-9:50 AM ROOM: Fowler Hall

PDH: 1

108. What's Coming With INDOT Alternative Delivery?

This presentation will focus on the INDOT Alternative Delivery Program guidelines and process. Updates on the progress of CMGC and PDB procurements and preconstruction phases will be shared, and we will touch on Level Up 31, SR 32 and I-80/94 Flex Road and upcoming project developments.

SPEAKER

Brian Shattuck, INDOT Mark Perron, Parsons Corporation Kevin Jasinski, Burgess & Niple, Inc.

Design/Construction

TIME: 10:00-10:50 AM ROOM: Fowler Hall

PDH: 1

109. Effective Asset Management of Mechanically Stabilized Earth (MSE) Walls: Best Practices, Challenges, and Innovations

MSE walls are widely used in civil engineering due to their cost-effectiveness and ability to retain earth efficiently. However, like any infrastructure, they require proper asset management to ensure long-term performance, safety, and durability. This presentation will provide a comprehensive overview of asset management strategies specifically for MSE walls, with an emphasis on inspection, maintenance, lifecycle management, and emerging technologies.

SPEAKER

Aamir Turk, INDOT Joshua Lee, INDOT Malek Smadi, Geotill, Inc

TIME: 11:00-11:50 AM ROOM: Fowler Hall

PDH: 1

110. Portable Signals and Driveway Assistance Devices: Lessons Learned

This presentation will cover how INDOT's use of portable signals has evolved since they were first introduced, summarize the results of INDOT's MUTCD experimentation with driveway assistance devices, and lessons learned from the experiment.

SPEAKER

Joe Bruno, INDOT Andrew Harris, Horizon Signal

Design/Construction

TIME: 12:00-12:50 PM ROOM: Fowler Hall

PDH: 1

111. College Avenue and Main Street Sewer Separation

This presentation will focus on the design phase of the College Avenue and Main Street Sewer Separation project in Brownsburg, Indiana. As one of the last remaining combined sewer areas in the town, a sewer separation project was selected to reduce the amount of stormwater that entered the sanitary sewer system, provide a separate stormwater outfall to serve the upstream watershed area, furnish an outlet for redevelopment, and alleviate flooding.

SPEAKER

Kasey Marley, Wessler Engineering

TIME: 1:00-1:50 PM ROOM: Fowler Hall

PDH: 1

112. Louisville viaSmart Over-Height and Flood Driver Prevention and Protection Systems

The Louisville Metro Government is executing a \$2 million Smart Grant project to mitigate safety issues for travelers at four viaduct locations in Louisville, Kentucky. Over-height detection systems, flood detection systems, and camera, vehicle detection systems are being installed at these locations. An Albased web data exchange platform is being developed to notify travelers in advance of flood or overheight vehicles.

SPEAKER

Dana Spratt, Louisville Metro Government William Lyon, Prime Engineering Terri Combs, Prime Engineering Chris Seidt, City of Louisville

Design/Construction

TIME: 2:00-2:50 PM ROOM: Fowler Hall

PDH: 1

113. Indy DPW's First BOT is Complete: What Was learned?

Join us for a recap of the first BOT project for Indianapolis DPW. Learn what problems were encountered along the way and the solutions that were executed towards the successful completion of the field work.

SPEAKER

Travis Underhill, Avenew Inc. Charlie Kacmar, Avenew Inc. John Bowen, City of Indianapolis DPW

TIME: 3:00-3:50 PM ROOM: Fowler Hall

PDH: 1

114. Connected Work Zones in 2025

This panel session will discuss the smart arrow boards and variable speed limit signs that will be deployed on I-74 and I-65 construction projects in 2025.

SPEAKER

Richard Hedgecock, Indiana Constructors, Inc.
John McGregor, INDOT
Bill Smith, INDOT

Design/Construction

TIME: 4:00-4:50 PM ROOM: Fowler Hall

PDH: 1

115. INDOT and AASHTOWare Project: What You Need to Know

This presentation will provide an update on the implementation of AASHTOWare project for INDOT contracts, starting with the May 2025 letting.

SPEAKER

Ellis Holder, Michael Baker International, Inc. Matthew Harding, INDOT

TIME: 1:00-1:50 PM ROOM: Loeb Theater

PDH: 1

116. Holistic View of INDOT Processes: From Planning to Construction

A panel of consultant, contracting, INDOT, and LPA personnel will have an energetic discussion and solicit audience feedback about the INDOT process from initial planning to construction. The session will highlight INDOT and LPA perspectives of things that have worked well, consultants' views of INDOT's process for planning and design, and the contractor's viewpoint on the INDOT process before bidding.

SPEAKER

Steve Moriarty, Kosciusko County Highway Amber Thomas, INDOT Dan McCoy, RL McCoy Inc. Prasad Narayan, Kapur and Associates

Design/Construction

TIME: 2:00-2:50 PM ROOM: Loeb Theater

PDH: 1

117. Pavement Markings: Deciding What to Use

Attendees will leave knowing the important questions designers need to ask when picking temporary and permanent pavement markings for a job. Together, we will discuss what to expect when choosing each item and the differences between jobs that may result in unexpected outcomes.

SPEAKER

Brian Triska, Maintenance of Traffic, LLC

TIME: 3:00-3:50 PM ROOM: Loeb Theater

PDH: 1

118. Chester Bridge Design-Build: Innovative Large River Crossing

Come learn about an innovative Mississippi River Bridge project that is replacing a 1942 truss bridge with a three-tower, four-span cable-stayed structure to improve safety, reliability, and increase traffic capacity. This best value design-build solved many seismic, geological, and river traffic collision risks and managed railroad/aviation conflicts by using a unique 4-span cable stay structure that is an easily inspectable, low-maintenance, 100-year service life bridge.

SPEAKER

Vince Gastoni, Parsons Corporation

Design/Construction

TIME: 4:00-4:50 PM ROOM: Loeb Theater

PDH: 1

119. Utility Coordination and the Value of Partnership

Those practicing utility coordination understand that the task is multi-faceted and often extremely challenging. Staying proactive, positive, and flexible is key as we engage multiple stakeholders. This session will provide an interactive opportunity to learn about the Southwest ITT Utility Committee's efforts to affirm the importance of building positive relationships with our utility partners. Presenters will interact with participants on successful practices and tips for improving stakeholder relationships and improving reliability in delivering utility coordination.

SPEAKER

Daniel McMurtry, INDOT Kenny Franklin, Parsons Corporation

TIME: 8:00-8:50 AM **ROOM:** STEW 302

PDH: 1

120. Indiana Geology and the Sampling Process

Attendees will gain a comprehensive understanding of the geologic layers of Indiana, why it is important to take them into consideration for roadway construction, and how the in-house sampling process functions.

SPEAKER

Samuel Clawson, INDOT Nayyar Siddiki, INDOT

Design/Construction

TIME: 9:00-9:50 AM **ROOM:** STEW 302

PDH: 1

121. Post Installation Inspection of Storm Drain Pipelines

How do you know if a storm drain pipeline or a roadway culvert has been installed correctly? The answer is a procedure known as Post Installation Inspection (PII). Attendees will gain a comprehensive understanding of PII and how it provides the owner/designer the data needed to determine whether proper installation occurred prior to final acceptance.

SPEAKER

John Susong, Rinker Materials Steve Smart, County Materials

TIME: 10:00-10:50 AM ROOM: STEW 302

PDH: 1

122. Sliding Into SR 62

Contract R-39919 was comprised of ten slide correction projects along SR 62 in Crawford County. This presentation will review the project's development, which included geotechnical engineering, construction, coordinating with the National Forest Service, and lessons learned in each phase. We will also walk through the following correction methods: design build soil nailed walls, cantilevered stub pile walls, riprap buttress fill, and stub shafts.

SPEAKER

Nick Will, Lochmueller Group Kyle Zak, Terracon Levi Leffert, INDOT

Design/Construction

TIME: 11:00-11:50 AM ROOM: STEW 302

PDH: 1

123. Automated Machine Guidance (AMG) Technology and 3D Modeling

In this session, we'll explore how AMG improves roadway construction by cutting labor costs, enhancing data flow, and boosting project quality, ride, and duration. We'll discuss how 3D models guide projects without traditional survey layouts and how AMG also transforms surveyors' approach to large projects and enable more efficient and precise data collection without relying on string-lines or subgrade stakes. Real-world lessons learned from engineering teams will be shared.

SPEAKER

Dean Teska, Kapur and Associates

TIME: 1:00-1:50 PM ROOM: STEW 302

PDH: 1

124. Designing a Lower Salt Future

Chloride is a pollutant of top concern that contaminates drinking water, is toxic to aquatic life, and is harmful to vegetation. Many communities find themselves in the difficult situation of choosing between safety and clean water. But those are not the only choices. In this presentation, we will discuss the chloride problem, identify infrastructure design problems, and explore the future of cold climate infrastructure design to support winter maintenance professionals in the reduction of salt.

SPEAKER

Connie Fortin, Bolton & Menk, Inc.

