

110th Purdue Road School

Transportation Conference & Expo



March 12 & 13, 2024

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TUESDAY

SCHEDULE OF EVENTS

Opening Session

Tuesday, 9:30–10:30 AM

Loeb Theater, Stewart Center

WELCOME

Arvind Raman

Dean of Engineering, Purdue University

FIRESIDE CHAT

Michael Smith

Commissioner, Indiana Department of Transportation

Doug Carter

Superintendent, Indiana State Police

Andy Cook

Former Mayor, City of Westfield

Richard Hedgecock

President, Indiana Constructors, Inc.



Complimentary Internet service is provided. No password is needed.
The network name is "attwifi".

EXHIBITOR VISIT & LUNCH

SCHEDULE OF EVENTS

VISIT WITH THE EXHIBITORS

Tuesday & Wednesday, 8:00 AM–5:00 PM
North & South Ballrooms, Purdue Memorial Union

While visiting with our exhibitors, coffee will be available all day. You can also enjoy a continental breakfast in the morning and lunch from 11:00 AM to 2:00 PM.

EXHIBITOR LUNCHEON

Tuesday & Wednesday, 11:00 AM–2:00 PM
PMU Commons (2 buffet stations) & North Ballroom (1 buffet station), Purdue Memorial Union

Provided by our exhibiting partners, lunch will be served buffet style from the PMU Commons (ground floor/lower level of Purdue Memorial Union) with an additional lunch buffet station in the North Ballroom (exhibit hall).



Tuesday Lunch - Taco Salad/Nacho Bar



Wednesday Lunch - BBQ Buffet

OTHER EVENTS

OTHER ROAD SCHOOL EVENTS

STUDENT POSTER SESSION

Tuesday, 11:00 AM–1:00 PM
Purdue Memorial Union

Adjacent to the South Ballroom (in the Purdue Memorial Union), look for students exhibiting posters that highlight recent research activities.

INDIANA LTAP

Visit Indiana LTAP in the exhibit hall to receive a free print copy of LTAP's 2024 Directory of Indiana State, County, City, and Town Officials as supplies last. The directory is also available in Excel format and as a phone and desktop app. Visit <https://www.purdue.edu/inltap/> for more information.

The LTAP staff will also be available to walk you through our Learning Management System, our Road Scholar program, and other free resources for local agencies.

Vote for the 2024 Indiana Transportation Innovators People's Choice Award on Tuesday. Look for booklets with this year's entries and voting information at the registration desk and at the LTAP booth.

ITE INDIANA ROAD SCHOOL DINNER / BANQUET

Wednesday, 5:00–7:00 PM
Discovery Learning Research Center, Room 131
207 S Martin Jischke Dr
West Lafayette, IN 47907

For more information and to register, please visit <http://www.indianaite.org/meetinginfo.php>.

MARCH 7, 2024

THURSDAY

ETHICS

TIME
1:00-2:00 PM

ROOM
INDIANAPOLIS
CONVENTION
CENTER,
ROOM 234

PDH: 1

132A. 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
INDIANAPOLIS
CONVENTION
CENTER,
ROOM 234

PDH: 1

133A. 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.

TIME
11:00-11:50 AM

ROOM
CL50 224

PDH: 1

1. US 33 Over Blue River: ABC’s With Steel

The US 33 over the Blue River Bridge Replacement project is the first INDOT project of its kind, and a great example of Accelerated Bridge Construction (ABC). The project used prefabricated steel beam modular superstructure units with prefabricated substructure units, approach slabs, terminal joints, and “steel-like” UHPC for the 8-inch closure pours. Correcting the substandard roadway superelevation added complexity to the design and detailing. Join us to learn more.