Design/Construction

TIME: 2:00-2:50 PM **ROOM:** STEW 302

PDH: 1

125. A Mixed-Use Model: Lafayette Sagamore Parkway NLT Trail

The City of Lafayette and the Wabash River Enhancement Corporation (WREC) recently constructed a nearly 1-mile segment of mixed-use trail along Sagamore Parkway. The project was funded through an IDNR Next-Level Trails (NLT) grant. Presenters will discuss the partnership between a local non-profit (WREC), the owner (City of Lafayette), and the planners and engineers (Kimley-Horn).

SPEAKER

Miles Demerly, Kimley-Horn Brandon Schreeg, Kimley-Horn Jeromy Grenard, City of Lafayette

TIME: 3:00-3:50 PM ROOM: STEW 302

PDH: 1

126. Using Roller Sound to Assess Site Compaction Uniformity

This talk explores how the acoustic sound produced by a roller during compaction can be analyzed to determine the uniformity of soil compaction across a construction site. By correlating roller-generated sound with the compactness of the ground, it's possible to develop a reliable, non-invasive method to assess whether soil has been compacted evenly. This approach offers a promising solution for ensuring site stability and quality in construction and geotechnical engineering projects.

SPEAKER

Sara Khoshnevisan, University of Cincinnati Laith Sadik, University of Cincinnati

Design/Construction

TIME: 4:00-4:50 PM **ROOM:** STEW 302

PDH: 1

127. Principles of Writing Construction Specifications and Special Provisions

This presentation will assist project managers and designers in preparing the necessary information required for Department contracts involving Standard Specifications and Special Provisions. Attendees will be exposed to examples of both the right and wrong way to present a Unique Special Provision, helpful tips on how to navigate the new Sharepoint review process, and questions to ask to adhere to legal, moral, and ethical construction standards.

SPEAKER

Scott Trammell, INDOT

TIME: 8:00-8:50 AM ROOM: STEW 306

PDH: 1

128. Concrete Air Entrainment in Cold Climates

The freeze-thaw and salt scaling performance of concrete relies heavily on its hardened air void system properties, which are mostly unmeasurable during pouring. Although fresh air content at pour time often correlates with the state of the hardened air void system, compatibility issues among admixtures can lead to significant variations. This presentation will overview how air entrainment enhances freeze-thaw performance and common test methods for measuring fresh and hardened air.

SPEAKER

Rouzbeh Khajehdehi, WSP

Design/Construction

TIME: 9:00-9:50 AM **ROOM:** STEW 306

PDH: 1

129. Going With the Flow: Successful Stream Reconstruction Lessons

The West Fork Blue River Stream Mitigation Reconstruction project required unique coordination efforts between INDOT EWPO, the designer, and the district. The field team will share the valuable lessons that emerged over the course of the reconstruction, including the value-added benefits of having on-site environmental observation, the need to adjust to site conditions and permitting hurdles, and vital communication strategies for collaborating with stakeholders.

SPEAKER

Chris Leek, CHA Consulting, Inc. Summer Elmore, CHA Consulting, Inc. Jacob Burskey, INDOT

TIME: 10:00-10:50 AM ROOM: STEW 306

PDH: 1

130. I-69 Finish Line: Keys for Successful Project Execution

I-69 Section 6 Contract 4 was opened to the final traffic configuration 6 months ahead of schedule and within 5% of the original scope budget. This presentation will highlight the key reasons for the project team's impressive success, including positive relationships among all parties, good schedule and document management, and regular use of the problem resolution ladder.

SPEAKER

Kirk Stafford, Corradino Group LLC Nicole Klass, American Structurepoint, Inc. Sandra Flum, INDOT

Design/Construction

TIME: 11:00-11:50 AM ROOM: STEW 306

PDH: 1

131. BIM for Lifecycle Quality Management of Precast Concrete Infrastructure

Precast concrete systems (PCS) provide many benefits, such as quality products, shorter lane closures and project duration, and increased road user and worker safety. Recognizing that quality deficiencies during any PCS lifecycle phases can offset the expected benefits, this presentation will illustrate a BIM-based framework with validated BIM templates for holistic, lifecycle quality management of PCS.

SPEAKER

Zirui Hong, Purdue University

TIME: 1:00-1:50 PM ROOM: STEW 306

PDH: 1

132. Peter Schickel Way Design and Construction Lessons Learned

This presentation will unpack the planning, design, and construction challenges experienced during the conclusion of the Peter Schickel Way in Harrison County, Indiana. Attendees will learn about the history of the project, the significance of regional connection and economic development, design challenges, environmental and geotechnical impacts, maintenance of the traffic scheme, and other major challenges that were overcome to make this a successful project.

SPEAKER

Wing Lau, American Structurepoint, Inc.

Design/Construction

TIME: 2:00-2:50 PM **ROOM:** STEW 306

PDH: 1

133. Nuances of Roundabout Design: Did Carmel Get it Right?

Dutch design differs from the tangential approach we use so widely in America. How will Carmel adapt their existing 153 RABS in the future to accommodate a more thorough complete streets approach? Join us to learn more.

SPEAKER

Brad Pease, City of Carmel Engineering Joshua Kirsh, City of Carmel Engineering

TIME: 3:00-3:50 PM **ROOM:** STEW 306

PDH: 1

134. TheLloyd4U: Taking Innovative Intersections From Concept to Construction

TheLloyd4U includes more than a dozen improvement projects along the Lloyd Expressway in Evansville to make the busy roadway safer and more efficient. The first displaced left turn intersection in Evansville opened in 2024 with innovative outreach strategies to prepare motorists. This talk will walk you through practices that have worked well and what's still to come with a project that stretches across Vanderburgh County.

SPEAKER

Emily Sprinkle, INDOT
Toby Randolph, Parsons Corporation
Jeff Whitaker, Lochmueller Group

Design/Construction

TIME: 4:00-4:50 PM **ROOM:** STEW 306

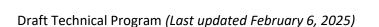
PDH: 1

135. Engineered Vegetated System for Slope Reinforcement/Soil Retention

There are many different options to consider when dealing with the challenges associated with slope reinforcement and soil retention. This presentation will illustrate the benefits of choosing an engineered vegetated system solution that uses earth percussion anchors and turf reinforcement mats (TRMs) instead of traditional hard armor, including rip rap.

SPEAKER

Kevin Boyce, American Excelsior Rick Ruffing, Gripple Inc.



Elected Officials

TIME: 8:00-8:50 AM **ROOM:** STEW 320

PDH: 1

136. Win-Win-Win: A Road Transfer 10+ Years in the Making

In 2023, INDOT successfully reached an agreement with a county and city on the transfer of a bridge and a segment of road that was no longer critical to the state transportation network but was of vital importance to the locals. After intense rounds of negotiations spanning 10 years, all parties agreed this was a rare opportunity for a win-win-win. Join us for a story of perseverance, partnership, and compromise.

SPEAKER

Adam Parkhouse, INDOT Sarah Ford, INDOT

TIME: 9:00-10:50 AM ROOM: STEW 320

PDH: 2

137. INLTAP's Local Agency Roundtables for Elected Officials

Join us for a dynamic roundtable discussion designed to address the pressing challenges faced by local elected officials today. Facilitated by subject matter experts, this session offers a unique opportunity to engage in collaborative, solution-focused conversations on communication strategies, road funding, workforce development, and retention. Connect with peers, share experiences, and gain valuable insights from both experts and fellow officials in an open forum designed to foster innovative solutions and shared learning.

SPEAKER

Rich Domonkos, Purdue University

Elected Officials

TIME: 1:00-1:50 PM **ROOM:** STEW 320

PDH: 1

138. Community Strategies for Engaging Developers

This panel discussion will explore effective strategies for fostering collaborative relationships between local communities and real estate developers.

SPEAKER

Jack Woods, Veridus Group, Inc. Ben Lipps, Town of Cumberland Josh Marsh, City of Greensburg

TIME: 2:00-2:50 PM ROOM: STEW 320

PDH: 1

139. Lebanon LEAP

The LEAP District is an Indiana Economic Development Corporation initiative designed to grow and attract a diverse mix of state-of-the-art businesses and to develop a highly skilled workforce that improves Indiana's economic vitality. Strategically located on Indiana's Hard Tech Corridor, just 30 miles from Indianapolis and Purdue University, the project has required significant investment in area transportation infrastructure. This presentation will outline the ongoing planning efforts of delivering this massive program.

SPEAKER

Craig Parks, Avenew Inc. Michael Watts, Pure Development

Elected Officials

TIME: 3:00-3:50 PM **ROOM:** STEW 320

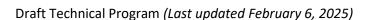
PDH: 1

140. After the Crash: Navigating Legal Challenges and Pitfalls in the Wake of a Traffic Fatality

Pat lost his 19-year-old daughter to a traffic crash 3 years ago. This presentation will shed light on the complex legal landscape that families face following such tragedies. Topics will include how the Indiana Hands-Free law and other state laws don't protecting victims enough, state car insurance minimums, and what else needs to be done to protect victims and their families.