SPEAKERS

Brandon Arnold, USI Consultants, Inc.
Kurt Heidenreich, Engineering Resources, Inc.
Stephanie Wagner, INDOT

MODERATOR

Stewart Kline, Tippecanoe County

TIME
1:00-1:50 PM

ROOM
CL50 224

PDH: 1

2. Cost Quantification of Construction Defects on Concrete Decks

This session highlights the impact of construction defects on the lifecycle performance of concrete bridge decks in Indiana. Our research team investigated the effects of defective construction practices on deterioration from chloride-induced corrosion, freeze-thaw cycles, carbonation, and fatigue cracking. The research leveraged data from INDOT to formulate a method for quantifying the additional lifecycle costs attributable to construction defects. Recommendations for construction, inspection, and data collection practices are discussed to improve future bridge construction and inspection.

SPEAKERS

Manuel Salmeron, Purdue University
Shirley Dyke, Purdue University
Julio Ramirez, Purdue University

MODERATOR

Brandon Arnold, USI Consultants, Inc.

TUESDAY

BRIDGES

TIME
2:00-2:50 PM

ROOM
CL50 224

PDH: 1

3. The Fort Wayne Veterans Memorial Bridge

INDOT, Fort Wayne, and Engineering Resources collaborated to build an aesthetically enhanced bridge, while simultaneously improving all modes of transportation for one of the major crossings of the St. Mary’s River in downtown Fort Wayne. The project was developed and built to pay homage to veterans and all branches of the military. This presentation will cover the challenges of using military insignia, legislative efforts to rename the bridge, and approval of bridge aesthetics.

SPEAKERS

Jenny Bass, INDOT
Patrick Zaharako, City of Fort Wayne
Kurt Heidenreich, Engineering Resources, Inc.

MODERATOR

Brandon Arnold, USI Consultants, Inc.

TIME
3:00-3:50 PM

ROOM
CL50 224

PDH: 1

4. UHPC Pre-Cast Bridge Elements

Join us for a discussion on the use of non-proprietary UHPC. We will review the uses of small batches of UHPC for bridge repair and maintenance and the use of large batches mixed in concrete trucks for the construction of pre-cast superstructure elements. We will review the entire process and show the construction of two bridges that have UHPC superstructures—the first of their kind in the U.S.

SPEAKER

Dewayne Rogers, Clare County Road Commission

MODERATOR

Brandon Arnold, USI Consultants, Inc.

MARCH 12, 2024

TUESDAY

BRIDGES

TIME
4:00-4:50 PM

ROOM
CL50 224

PDH: 1

5. Gantry Erection of I-294-Mile-Long Bridge

Collins representatives will discuss the creative solutions implemented to erect the three-span haunched steel girders over the Des Plaines River and Sanitary and Ship Canal . The solutions include the use of a gantry system, stiffening truss, and longitudinal jacking systems. Insight into the erection decisions related to economic and efficiency factors and interesting aspects of the demolition will also be highlighted.

SPEAKERS

Michael Haas, Collins Engineers, Inc.
Sean Doumas, Collins Engineers, Inc.
Jacob Behnke, Collins Engineers, Inc.

MODERATOR

Brandon Arnold, USI Consultants, Inc.

TUESDAY

DESIGN/CONSTRUCTION

TIME
12:00-12:50 PM

ROOM
FOWLER HALL

PDH: 1

6. Hurrying to Drain: The Secret to Accelerated Projects

Even a simple project can have pitfalls when it's accelerated. Presenters will share best practices on how frequent, strong communication can overcome tight schedules, site access limitations, and construction challenges.

SPEAKERS

Mark Spence, HNTB
Clint Scherzer, INDOT
Marshall Enyart, HNTB

MODERATOR

Jeffrey Kuhn, City of West Lafayette

TIME
1:00-1:50 PM

ROOM
FOWLER HALL

PDH: 1

7. Proper Use and Care of the Lightweight Deflectometer

This presentation will demonstrate proper techniques of using the lightweight deflectometer in the field for compaction control. We will also review maintenance and troubleshooting techniques that the user can use to avoid device failure.

SPEAKER

Garry Aicken, Kessler Soils Engineering Products, Inc.