SPEAKER

Patrick Conner, Purdue University



Electric & Connected Vehicles

TIME: 8:00-8:50 AM ROOM: STEW 214 CD

PDH: 1

141. Equity in Electrification: Engaging Communiy's EV Charging Projects

Explore the equitable deployment of EV charging infrastructure in Indiana through the Charging the Crossroads program. This session will delve into strategies that ensure all communities, including underserved and rural areas, benefit from the transition to electric vehicles. Discover the program's efforts to promote inclusivity, address disparities, and create a sustainable, accessible future for all Hoosiers.

SPEAKER

George McCue, INDOT Lisa Wall, HNTB Corporation Peter Flynn, HNTB Corporation

TIME: 9:00-9:50 AM ROOM: STEW 214 CD

PDH: 1

142. Smart Crossroads: Solving Complex Challenges in the Freight and Logistics Industry

The global freight and logistics industry has entered an era of disruptive innovation, and advanced technologies and applications of AI will lead this transformation. At the epicenter of innovation in freight and logistics at the Crossroads of America is the Smart Crossroads, a pivotal ecosystem strategically connecting Purdue's extensive resources with leading industry partners, including founding member Wabash, transportation fleets, 3PLs, retail shippers, and suppliers.

SPEAKER

Greg Shaver, Purdue University Razi Nalim, Purdue University Brent Yeagy, Wabash National Corporation

Electric & Connected Vehicles

TIME: 10:00-10:50 AM ROOM: STEW 214 CD

PDH: 1

143. Dynamic Wireless Power Transfer

INDOT ASPIRE Dynamic Wireless Power Transfer Roadway: Purdue University, in partnership with INDOT, PC Krause and Associates, White Construction, William Charles Electric, and Cummins, Inc. transitioned the embedment of dynamic wireless power transfer (DWPT) technology from a controlled test setting to real roadway implementation. This presentation delves into the construction process of the quarter-mile DWPT project on northbound US 52/231 in West Lafayette and outlines the plans for testing the technology with a Cummins truck later this year.

SPEAKER

George McCue, INDOT Dionysios Aliprantis, Purdue University Patrick Patterson, INDOT

Community Perceptions of an Electrified Roadway Pilot: Despite the potential of dynamic wireless power transfer (DWPT) to support transportation electrification, communities' perceptions of the technology are understudied. This presentation discusses results from a community engagement survey for West Lafayette's DWPT pilot project. Using a mixed-methods approach, the survey evaluated the community's understanding of electric vehicles, charging technologies, and perceived benefits and concerns about DWPT.

SPEAKER

Ben O'Brien, Purdue University Chiara Cervini, Purdue University Bruno Cesar Krause Moras, Purdue University

Electric & Connected Vehicles

TIME: 11:00-11:50 AM **ROOM:** STEW 214 CD

PDH: 1

144. Electric Vehicles: Research, Trends, and Usage

Equitable EV Charging Solutions for Multi-Family Housing: We will present our research on electric vehicle (EV) charging infrastructure, with a focus on addressing accessibility for disadvantaged communities and multi-family housing residents in Indiana. Leveraging datasets on EV demand, travel patterns, and charging behavior, we provide actionable insights into future infrastructure needs and the optimal placement of various levels of chargers. This work ensures that Indiana's residents, particularly those with limited home-charging access, benefit from equitable and sustainable electric mobility solutions.

SPEAKER

Xiaowei Chen, Purdue University
Omar Faruqe Hamim, Purdue University

Exploring Public EV Charging Station Utilization Across Indiana: Public electric vehicle (EV) charging station utilization data across Indiana was observed over a year to understand spatial and temporal variations. The results reveal differences between urban and rural areas, with some stations serving as charging hotspots while others experience minimal usage, creating charging deserts. Our analysis offers valuable insights for optimizing the deployment of EV charging stations across Indiana and ensuring more efficient and effective infrastructure planning.

SPEAKER

Omar Faruqe Hamim, Purdue University Xiaowei Chen, Purdue University

Longitudinal Monitoring of Electric Vehicle Travel Trends: This presentation explores how crowdsourced connected vehicle (CV) data offers insight into electric vehicle travel trends over multiple months and years. Over 238 billion CV records in Indiana were analyzed over 16 months from January 2022 through April 2023. Results showed a 156% increase in electric vehicle miles traveled (VMT) and a 2% growth in internal combustion engine VMT. Insights into EV trip lengths will help stakeholders evaluate the impact of their charging infrastructure investments.

SPEAKER

Jairaj Desai, Purdue University Jijo Mathew, Parsons Corporation

Electric & Connected Vehicles

TIME: 1:00-1:50 PM ROOM: STEW 214 CD

PDH: 1

145. Which Came First, the Corridor or the CV? CAV on I-64 in Kentucky

KYTC will share the progress of a study evaluating the suitability of I-64 between Lexington and Louisville to support widespread CAV deployment. KYTC, Corradino, and HNTB will discuss their analysis of the physical and digital infrastructure needs, define and model potential alternatives, and assess the costs and benefits of a digitalized roadway. Join us as we delve into preliminary results, project lessons learned, and next steps.

SPEAKER

Stephen De Witte, KYTC Johnny Han, Corradino Group LLC Diane Newton, HNTB Corporation

TIME: 2:00-2:50 PM ROOM: STEW 214 CD

PDH: 1

146. Charging Ahead: EV Charging Projects in Indiana

From VW to NEVI, L2 and DC fast EV charging infrastructure is expanding across Indiana. A panel of leaders from various projects will discuss federally funded efforts to deploy and improve Level 2 and DC fast charging infrastructure along corridors and within communities. The panel will educate the audience on the challenges and opportunities, key outcomes and takeaways, and strategies for ensuring the projects are sustainable and achieve equitable outcomes.

SPEAKER

Diane Newton, HNTB Corporation George McCue, INDOT Shawn Seals, IDEM Mo McReynolds, City of Indianapolis Leah Thill, Michiana Council of Governments

Electric & Connected Vehicles

TIME: 3:00-3:50 PM ROOM: STEW 214 CD

PDH: 1

147. Autonomous Vehicle Discoveries and Updates

Industry-University Collaborative Research on Electrified and Automated Trucking: Trucking supports critical economic sectors, but it is labor-intensive, dangerous, and polluting. Automation, electrification, and connectivity in trucks and buses could help mitigate the driver shortage, supply-chain delays, emissions, road crashes, and public transport costs. A new consortium of diverse industry stakeholders is conducting multi-disciplinary research to accelerate the adoption of automated and electrified commercial vehicles to transport people and goods efficiently, cleanly, and flexibly. This presentation will highlight these research discoveries.

SPEAKER

Razi Nalim, Purdue University

No Bumps in the Road: I-70 Truck Automation Corridor Progress: Join us for an interactive and engaging session to unpack the state DOT's alignment with the private sector market needs and their work to spur sustainable autonomous vehicle (AV) operations. ODOT and INDOT's I-70 Truck Automation Corridor project developed a tool to assess road readiness for truck automation, while demonstrating automated vehicle technologies across interstates. Speakers will give a deployment update and demonstrate the road audit tool for audience feedback.

SPEAKER

Nathan Sturdevant, INDOT Diane Newton, HNTB Corporation Alex Kavanagh, HNTB Corporation Andrew Bremer, DriveOhio

Development of Commercial EV Truck Depots With Real-World Experience: Every 2 years, NACFE demonstrates state-of-the-art truck fleet operations. In 2021, it was focused on electric vehicle (EV) truck pilots with 13 different OEMs, and in late 2023, the focus was on EV truck depots that had a minimum of 15 EV trucks on one depot charging system. We welcome audience questions as we share NACFE's truck charging data, operational data, fleet feedback and truck driver inputs.

SPEAKER

Dave Schaller, North American Council for Freight Efficiency

Ethics

TIME: 8:00-8:50 AM ROOM: Loeb Theater

PDH: 1

148B. Indiana Statutes and Rules for Professional Engineering Licensure

This session will explain the Indiana Code vs. the Indiana Administrative Code; selected statutes and rules applied to the practice of engineering; registration by comity; registrant's seal; computer-based testing for FE and PE exams; rules for continuing education, audits; board structure; and threats to professional licensure.

SPEAKER

Tim Jensen, Veridus Group, Inc.

TIME: 9:00-9:50 AM ROOM: Loeb Theater

PDH: 1

149B. Professionalism and Ethics in the Practice of Engineering

This presentation will provide participants with an overview of ethics, including how they're formed and how professional engineers use them to make decisions in every situation.

SPEAKER

Tim Jensen, Veridus Group, Inc.

Human Capital/Leadership

TIME: 8:00-8:50 AM ROOM: STEW 278

PDH: 1

150. Advice to Younger Me

The president of a national firm offers guidance for young professionals about the importance of office presence, tackling challenging projects, and effective communication with supervisors. The presentation will emphasize work-life balance, involvement in industry organizations, and building relationships across departments.