MODERATOR

Jeffrey Kuhn, City of West Lafayette

TUESDAY

DESIGN/CONSTRUCTION

TIME
2:00-2:50 PM

ROOM
FOWLER HALL

PDH: 1

8. Design-Build Best Value:
Navigating Geotechnical Risk

The I-69 Section 6 Contract 5 Design-Build Best Value Project had an approximate construction cost of \$728 million, including reconstruction of SR 37, I-465, and a new system-to-system interchange for I-69 and I-465. Geotechnical risks consisted of compressible soils from the historic meandering of the White River and areas of mined sand and gravel. The speakers will present the management process of the geotechnical risks from both the owner’s and the contractor’s perspectives.

SPEAKERS
Mike Wigger, Terracon Consultants, Inc.
Sam Balog, American Structurepoint
Andrew Pangallo, INDOT

MODERATOR
Matthew Ulberg, Montana LTAP

TIME
3:00-3:50 PM

ROOM
FOWLER HALL

PDH: 1

9. Rethinking Intersections at
Grade: IDM CH 46 Update

INDOT is working on a total revision of Chapter 46 “Intersections at Grade” of the Indiana Design Manual (IDM). These revisions address numerous longstand- ing concerns with the way intersections are designed in Indiana and also contribute design information for alternative intersections.

SPEAKERS
Taylor Ruble, INDOT
Nathan Shellhamer, INDOT

MODERATOR
Matthew Ulberg, Montana LTAP

TUESDAY

DESIGN/CONSTRUCTION

TIME
4:00-4:50 PM

ROOM
FOWLER HALL

PDH: 1

10. A Move Towards Context-Based Design

Vehicle speeds in urban, suburban, and small-town areas are a major safety concern for both pedestrians and motorists. INDOT is evaluating state design standard changes that would use geometric design to regulate vehicle speeds to appropriate levels based on the community context.

SPEAKERS
Taylor Ruble, INDOT
Daniel McCoy, INDOT

MODERATOR
Matthew Ulberg, Montana LTAP

TIME
1:00-1:50 PM

ROOM
LOEB THEATER

PDH: 1

11. Using Sustainable BMPs to Achieve SWPPP Success

Designing and implementing practices that minimize pollutant introduction to the waterways using sustainable practices is key to successful environmental compliance. This presentation highlights the use of sustainable BMPs in design and implementation.

SPEAKER
Joe Moore, Erosion and Construction Services

MODERATOR
Dave Henkel, Lochmueller Group

TIME
2:00-2:50 PM

ROOM
LOEB THEATER

PDH: 1

12. Managing Risk: Balancing Design Criteria With Site Constraints

American Structurepoint and INDOT present best practices for managing risks associated with drainage design criteria versus site constraints. We will discuss how we have successfully delivered products that may not fulfill all design criteria but still meet the intent of INDOT and protect the public’s interests.

SPEAKERS
Jordan Bosse, American Structurepoint
James Emerick, INDOT

MODERATOR
Dave Henkel, Lochmueller Group

TIME
3:00-3:50 PM

ROOM
LOEB THEATER

PDH: 1

13. Adventures in Preparing Additional Information Documents

Design modifications happen and can affect environmental approvals necessary for letting. This presentation will discuss the role that additional information documents play in the environmental process, when they are needed, timelines for approvals, and an overview of examples.

SPEAKERS
Josh Iddings, American Structurepoint
Sarah Everhart, American Structurepoint

MODERATOR
Dave Henkel, Lochmueller Group

TUESDAY

DESIGN/CONSTRUCTION

TIME
4:00-4:50 PM

ROOM
LOEB THEATER

PDH: 1

14. Pedestrian Maintenance of Traffic Updates

This presentation will provide an overview of the changes to ADA design criteria in accordance with the final rule of PROWAG (effective October 7, 2023). We will also share the new INDOT Standard Drawing series 801-TPAR and the progress of the QPL lists for ADA pedestrian MOT devices.

SPEAKERS
Katherine Smutzer, INDOT
Herbert Davis, INDOT

MODERATOR
Dave Henkel, Lochmueller Group

TIME
11:00-11:50 AM

ROOM
STEW 302

PDH: 1

15. 3rd Street Bridge Replacement and Enhancements Over Lake George

The Lake George recreational area in and around downtown Hobart Indiana was prone to flooding during heavy rain events, which prevented the use of its park, scenic areas, and businesses. 3rd Street, which is the main arterial into town, crossed Lake George with a 69-ft single span structure that became inundated during rain events and did not have freeboard to allow boat passage. The new 4-span structure and floodwall reduced water levels and improved the overall functionality of the area.

SPEAKERS
Bryan Wright, Butler, Fairman & Seufert, Inc.
Andrea Langille, Butler, Fairman & Seufert, Inc.
Brandon Towle, Butler, Fairman & Seufert, Inc.
Duane Alverson, Lake County
Phil Gralik, City of Hobart

MODERATOR
Patrick Zaharako, City of Fort Wayne

TIME
12:00-12:50 PM

ROOM
STEW 302

PDH: 1

16. Lessons Learned From the I-65 Concrete Pavement Restoration

This presentation will provide an update and lessons learned from the construction project on R-42491 Concrete Pavement Restoration on I-65 from US-30 to 80/94. We will discuss incident management, IHCP changes, drastic quantity increases, modified schedules, major ramp closures, multi-phase accelerated construction, and cooperation strategies that made this a successful project.

SPEAKERS

John Moran, Primera Engineers
Matt Henke, Rieth-Riley Construction Co., Inc.
Christien Reynolds, INDOT

MODERATOR

Patrick Zaharako, City of Fort Wayne

TIME
1:00-1:50 PM

ROOM
STEW 302

PDH: 1

17. I-69: Closing in on the Finish Line

Construction of the nation’s newest interstate, I-69 from Martinsville to Indianapolis, began in 2019 and will be open to traffic by the end of 2024, including the new system interchange at I-465/I-69 and an additional travel lane on 8 miles of I-465. This project update will include videos on completed and remaining work activities, quantities, communication activities, and a presentation of the before/after photos on major work milestones.

SPEAKERS

Tim Miller, HNTB
Sarah Rubin, INDOT

MODERATOR

Jeremy Hunter, INDOT

TUESDAY

DESIGN/CONSTRUCTION

TIME
2:00-2:50 PM

ROOM
STEW 302

PDH: 1

18. MSE Walls Retrofit Design and Construction

Presenters will share the INDOT MSE wall retrofit contracting approach, design, and construction for existing MSE walls that showed signs of significant premature distresses.

SPEAKERS

Aamir Turk, INDOT
Malek Smadi, Geotill, Inc.

MODERATOR

Jeremy Hunter, INDOT

TIME
3:00-3:50 PM

ROOM
STEW 302

PDH: 1

19. Complete Streets on a Local Arterial Roadway

The Emerson Avenue Widening project focused on transforming an existing single-lane roadway into five lanes while also incorporating the City of Indianapolis Complete Streets Policy. Project goals included enhanced connectivity, additional multimodal accessibility, and improved safety on a congested roadway connecting Indianapolis and Greenwood. Attendees will learn how to incorporate complete street design elements; the challenges and complexities of coordinating multiple stakeholders; and project results.

SPEAKERS

Nicholas Murphy, American Structurepoint
Nick Correll, City of Indianapolis

MODERATOR

Jeremy Hunter, INDOT

MARCH 12, 2024

TUESDAY

DESIGN/CONSTRUCTION

TIME
4:00-4:50 PM

ROOM
STEW 302

PDH: 1

20. New Roundabout Guidelines

This presentation will review major updates from NCHRP Report 672, including the revised conflict point presentation, updated stopping sight distance sight lines/triangles. The discussion will include the new appendix with design performance check techniques and the notable changes in the Public Right-of-Way Accessibility Guidelines (PROWAG) final ruling on roundabouts.