SPEAKER

Kashif Khan, Infrastructure Engineering. Inc. Cassie Reiter, Crawford, Murphy & Tilly Jennifer Pyrz, IndyGo

TIME: 9:00-9:50 AM ROOM: STEW 278

PDH: 1

151. Ethical Leadership

This session will equip agency leaders with essential tools to navigate ethics in public service. Participants will explore foundational ethical concepts, the importance of public trust, and practical strategies for ethical decision-making. Real-world case studies will help leaders identify and resolve ethical dilemmas while fostering an ethical organizational culture. By the end, participants will be prepared to lead with integrity, build trust, and inspire ethical behavior within their teams and organizations.

SPEAKER

Todd Morrison, University of Kentucky

Human Capital/Leadership

TIME: 10:00-10:50 AM ROOM: STEW 278

PDH: 1

152. Winning Your Team With Intentional Connection

As the leader of a team, how do you inspire others even when you don't have all the answers? This session will introduce ways to be intentional in our relationships and make deeper connections with our team members. We hope you leave this session with the courage to be vulnerable and drive your vision.

SPEAKER

Jessica Miller, INDOT Kenny Franklin, Parsons Corporation

TIME: 11:00-11:50 AM ROOM: STEW 278

PDH: 1

153. Updates in Innovation

Indiana Innovators: We will outline the activities of the collaboration with INDOT and LTAP as well as present the People's Choice award for Best Innovation 2025.

SPEAKER

Todd May, INDOT Jennifer Sharkey, Purdue University

INDOT Innovation and Research Collaborative Projects: Join us for an informative update on the most recent projects from the INDOT Innovation and Process Improvement Division and the INDOT Research program.

SPEAKER

Todd May, INDOT Barry Partridge, INDOT

Human Capital/Leadership

TIME: 1:00-1:50 PM **ROOM:** STEW 278

PDH: 1

154. Engaging Emerging Professionals in the Hybrid World

In today's dynamic workplace, engaging and supporting emerging professionals and interns is crucial for innovation and growth. This presentation will explore effective tactics for connecting with and empowering young staff in the hybrid workplace we now work in and outline practical leadership strategies to foster an inclusive and motivating environment. Join us to discover how to harness the potential of emerging professionals and drive organizational success.

SPEAKER

Anna Moyer, WSP Patrick McCallister, WSP

TIME: 2:00-2:50 PM ROOM: STEW 278

PDH: 1

155. Marian University's Civil Engineering: The First 3 Years

In fall 2022, Marian University launched Indiana's newest civil engineering program to prepare students with the skills and knowledge to address future challenges. Over the past 3 years, the program has grown significantly, including moving into state-of-the-art E.S. Witchger School of Engineering and increasing freshman enrollment by 138%. This presentation will highlight milestones, outline goals, and explore opportunities for the engineering community to support this emerging program.

SPEAKER

Abner (Chien-Chung) Chen, Marian University Jennifer Goins, HNTB Corporation

Human Capital/Leadership

TIME: 3:00-3:50 PM **ROOM:** STEW 278

PDH: 1

156. Getting the Most Out of Your Interns

This presentation will discuss how to utilize interns efficiently, from the perspective of two former interns. We will discuss how our internships were balanced between technical development and project delivery and highlight our recent experience as full-time staff that are now training new interns.

SPEAKER

Hunter West, WSP Joe Streeter, WSP Emily Chen, WSP

TIME: 4:00-4:50 PM ROOM: STEW 278

PDH: 1

157. Mentoring to Retain Engineering Students and Graduates

ITE has identified work force development as one of three key issues facing engineering firms today; yet, as many as 50% of all graduate engineers may leave the engineering profession within 10 years of graduation. Mentors and mentees will discuss the role that mentorship can play in engineering student and graduate engineer retention in the work force.

SPEAKER

Carly Schiene, Parsons Corporation Tom Ford, INDOT Gail Lee, Unknown

Local Agency

TIME: 8:00-8:50 AM ROOM: STEW 314

PDH: 1

158. SNBI Bridge Load Posting Status and Evaluation

This informative presentation will discuss bridge load posting requirements, strategies, and tools for state and local public agencies that will help you reach SNBI compliance for posting status and evaluation. The different types of allowed bridge load posting signs and common misconceptions will also be reviewed.

SPEAKER

Reid McIntire, United Consulting Charles Bernth, INDOT

TIME: 9:00-9:50 AM ROOM: STEW 314

PDH: 1

159. Effective Utility Coordination: IMPO Discussion

Utility-related construction delays continue to plague our industry despite processes in place to provide better communication throughout the project delivery process. The IMPO conducted a study to review effective utility coordination practices that minimized construction delays. This presentation will give an overview of the research and the key outcomes, provide practical steps forward, and outline possible implementation procedures that can be applied specifically to local agency projects.

SPEAKER

Natalie Parks, Kimley-Horn

Local Agency

TIME: 10:00-10:50 AM ROOM: STEW 314

PDH: 1

160. Bell Ford Bridge Reconstruction Project

In 2006, the 1868 Bell Ford Bridge, the last remaining combination post truss in existence, collapsed. In September 2024, the bridge was reconstructed over Fall Creek as part of the Geist Greenway Trail. The bridge follows the traditional Stephen Long truss design and reused almost all of the original 1868 wrought iron and 30% of the original timber. Our presentation explores how this project came into being and the unique features and challenges that came with designing and reconstructing this one-of-a-kind bridge.

SPEAKER

Daniel Kurdziel, Kurdziel Barker Engineering, Inc. Matt Lee, Hamilton County Jim Barker, Kurdziel Barker Engineering, Inc.

TIME: 11:00-11:50 AM ROOM: STEW 314

PDH: 1

161. The More You Know: Grant Applications

This session will be an interactive peer exchange detailing the experience of discretionary grant recipients (including local public agencies and metropolitan planning organizations) in Indiana across multiple federal transportation grant programs. The recipients will discuss their experience putting together and submitting applications, award/contractor management, and grant reporting and reimbursement requirements.

SPEAKER

Andy Rush, Kentuckiana Regional Planning and Development Agency Leah Thill, Michiana Council of Governments Leslie Biek, City of South Bend Matt Brinkman, Region 3-A Patrick Zaharako, City of Fort Wayne

Local Agency

TIME: 12:00-12:50 PM ROOM: STEW 314

PDH: 1

162. Building Resilience: Strategies for Bridge Preservation and Rehabilitation

This presentation will dive into local bridge data, the future state of bridge data, and what can be done to reduce the number of "fair" bridges from falling into further disrepair.

SPEAKER

Patrick Conner, Purdue University

TIME: 1:00-2:50 PM ROOM: STEW 314

PDH: 2

163. INLTAP's Local Agency Roundtables for County Engineers and Supervisors

Join your peers in roundtable discussion focused on the top challenges faced by county engineers and supervisors. Facilitated by experienced industry experts, this session provides a space to collaborate on communication strategies, road funding, workforce development, and retention. This is an excellent opportunity to exchange ideas, share experiences, and develop actionable solutions to address the unique demands of managing county-wide infrastructure and public works.

SPEAKER

Rich Domonkos, Purdue University

Local Agency

TIME: 3:00-3:50 PM **ROOM:** STEW 314

PDH: 1

164. The Basics: ADA and Section 504 Self-Evaluations

This session will focus on ADA and Section 504 self-evaluation basics to help ensure that all programs, services, and activities are accessible to people with disabilities.

SPEAKER

Taffanee Keys, INDOT

TIME: 4:00-4:50 PM **ROOM:** STEW 314

PDH: 1

165. Understanding and Complying With Title VI

This session will provide a high-level overview of Title VI and related statutes, rules, and regulations requirements and resources to support the development of agency nondiscrimination strategies and Title VI plans.

SPEAKER.

Taffanee Keys, INDOT

Maintenance & Operations

TIME: 8:00-8:50 AM ROOM: UC 114

PDH: 1

166. Al and Roadway Asset Management

Asset management has become much easier and more affordable thanks to LiDAR, 360 degree digital photography, GPS, and AI. These new tools can cut the time of a field inventory to just a few days. In addition to rating pavements, they can also pick up sign inventories, clear zone obstructions and pavement drop-offs, and more. Join us for a discussion.

SPEAKER

Shawn Strange, First Group Engineering

TIME: 9:00-9:50 AM ROOM: UC 114

PDH: 1

167. Smart Salting: Tips and Tricks

Drawing on over 17 years of experience, this presentation will provide an overview of the Smart Salting for Roads class, including the new Smart Salting for Roads Manual. Learn why chloride (part of the most-applied compound in deicer use) is a pollutant of top concern for surface and groundwater and tips and tricks for lowering salt use in winter maintenance, protecting water, and saving money.

SPEAKER

Carolyn Dindorf, Bolton & Menk, Inc.

Maintenance & Operations

TIME: 10:00-10:50 AM

ROOM: UC 114

PDH: 1

168. Tools and Technology for Roadside Vegetation Asset Management

Concerns over endangered species, pollinator populations, roadside fires, climate change, invasive species, and other pressures on native ecosystems are intensifying the focus on roadside vegetation asset management (RVAM). Improving RVAM could increase system resiliency for the national highway system. This session will summarize a NCHRP research project that used nationwide surveys and case studies to explore current practices and developments in roadside vegetation mapping, data analysis, and data management to help state transportation agencies improve RVAM practices.

SPEAKER

Cheryl Daniels, Davey Resource Group Angela Burdell, Davey Resource Group

TIME: 11:00-11:50 AM

ROOM: UC 114

PDH: 1

169. Pavement Condition Assessment Case Studies Using Crowdsourced Vehicle Data

Join us as we educate attendees on an emerging pavement assessment method that uses anonymized crowdsourced data from connected vehicle production sensors to estimate the International Roughness Index (IRI) more frequently and cost-effectively. Nationwide, crowdsourced data assessed over 500,000 miles of roadways in 400 US metropolitan areas to identify and rank regions based on roughness central tendency.

SPEAKER

Justin Mahlberg, LSM Analytics Howell Li, LSM Analytics

Maintenance & Operations

TIME: 1:00-1:50 PM ROOM: UC 114

PDH: 1

170. Low Cost and High Impact AI and IoT for Weather Monitoring

This presentation explores next-generation AI and IoT technologies for road weather monitoring, including autonomous weather cameras and environmental sensors. The discussion will focus on the application of these technologies to improve infrastructure resilience and optimize response strategies during hazardous weather events, and examine how these tools, along with other emerging solutions, can enhance weather awareness, decision-making, and safety in road maintenance operations.

SPEAKER

Patrick Baglien, Vue Robotics

TIME: 2:00-2:50 PM ROOM: UC 114

PDH: 1

171. Strategies for Improving Indiana Roadside Right-of-Way Vegetation Maintenance

Given the nearly 29,000 lane miles and more than 40,000 acres INDOT manages, completing roadside vegetation maintenance efficiently and safely while managing other aspects of highway maintenance is often challenging. Through research and regional DOT surveys, presenters will share tools, technology, BMPs, and design specifications that will improve roadside vegetation maintenance and design practices as well as the planning and prioritization of work along Indiana state highways.

SPEAKER

Cheryl Daniels, Davey Resource Group Angela Burdell, Davey Resource Group

Maintenance & Operations

TIME: 3:00-3:50 PM ROOM: UC 114

PDH: 1

172. Monitoring Pavement Roughness Using Connected Vehicle Data

This presentation will explore how crowdsourced data from connected vehicles can revolutionize asset management. Over three billion records from Indiana interstates between 2022 and 2023 were analyzed to identify spatial and temporal patterns in pavement roughness using an International Roughness Index (IRI) estimate. A comprehensive case study along I-65 will delve into annual, monthly, and daily comparisons of pavement conditions and provide supporting visual evidence from dashcam footage captured by commercial trucks.

SPEAKER

Jijo Mathew, Parsons Corporation Jairaj Desai, Purdue University Rahul Sakhare, Purdue University

Multimodal Transportation

TIME: 8:00-8:50 AM ROOM: CL50 224

PDH: 1

173. Indy's Successful \$20 Million SS4A Implementation Grant: Application Insights

The City of Indianapolis and IndyGo were successfully awarded \$20 million in Safe Streets for All Implementation grants in 2024 for upgrades on high transit ridership corridors. Join us for an insightful discussion with the multidisciplinary team behind this grant. We'll explore the efforts that went into securing the grant, share the application process, and highlight key lessons learned throughout the project.

SPEAKER

Christian Cambron, IndyGo Patrick Weitlauf, CHA Consulting, Inc. Amanda Johnson, EMCS, Inc.

TIME: 9:00-9:50 AM ROOM: CL50 224

PDH: 1

174. Terre Haute 2050 Metropolitan Transportation Plan

The Terre Haute MPO recently developed a BIL-compliant 2050 Metropolitan Transportation Plan (MTP). This presentation will discuss how the goals and performance measures complied with BIL requirements for a small-sized urban area; the data-driven analysis of existing and future conditions; recommendation and prioritization of multimodal strategies; and the development of a cost-feasible plan. We will also demonstrate an enhanced stakeholder/public engagement process throughout the project using innovative crowdsourcing technology and GIS online applications.

SPEAKER

Jeremy Weir, Terre Haute MPO Johnny Han, Corradino Group LLC Shengnan Lou, Corradino Group LLC

Multimodal Transportation

TIME: 10:00-10:50 AM ROOM: CL50 224

PDH: 1

175. Yes, Indiana Has Ports!

Ports of Indiana—the only statewide port authority in the Midwest—is a world-class port system. It operates one port on Lake Michigan and two on the Ohio River. Learn about the history of this organization and the important role it plays in multimodal freight mobility and Indiana's economy.

SPEAKER

Kristin Brier, Ports of Indiana

TIME: 11:00-11:50 AM ROOM: CL50 224

PDH: 1

176. Ports of Indiana: Life in the Fastlane

The Ports of Indiana (POI) operates the Lake Michigan port at Burns Harbor near Chicago. POI recently completed \$23 million worth of projects aimed at improving intermodal connectivity for bulk commodities. The Fastlane grant funded construction of two rail yards and three berths to improve direct connections between rail and waterborne vessels. Join us as we illustrate how these projects fosters less dependence on trucks in and around the port, lessening roadway congestion and provide environmental benefits for the region.

SPEAKER

Kevin Cox, WSP Julie Petree, Ports of Indiana Kristin Brier, Ports of Indiana

Multimodal Transportation

TIME: 2:00-2:50 PM ROOM: CL50 224

PDH: 1

177. Ports of Indiana, Burns Harbor, and Berth Redevelopment

The Ports of Indiana, Collins Engineers, Inc., and ICC will present on the design and construction of the redevelopment of two separate berth facilities within the Ports of Indiana, Burns Harbor. The project included a new bulk transload facility, expansion of the east side rail yard at Berth 5, and the expansion of the existing Berth 16 and 17 site to an over 1,500 LF waterfront facility along the west harbor.

SPEAKER

Kyle Von Holten, Collins Engineers, Inc. Julie Petree, Ports of Indiana Brian Walsh, ICC Group

TIME: 3:00-3:50 PM ROOM: CL50 224

PDH: 1

178. Design of Safe Trail and Roadway Interactions

Shared-use paths (often referred to as trails) are intended to accommodate both pedestrians and bicycles. However, bicycles are considered vehicles, which makes a path a hybrid transportation corridor and can make pathway interactions with roadways confusing. The safety of both pathway and roadway users is the primary concern when designing shared-use paths. We will review the various regulations and guidelines for the design of pathway-roadway intersections and the safety and separation between roadways and shared-use side-paths.

SPEAKER

Doug Valmore, Butler, Fairman & Seufert, Inc. Gretchen Zortman, City of Indianapolis DPW Jill Palmer, City of Indianapolis DPW Amanda Johnson, EMCS, Inc. Alan Hamersly, Butler, Fairman & Seufert, Inc.

Multimodal Transportation

TIME: 4:00-4:50 PM ROOM: CL50 224

PDH: 1

179. Transforming Rails to Trails: A Technical Approach to Trail Design

The Monon South Trail project showcases the technical complexities of converting an abandoned rail line into a multi-use trail. In this presentation, we'll dive into the technical challenges and solutions involved in trail design, including surface materials, drainage, and crossing infrastructure. Attendees will gain insights into the practical considerations that go into the planning and execution of large-scale rail-to-trail projects.

SPEAKER

Drew Storey, Clark Dietz, Inc. Jeff Quyle, Radius Indiana



Pavements

TIME: 8:00-8:50 AM ROOM: STEW 218 AB

PDH: 1

180. Longer Lasting Road Repairs With Full-Depth Reclamation

Full-Depth Reclamation (FDR) is the secret to fast, easy, and economical road repairs that last. Projects that would normally take a week or longer can be done in as little as one day, with equally impressive cost savings. Attendees will explore proven cost and time saving benefits of FDR; compare basic, mechanical, and chemical road base stabilization methods; and identify how to achieve durable, longer lasting road repairs.

SPEAKER

Michael Brandt, Asphalt Zipper, Inc.

TIME: 9:00-9:50 AM **ROOM:** STEW 218 AB

PDH: 1

181. Road Surface Condition Evaluation Using Navigation, Imaging, and LiDAR Systems With Varying Grades

This talk will share the results of a preliminary investigation for evaluating road surface condition using a comparative analysis of different navigation, LiDAR, and imaging systems with varying grades (e.g., survey grade, mapping grade, and consumer grade sensors).

SPEAKER

Ayman Habib, Purdue University

Pavements

TIME: 10:00-10:50 AM **ROOM:** STEW 218 AB

PDH: 1

182. Pavement Patching: INDOT's Comprehensive Patching Table Initiatives

This presentation will highlight INDOT's latest efforts to enhance pavement patching practices through the development of comprehensive patching tables as part of the pavement design process. We will cover the new structure of these patching tables and explore advanced technologies for identifying patch locations, including a case study on the use of LiDAR technology for precise mapping and implementation.