SPEAKERS

Nicholas Murphy, American Structurepoint
Jordan Bosse, American Structurepoint
Mark Orton, INDOT

MODERATOR

Jeremy Hunter, INDOT

TUESDAY

ELECTED OFFICIALS

TIME
1:00-1:50 PM

ROOM
STEW 320

PDH: 1

21. White River Innovation District
BOT for Infrastructure IndyDPW

When Elanco announced their headquarters will be at the former GM stamping plant site in Indianapolis, Indy DPW, IEDC and their partners needed to not only design roadway infrastructure, but also all-new utility infrastructure and a new bridge across the White River. When the build-operate-transfer procurement process became available for use by Indianapolis, the design teams and owners embraced the opportunity for a collaborative construction process on this transformative project.

SPEAKERS

Cassie Reiter, Crawford, Murphy & Tilly, Inc.
John Bowen, Indianapolis DPW
Shannon Killion, City of Indianapolis

MODERATOR

Kevin Sears, INDOT

TIME
2:00-2:50 PM

ROOM
STEW 320

PDH: 1

22. Equitable Stormwater Rates:
Sustaining Essential Infrastructure

Public officials must understand the critical importance of equitable stormwater rates. By implementing realistic rates, we can ensure the sustainability of stormwater infrastructure and reduce reliance on tax dollars. We'll delve into the significance of treating stormwater utilities like other utilities and explore how rates can fund crucial projects and maintenance. This approach benefits communities, promotes fiscal stewardship, and secures a resilient future for stormwater management.

SPEAKERS

Benjamin Lipps, Town of Cumberland
Mary Atkins, Wessler Engineering
Andre Riley, Baker Tilly Municipal Advisors, LLC

MODERATOR

Kevin Sears, INDOT

MARCH 12, 2024

TUESDAY

ELECTED OFFICIALS

TIME
3:00-3:50 PM

ROOM
STEW 320

PDH: 1

23. Public Speaking Level 2: The Skill of Storytelling and Persuasion

Building on “Public Speaking for Engineers and Public Officials,” this session will take it to the next level of public speaking. We will discuss and build skills of storytelling and persuasion and how it relates to people and public speaking.

SPEAKER
Tim Jensen, Veridus Group, Inc.

MODERATOR
Kevin Sears, INDOT

TIME
12:00-12:50 PM

ROOM
RAWL 1086

PDH: 1

24. NextLevel Grants and Project Funds 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 the local and/or in conjunction with local call funds. This session will provide you with an understanding of the new NextLevel Grants initiative and how to effectively manage your project funding.

SPEAKERS

Karen Hicks, INDOT
Aaron Potter, INDOT
Paul Reed, INDOT

MODERATOR

Jacque Clements, AIC

TIME
1:00-1:50 PM

ROOM
RAWL 1086

PDH: 1

25. Exploring Fuel Tax Alternatives

The federal government and many state governments rely on excise fees on motor fuel to maintain safe, efficient modes of transportation. As vehicles become more fuel efficient, gas taxes will not be a sustainable means to fund transportation infrastructure. Learn how states across the U.S. are pursuing alternative funding mechanisms like road user charging (RUC), vehicle miles travelled (VMT) tax and pay per mile concepts, while ensuring a fair and equitable tax burden.

SPEAKERS

Diane Newton, HNTB
Joe Guerre, HNTB

MODERATOR

Jacque Clements, AIC

TUESDAY

FINANCE/ADMINISTRATION

TIME
2:00-2:50 PM

ROOM
RAWL 1086

PDH: 1

26. Local Income Tax: An Evolving Resource

Local income tax (LIT) has become an increasingly important resource for Indiana communities. Each year, many Indiana counties adopt new or reallocate existing LIT rates to meet ever-changing needs. The 2023 legislative session added additional LIT flexibility for jails, EMS, fire protection, courts, and other needs. A new LIT rate may free up funding for roads, but getting it adopted may require cooperation among the county and its municipalities. Join us for a discussion.