SPEAKER

Kumar Dave, INDOT Tony Jones, INDOT Ben Stenger, HNTB Corporation

TIME: 11:00-11:50 AM ROOM: STEW 218 AB

PDH: 1

183. Rising Expectation for Pavement Foundation:

This session is essential for anyone involved in transportation engineering and roadway construction. Attendees will discover the latest advancements in subgrade treatment, long lasting pavement design, and construction techniques (including QC/QA) that are driving higher standards in pavement foundations. Learn how INDOT professionals are adapting to meet these increasing demands, ensuring longevity and reliability in modern infrastructure.

SPEAKER

Kumar Dave, INDOT Nayyar Siddiki, INDOT

Pavements

TIME: 1:00-1:50 PM **ROOM:** STEW 218 AB

PDH: 1

184. Preserve Your HMA Pavements From the Start

This presentation will review sustainable preservation treatments and their application timeline to extend the life of asphalt pavement. We will discuss how pre-preservation treatments like a void reducing asphalt membrane, early-life preservation treatments such as rapid penetrating emulsion, and topical rejuvenators can reduce future maintenance and delay reconstruction. We will also look at mid-life treatments, such as micro-surfacing, fit into a preventative maintenance preservation plan.

SPEAKER

Andrew Eicher, Asphalt Materials, Inc. Tim Zahrn, Asphalt Materials, Inc.

TIME: 2:00-2:50 PM **ROOM:** STEW 218 AB

PDH: 1

185. Resilient Modulus of Aggregate and Cement Stabilized Soils

The resilient modulus of aggregate and subgrade have been used in the design of pavement. Join us as we review equipment and testing procedures of resilient moduli in INDOT's geotechnical laboratory.

SPEAKER

Nayyar Siddiki, INDOT Kamran Ghani, INDOT

Pavements

TIME: 3:00-3:50 PM ROOM: STEW 218 AB

PDH: 1

186. Impact of INDOT's New Binder Specification on BMD

INDOT specifications required the transition from AASHTO M320 PG binders to AASHTO M332 MSCR (multiple stress creep recovery) graded binders for INDOT projects let as of September 1, 2024. Additionally, the base binder grade transitioned from PG 64-22 to PG 58S-28. This presentation will address the impacts of the binder changes and the anticipated impacts on pavement performance, as determined using Balanced Mix Design (BMD) performance tests.

SPEAKER

Scott Quire, E & B Paving

TIME: 4:00-4:50 PM **ROOM:** STEW 218 AB

PDH: 1

187. Enhance FWD Analysis in Pavement ME Design

The current level 1 pavement ME design requires the input of deflection data. This talk focuses on improving the FWD data analysis workflow for enhanced pavement ME design. Presenters will discuss how we can better use the FWD data and leverage the power of big data and machine learning.

SPEAKER

Wen Tang, Purdue University Boonam Shin, INDOT

Project Management/Planning

TIME: 8:00-8:50 AM **ROOM:** STEW 202

PDH: 1

188. Different Perspectives for Building a Successful Project Team

The key to project success is a happy and cohesive team. A panel of consultant, contracting, INDOT, and LPA personnel will have an energetic discussion and solicit audience feedback about how to achieve a successful project and avoid pitfalls. The focus will be on how to build an effective project team and how this helps retain existing talent and attract new.

SPEAKER

Steve Moriarty, Kosciusko County Highway Amber Thomas, INDOT Dan McCoy, RL McCoy Inc. Prasad Narayan, Kapur and Associates JoAnn Wooldridge, INDOT

TIME: 9:00-9:50 AM **ROOM:** STEW 202

PDH: 1

189. Leveraging IndianaMap Data and Tools for Transportation Projects

IndianaMap provides essential datasets for transportation projects, including roads, parcels, wetlands, streams, floodplains, elevation, imagery and more. This session will demonstrate how to utilize the IndianaMap AGOL community account's tools, such as Experience Builder, Survey123, Field Maps, and Dashboards. Learn how to import/export data, perform geoprocessing tasks in Map Viewer, and access free ESRI training to optimize transportation planning and execution.

SPEAKER

Ben Grubbs, Indiana Geographic Information Office Rick Rahe, Indiana Geographic Information Office

Project Management/Planning

TIME: 10:00-10:50 AM ROOM: STEW 202

PDH: 1

190. Constructability Reviews for the Win: How to Model Success

The success of a project hinges not only on innovative design but also on the practical feasibility of construction. This presentation delves into the critical role of constructability reviews in civil design projects. You'll learn how to create/setup open format IFC models to be reviewed in many applications, and gain insights into best practices and strategies for integrating constructability reviews into your project workflow.

SPEAKER

Jonathan Paauwe, INDOT Andrew Pangallo, INDOT Nathan Goins, HNTB Corporation

TIME: 12:00-12:50 PM ROOM: STEW 202

PDH: 1

191. Cracking the Code on Predictive Maintenance for Culverts

This presentation provides an overview of the approach and methodology used to build an Al-powered predictive model to identify which culverts are likely to require inspection and/or maintenance. Evaluating and integrating the different data sources together to create a singular view of each culvert required a substantial amount of data engineering. The predictive model uses Machine Learning (ML) to enable effective prioritization of culvert inspection and maintenance efforts to make better use of resources.

SPEAKER

Craig Rolling, HNTB Corporation

Project Management/Planning

TIME: 1:00-1:50 PM **ROOM:** STEW 202

PDH: 1

192. When Expanding Project Scope Delivers Greater Value

Can a construction cost jump from an estimated \$6.6 million to a bid of \$16 million be seen as a positive outcome? Absolutely—when it results in better value for the public by addressing multiple needs instead of just one. Discover how a \$10 million scope change, which included an interchange modification and signage replacement, was successfully managed during the replacement of the US 6 bridge over I-80/94.

SPEAKER

Ben Butz, Butler, Fairman & Seufert, Inc. Troy Williard, Butler, Fairman & Seufert, Inc. Ashley Przybylinski, INDOT

TIME: 2:00-2:50 PM **ROOM:** STEW 202

PDH: 1

193. Critical Success Factors (CSF) for Managing Utility Coordination Stakeholders

Issues when managing stakeholders, such as inadequate engagement or insufficient communication, are widely recognized as problematic areas when coordinating utility infrastructure for highway projects. This session will present findings from a research project that identified CSFs for stakeholder management in utility coordination. These CSFs form the basis of a comprehensive framework designed to serve as a generic reference tool for practitioners to navigate utility coordination more effectively.

SPEAKER

Shani Alexandra Montes Victorio, Parsons Corporation

Project Management/Planning

TIME: 3:00-3:50 PM **ROOM:** STEW 202

PDH: 1

194. Capital Program Management

The CIP database for the City of Indianapolis acts as the system-of-record for capital infrastructure programming and execution. Attendees will learn the key philosophical take-aways and constructs related to data that can apply to any capital program.

SPEAKER

Jim Lutterbach, City of Indianapolis DPW Jeff Dieterlen, City of Indianapolis DPW

TIME: 4:00-4:50 PM **ROOM:** STEW 202

PDH: 1

195. AI Assist and Other Innovations for Asset Management

USI will present new strategies to streamline asset management from inventory collection to assessment. Through partnership with Vialytics, a new Al-enhanced inventory collection tool is available with mapping services that will save LPAs time and resources. The database built with Vialytics technology helps develop capital programs and tracks asset improvements that will become an instrumental part of daily road maintenance.

SPEAKER

Jodi Coblentz, USI Consultants, Inc.

Project Management/Planning

TIME: 8:00-8:50 AM **ROOM:** STEW 279

PDH: 1

196. Automated Activity Detection in Construction: A Video Analytics Approach for Efficient Monitoring

This session introduces an automated system for detecting and tracking construction activities in untrimmed videos using fine-tuned YOLO-V8. The system identifies key tasks like excavation, compaction, and installation, provides start/end times, and visualizes task sequences. Automating the process enhances the accuracy and efficiency of construction progress monitoring, offers insights into potential quality concerns, and reduces the need for manual review, thus streamlining supervision and improving project management.

SPEAKER

Malleswari Kachireddy, Purdue University Nikkhil Vijaya Sankar, Purdue University

TIME: 9:00-9:50 AM **ROOM:** STEW 279

PDH: 1

197. Capital Program Management

City and county officials face daunting challenges to deliver public infrastructure with limited resources. Compounding the problem is project data, which is often siloed across multiple systems, many of which are improperly conceived or configured for the special needs of capital programs. Join us as we unpack how the CIP database is a response to these challenges and provides an extensible cloud platform for managing capital programs of all sizes and types.

SPEAKER

Jim Lutterbach, City of Indianapolis DPW Jeff Dieterlen, City of Indianapolis DPW

Project Management/Planning

TIME: 10:00-10:50 AM ROOM: STEW 279

PDH: 1

198. Capital Program Management

This session will detail the highlight of capital outputs. What are they? Why do they matter? Attendees will learn the answer to these questions and more.