SPEAKERS

Andy Mouser, Baker Tilly
Tom Dermody, City of LaPorte

MODERATOR

Jacque Clements, AIC

TIME
3:00-3:50 PM

ROOM
RAWL 1086

PDH: 1

27. Gas Tax Reimbursement and Budgeting Sub-Funds

Getting Gas Tax Reimbursed from the State: Learn how to get gas tax reimbursed from the State for your highway department vehicles.

SPEAKER

Bob Plantenga, Dossett Consulting, LLC

Budgeting Restricted and Non-Restricted MVH Sub-Funds: With a history of expenditures for the two sub-funds, you can save yourself time and frustration by budgeting MVH 1176 and MVH 1173 in detail during the annual budget process. Attendees will gain learn best practices and helpful tips to take back to the office.

SPEAKER

Jacque Clements, AIC

MODERATOR

Kathy Eaton-McKalip, INDOT

TUESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
11:00-11:50 AM

ROOM
STEW 206

PDH: 1

28. Engineers Without Borders: U.S. Mission, Needs, and Opportunities

Join us for an informative presentation about the mission, sustainable design practices, needs, and opportunities of the EWB (engineers without borders). This 17,000-member organization addresses clean water, sanitation, and other core living needs of small, disadvantaged international communities. EWB conducts hundreds of global projects per year and offers significant volunteer opportunities for civil, environmental, and electrical engineers and mentoring opportunities for scores of EWB student chapters.

SPEAKERS

Katherine Kreienkamp, EWB Indianapolis
Allen Boyd, EWB Indianapolis
Susan Harris, EWB Indianapolis

MODERATOR

Nick Parr, Boone County

TIME
1:00-1:50 PM

ROOM
STEW 206

PDH: 1

29. It Starts With You: Effective Team Building Strategies

This presentation will provide strategies to build effective teams. Transportation projects require effective collaboration, which is accomplished through team building and trust. To successfully manage and work in a team made up of diverse people with different perspectives and experiences, we must first look inward to build self-awareness and emotional intelligence. In doing so, we can connect with others by being our authentic selves and listening to understand.

SPEAKERS

Jennifer Sharkey, Purdue University
Karen Wood, SJCA, Inc.

MODERATOR

Daniel Saldivar-Carranza, Purdue University

MARCH 12, 2024

TUESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
2:00-2:50 PM

ROOM
STEW 206

PDH: 1

30. Looking Back and Plowing Ahead

Four generations of transportation teammates will discuss where they’ve been, why they’re here, and where they’re headed as the transformation to the transportation industry continues.

SPEAKERS
Doug Burgess, INDOT
Kevin Jasinski, Burgess & Niple
Sara Heck, Avenew

MODERATOR
Daniel Saldivar-Carranza, Purdue University

TIME
3:00-3:50 PM

ROOM
STEW 206

PDH: 1

31. The Transition From Individual Contributor to Engineering Manager

There is little guidance on the best practices for transitioning from an individual contributor to an engineering manager. Letting go of doing the “engineering work” and focusing on creating leaders can be a difficult transition. The presenter will share her experience and lessons learned from navigating the transition from individual contributor to engineering manager.

SPEAKER
Kara Boyles, City of South Bend

MODERATOR
Daniel Saldivar-Carranza, Purdue University

MARCH 12, 2024

TUESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
4:00-4:50 PM

ROOM
STEW 206

PDH: 1

32. Engaging Engineering Students in Community-Based Project Learning

Engineers must solve today’s functional problems through a humanistic lens that focuses on the community being served. This lens entails soft skills like engaging with residents, actively listening to anecdotes, and incorporated feedback into a project. In this community-based project leadership course, attendees will learn to engage with residents, work synergistically alongside them, and take a project from concept to completion.

SPEAKER
Kara Boyles, City of South Bend

MODERATOR
Daniel Saldivar-Carranza, Purdue University

TUESDAY

LOCAL AGENCY

TIME
11:00-11:50 AM

ROOM
STEW 214 AB

PDH: 1

33. Tips for Successful LPA Engineers and Supervisors

The session will present lessons learned, tips, tricks, and lifehacks for LPA staff. We'll unpack common traffic requests, HMA inlay and construction, nuggets from a long-lost LPA manual, and a long-range asset management strategy. resources. We'll share valuable resources throughout the presentation that will save you time and money and position you to successfully serve your LPA.