SPEAKER

Jim Lutterbach, City of Indianapolis DPW Jeff Dieterlen, City of Indianapolis DPW

TIME: 12:00-12:50 PM ROOM: STEW 279

PDH: 1

199. Capital Program Management:

Where is my construction? What are we doing today? Who is doing it? When? These are just a few of the questions posed for all projects across the state. The CIP Interactive Construction Map (C-Map) acts as a portal for the entire construction program, providing visibility from the central office and moving us closer to the day of near real-time construction telemetry.

SPEAKER

Jim Lutterbach, City of Indianapolis DPW Jeff Dieterlen, City of Indianapolis DPW

Project Management/Planning

TIME: 1:00-1:50 PM **ROOM:** STEW 279

PDH: 1

200. Project Delivery Methods in Action

This presentation will cover the various project delivery methods available to cities, towns, and counties. It will also describe real-life examples of how each is used, how the method is determined, and why a community chooses one method over another

SPEAKER

Tim Jensen, Veridus Group, Inc. Sarah Reed, City of Noblesville

TIME: 2:00-2:50 PM ROOM: STEW 279

PDH: 1

201. Utility Work Plans: Iterating Your Way to Success

The development and approval of utility work plans on more complex projects involves the creation and review of the master utility plans and utility schedules, while simultaneously meetings with utility partners and project team members. This presentation will use sample projects to show iterations of master utility drawings and Gantt charts to reach final approval phase.

SPEAKER

Deborah Porter, Clark Dietz, Inc.
Daniel McMurtry, INDOT
Mike Randolph, Parsons Corporation

Project Management/Planning

TIME: 3:00-3:50 PM **ROOM:** STEW 279

PDH: 1

202. Utility Coordination 101: An Overview and Updates

This presentation will include an overview of the entire utility coordination process, including starting well, partnering with the oversight agent and utilities, tracking progress, keeping the client updated, and completing on time. Information about updates to the work plan template and the 107-R-169 will be discussed.

SPEAKER

Deborah Porter, Clark Dietz, Inc. Bill Read, INDOT Kristoffer Greenlee, INDOT

TIME: 4:00-4:50 PM ROOM: STEW 279

PDH: 1

203. ProPEL Indy: A Plan to Modernize I-65 and I-70

Central Indiana is home to a world-class transportation system that links our businesses, neighborhoods, economies and attractions together. Much of I-65 and I-70 within I-465 was constructed more than 40 years ago and needs modernized. ProPEL Indy has spoken to thousands of stakeholders about their vision of the next generation of interstates. This session will provide an update on the INDOT ProPEL Study and share information on concepts that are being considered.

SPEAKER

Tim Miller, HNTB Corporation Lisa Wall, HNTB Corporation

Public Relations/Communications

TIME: 8:00-8:50 AM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

204. Lessons Learned: Building a Successful Educational Campaign

J-turn, roundabout, and zipper merge are not bad, but they can create instant anxiety with the public. Don't let negativity keep your next project from getting off to a strong start. In this session, you'll hear about an I-69 ORX educational campaign that successfully turned the tide of public sentiment in Henderson, KY when six new roundabouts were introduced. You'll hear about the tools, tips, and tactics that can help any educational campaign succeed.

SPEAKER

Emily Deason, Kentucky Transportation Cabinet Mindy Peterson, Parsons Corporation

TIME: 9:00-9:50 AM **ROOM:** WALC 1055

(Hiler Thtr)
PDH: 1

205. The Lloyd4U: Embracing Innovative Intersections

The Lloyd4U includes over a dozen improvement projects along the Lloyd Expressway in southwest Indiana. The projects include three DLTs, two RCUTs, a hybrid DLT/BLT, interchange modifications, road closures, and more along the highest volume corridor in the region. Implementing an educational campaign to boost driver confidence was essential to the project's success. Team members will share a range of examples that were implemented to enhance public awareness and build understanding of the innovative intersections' benefits.

SPEAKER

David Goffinet, Lochmueller Group Nicole Minton, Lochmueller Group Emily Sprinkle, INDOT

Public Relations/Communications

TIME: 11:00-11:50 AM ROOM: WALC 1055

(Hiler Thtr) **PDH:** 1

206. Engaging Your Audience: Best Practices for Public Speakers

Public Speaking for Engineers and Public Officials: This revamped presentation will discuss the basics of public speaking specifically designed for engineers and public officials. Attendees will leave with a blueprint to make their next public talk more effective.

SPEAKER

Tim Jensen, Veridus Group, Inc.

How To Give a Good Technical Presentation: The ability to give a good technical presentation is an important skill for engineers, researchers, and contractors. It's a skill that must be both learned, and practiced. The presenter must tailor the talk to the audience, plan the script and the slides, rehearse, and set expectations with the audience. Attendees will leave equipped with useful tips and strategies to give an effective technical presentation.

SPEAKER

Rouzbeh Khajehdehi, WSP

Public Relations/Communications

TIME: 12:00-12:50 PM ROOM: WALC 1055

(Hiler Thtr) **PDH:** 1

207. The Foot: A Community Remembered

Transportation projects not only improve community relationships but may also create cultural connections. Explore how media production was incorporated as a unique Section 106 mitigation stipulation sponsored by MoDOT for adverse effects in Jefferson City, Missouri. The Foot: A Community Remembered, a 40-minute film documentary, is a unique, engaging, and powerfully emotional film documentary produced to preserve the legacy of this now lost historic African-American neighborhood.

SPEAKER

Gary Quigg, Lochmueller Group Hannah Blad, Lochmueller Group

TIME: 1:00-1:50 PM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

208. Connecting Stakeholders to the I-69 Finish Line

Sharing the story of the I-69 Finish Line required a variety of tools, techniques, and innovations that eventually led to a highly successful communications program. Tactics such as social media, website, and email helped build trust with media, motorists, residents, and businesses. Strategies to humanize the project and ensure an equitable outreach program and the development of the On Track newsletter, which is delivered to over 12,000 inboxes each week, will be discussed.

SPEAKER

Natalie Garrett, INDOT Tim Miller, HNTB Corporation

Public Relations/Communications

TIME: 2:00-2:50 PM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

209. Leveraging Regional Collaboration for Trail Success: The Monon South Experience

The success of the Monon South Trail has been driven by strong collaboration between local governments, community organizations, and private stakeholders. This presentation will focus on the importance of partnerships in trail development and highlight how the trail has benefited from collective visioning, public engagement, and multi-jurisdictional cooperation. Attendees will learn strategies for building strong partnerships that ensure trail projects are embraced by the community and supported throughout the construction process.

SPEAKER

Drew Storey, Clark Dietz, Inc. Jeff Quyle, Radius Indiana

TIME: 3:00-3:50 PM **ROOM:** WALC 1055

(Hiler Thtr)
PDH: 1

210. Fueled by Feedback: PEL Study Communications Best Practices

INDOT is using the Planning and Environment Linkages (PEL) process to gather stakeholder feedback earlier in the planning process. This session will discuss communications best practices and lessons learned from the ProPEL US 30/31 and ProPEL Indy studies. The studies' approach to meaningful engagement in communities, including underserved populations, can help inform how to take your next PEL and project communications to the next level.

SPEAKER

Natalie Garrett, INDOT Stacey Osburn, HNTB Corporation

Public Relations/Communications

TIME: 4:00-4:50 PM **ROOM:** WALC 1055

(Hiler Thtr) **PDH:** 1

211. INDOT's Enhanced Planning for Public Engagement

INDOT is committed to continuously expanding its public engagement strategies to help inform and educate the public about transportation planning and provide opportunities for input. INDOT recently integrated a crowdsourcing technology into its toolbox for enhanced public/stakeholder surveys, which allows interactive information accessibility, diversified data collection, easy process review, involvement of equity-focused communities, and effective data management. A demo of survey examples will be included.

SPEAKER

Catherine Seely, INDOT
Akbar Bakhshi, Corradino Group LLC
Johnny Han, Corradino Group LLC

Safety

TIME: 8:00-8:50 AM **ROOM:** STEW 218 CD

PDH: 1

212. INDOT Statewide Safety Research Update

Learn best practices for implementing driving simulators in INDOT driver training; using color patterns for improving work zone safety and perception;

SPEAKER

Yiheng Feng, Purdue University
Yunfeng Chen, Purdue University
Sogand Hasanzadeh, Purdue University
Luciana Debs, Texas State University

TIME: 9:00-9:50 AM **ROOM:** STEW 218 CD

PDH: 1

213. Slowing Traffic to Enhance Safety on Local Streets

The battle between keeping driver speeds at a safe level and keeping traffic flowing is never ending. From planning and municipal design standards to reconstruction and retrofitting, this presentation will discuss a variety of techniques to slow drivers on local streets. Actual implementation of the techniques, the results of that implementation, and the potential pitfalls of each will be discussed.

SPEAKER

Phil Gralik, Butler, Fairman & Seufert, Inc. Andrea Langille, Butler, Fairman & Seufert, Inc.

Safety

TIME: 10:00-10:50 AM **ROOM:** STEW 218 CD

PDH: 1

214. Move Over Barrels: Automation to Keep Work Zones Save

This session will explore various cutting-edge technologies that agencies are currently deploying to enhance work zone safety. The discussed innovations will include CV applications that use the Work Zone Data Exchange (WZDx), machine vision technology to detect workers and alert drivers, Autonomous Truck Mounted Attenuators (ATMAs), and Automated Work Zone Speed Enforcement (AWZSE). These advancements aim to significantly reduce crashes and improve overall safety for both workers and drivers.

SPEAKER

John McGregor, INDOT
Ryan Huebschman, HNTB Corporation
Matt Junak, HNTB Corporation

TIME: 11:00-11:50 AM **ROOM:** STEW 218 CD

PDH: 1

215. KISS: Keep it Simple for Safety

There are high-tech tools for measuring speed, traffic volume, and other items needed in a safety study. There are also very simple methods that can be used by anyone to get an initial estimate, check the fancy tools, or determining if it is worth spending time and money on a more complicated review. This session will review some of these simple methods to determine traffic volumes, speeds, sight distance, passing zones, clear zones, and where to place road signs.

SPEAKER

David Orr, Cornell University

Safety

TIME: 1:00-1:50 PM **ROOM:** STEW 218 CD

PDH: 1

216. Connected Trucks: Challenges and Solutions

In-Cab Alerts Impacts on Connected Truck Speed Reductions: This presentation explores how in-cab alerts provided to commercial vehicles have positively impacted truck speeds on limited access corridors. Approximately 23,000 alerts were analyzed from a fall 2023 pilot study in Ohio and a statewide deployment spring 2024 in Indiana. Results showed that 21% (Indiana) and 22% (Ohio) of drivers who received a dangerous slowdown alert reduced speeds by at least 5 mph within 30 seconds of the alert.

SPEAKER

Jairaj Desai, Purdue University Jijo Mathew, Parsons Corporation Rahul Sakhare, Purdue University

Leveraging Connected Truck Data to Assess Truck Parking Needs: Truck parking shortages pose significant safety risks on highways. This presentation provides an overview of a recent study that used connected truck data to analyze the impact of a rest area closure on I-70 in Indiana. Findings demonstrate a substantial increase in ramp parking, indicating a critical need for additional parking facilities. Data analytics and visualization tools offer a scalable solution for nationwide assessment of truck parking needs, which enables informed decision-making for infrastructure improvements.

SPEAKER

Jijo Mathew, Parsons Corporation Jairaj Desai, Purdue University

Safety

TIME: 2:00-2:50 PM ROOM: STEW 218 CD

PDH: 1

217. Low Cost and Systemic Safety for Local Governments: A Workshop

The INDOT Traffic Engineering team WILL discuss low-cost safety options that can be used by local governments with or without dedicated safety funding. We'll dive into the details and specifics of these treatments and discuss when they are appropriate for use. This interactive workshop is a great way for city and county engineers and local elected officials to gain a better understanding of systemic safety treatments.

SPEAKER

Taylor Ruble, INDOT Daniel McCoy, INDOT

TIME: 3:00-3:50 PM **ROOM:** STEW 218 CD

PDH: 1

218. Wrong Way Vehicle Detection System (WWVDS) Pilot Project

We will discuss the overall concept of the WWVDS pilot project, how sites were chosen based on different information, and various types of treatments selected. Presenters will show the typical layout for each treatment type; discuss potential problems with installation and maintenance; explain future capabilities; and walk through some of the lessons learned since starting construction.

SPEAKER

Kate Pippin, INDOT Ankur Desai, INDOT

Safety

TIME: 4:00-4:50 PM **ROOM:** STEW 218 CD

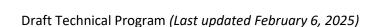
PDH: 1

219. Advancements in Roadway Lighting and Pavement Marking Practices and Standards

This session will detail INDOT's initiative to improve road user safety through the improved application of roadway lighting. The initiative includes expanding the use of lighting where beneficial as well as enhancements to construction specifications and maintenance practices.

SPEAKER

David Boruff, INDOT Joe Bruno, INDOT



Traffic Operations

TIME: 8:00-8:50 AM ROOM: STEW 310

PDH: 1

220. Ohio DOT Automated Driving System Deployment Project Findings

Attendees will gain a comprehensive understanding of the findings from the OhioDOT Automated Driving Systems (ADS) Deployment project of tractor semi-trailers and Ford transit vans operating on Ohio public roads using Level 2/3 technology. The tractors used truck platooning technology and were operated by a motor carrier in revenue service. The passenger vans operated in three project designated routes using HD maps and were operated by project team members.

SPEAKER

Benjamin Ritchey, CDM Smith

TIME: 9:00-9:50 AM **ROOM:** STEW 310

PDH: 1

221. Impact of the 2024 Solar Eclipse on National Traffic Mobility Using CV Data and Images

This presentation reports on the use of connected truck data to evaluate the impact of the solar eclipse on interstate traffic mobility in thirteen states. Eleven states had a total week-over increase of 66% in the number of mile hours of interstate operation below 45 mph; Texas and Oklahoma experienced a reduction in week-over congestion during the eclipse by 35%; and Indiana had the highest increase in congestion on eclipse day by 856 mile-hours.

SPEAKER

Rahul Sakhare, Purdue University Jairaj Desai, Purdue University Jijo Mathew, Parsons Corporation

Traffic Operations

TIME: 10:00-10:50 AM ROOM: STEW 310

PDH: 1

222. I-465 TSMO: Operations, Effectiveness, and Lessons Learned

The I-465 TSMO project installed ramp meters and variable speed limit signs on I-465, two first-of-their-kind deployments in Indiana. Both systems became operational in 2024. In this session we'll dive into the details of operating these systems, present data on their initial effectiveness, and discuss lessons learned.

SPEAKER

Drew Sorenson, INDOT Rafal Ignatowicz, Parsons Corporation Jijo Mathew, Parsons Corporation

TIME: 11:00-11:50 AM ROOM: STEW 310

PDH: 1

223. Prioritizing Transit Along the IndyGo Purple Line BRT

This presentation will provide an overview of Transit Signal Priority along the City of Indianapolis and IndyGo's Purple Line Bus Rapid Transit, which is scheduled to begin service in October 2024. Highlights include traffic signal timing optimization along the route, the software-based TSP system, transit signal performance metrics, and lessons learned.

SPEAKER

Matt Duffy, IndyGo Michael Ruelle, Kimley-Horn

Traffic Operations

TIME: 1:00-1:50 PM **ROOM:** STEW 310

PDH: 1

224. FlexRoad: Corridor-Wide TSMO Implementation and CMGC Delivery

The 80/94 FlexRoad project will improve traffic flow and safety along Indiana's busiest interstate corridor. Improvements include implementing Transportation Systems Management and Operations (TSMO) strategies throughout the corridor with a Construction Manager General Contractor (CMGC) delivery method. Attendees will learn why TSMO solutions were the best options, implementation challenges, and lessons learned.

SPEAKER

Mike Yacullo, INDOT Toby Randolph, Parsons Corporation Mindy Peterson, Parsons Corporation

TIME: 2:00-2:50 PM **ROOM:** STEW 310

PDH: 1

225. Evolution of Traffic Signal Detection Technology

How has traffic signal actuation changed over time? Originally, a traffic signal's main purpose was to assign the right-of-way to vehicles for collision avoidance, and now they are crucial tools to manage traffic flow, alleviate congestion and provide safety for pedestrians and bicyclists. This presentation will explore early detection methods, evaluate current technology, and explore the future of detection technology.

SPEAKER

Carly Schiene, Parsons Corporation Haydn Malackowski, Parsons Corporation

Traffic Operations

TIME: 3:00-3:50 PM **ROOM:** STEW 310

PDH: 1

226. Impacts of Traffic Calming Using Connected Vehicle Data

Area-wide traffic calming measures were implemented on a major road near downtown South Bend, Indiana to reduce vehicular speed and improve safety for motorized and non-motorized road users. The interventions included speed tables, road diets, raised crosswalks, and raised intersections. We analyzed connected vehicle data from INRIX, including vehicle speeds and trajectories, before and after implementation. The findings showed a statistically significant reduction in vehicle speeds, demonstrating potentially improved safety.

SPEAKER

Oluwanifemi Oluwatomini, University of Notre Dame

TIME: 4:00-4:50 PM ROOM: STEW 310

PDH: 1

227. Implementation of Rail-Crossing Information Systems

The reliability and utility of rail-crossing information systems has succeeded over the last 5-years in reducing congestion and improving safety. This presentation will review the implementation and expansion of a rail crossing information system deployed in the City of New Haven and its adoption across the state. The presentation will show the problem, solution, and the quantified benefits seen.

SPEAKER

Neil Ternowetsky, TRAINFO