SPEAKERS

Matt Gavelek, Town of Chesterton
Jennifer Sharkey, Purdue University

MODERATOR

Taylor Ruble, INDOT

TIME
12:00-12:50 PM

ROOM
STEW 214 AB

PDH: 1

34. A Holistic Approach to Managing Local Agency Assets

Local public agencies are responsible for all assets within their right-of-ways and must meet optimize their funding to meet current and future demands on their infrastructure. This presentation will show how a layered approach to inventorying and planning assets, combined with a heavy dose of staff development to improve a local government's understanding of its system, can open up additional funding mechanisms to improve the transportation network.

SPEAKERS

Craig Parks, Avenew
Sara Heck, Avenew
Charlie Kacmar, Avenew

MODERATOR

Taylor Ruble, INDOT

TUESDAY

LOCAL AGENCY

TIME
2:00-2:50 PM

ROOM
STEW 214 AB

PDH: 1

35. County Bridge Preservation: Locally Funded vs. Federally Funded

This presentation will discuss the previous federal aid call for bridge preventative maintenance projects, the INDOT Asset Management Plan format vs. CCMG, how the federal aid call was cancelled, and how Harrison County and Boone County moved projects forward with 100% local funds. We will also explore how far counties have come on asset management with pavements, and the continuing need adopt preventative maintenance on bridges. We will conclude with an overview of how these projects can be delivered locally vs. with federal funds.

SPEAKERS

Kevin Russel, Harrison County
Nick Parr, Boone County
Jonathan Olson, Butler, Fairman & Seufert, Inc.

MODERATOR

Mark Ahearn, Purdue University

TIME
3:00-3:50 PM

ROOM
STEW 214 AB

PDH: 1

36. Introduction to Right-of -Way Acquisition

This discussion will give an overview of the laws on land acquisition, what the typical process looks like, and one community’s perspective on communication related to the process.

SPEAKERS

James Hellmann, City of Noblesville
Jonathan Hughes, Bose McKinney & Evans LLP

MODERATOR

Mark Ahearn, Purdue University

TUESDAY

LOCAL AGENCY

TIME
4:00-4:50 PM

ROOM
STEW 214 AB

PDH: 1

37A. What is in the New Edition of the MUTCD?

The session will provide a brief overview of the updates to the new 11th edition of the MUTCD that would be of interest to local agencies.

SPEAKERS
Karen Stippich, FHWA
David Boruff, INDOT
Laura Slusher, Purdue University

MODERATOR
Mark Ahearn, Purdue University

TIME
2:00-3:50 PM

ROOM
STEW 314

PDH: 2

38. Local Agencies Round Tables: Street Commissioners

Join us for a round table discussion with Indiana’s street commissions about transportation concerns that Indiana counties are facing. This is great chance to network with your peers; brainstorm; and discuss ideas, problems, plans.

SPEAKERS
Meredith Camp, Purdue University
Richard Domonkos, Purdue University

TUESDAY

MAINTENANCE & OPERATIONS

TIME
12:00-12:50 PM

ROOM
UC 114

PDH: 1

39. Applied Ergonomics

There are approximately 2.3 million work-related injuries and over 6,000 fatalities every year. In 2020, half of these injuries happened in the construction industry. Our research explored the three main causes of work-related injuries, identified high-risk activities and the root causes of injuries in those activities, evaluated current safety practices in INDOT, proposed ergonomically effective technologies, and conducted experiments to evaluate if those ergonomic interventions can improve workers’ health and safety. Join us for a discussion.

SPEAKERS

Yunfeng Chen, Purdue University
Xinran Hu, Purdue University

MODERATOR

Joe Percy, Hendricks County

TIME
1:00-1:50 PM

ROOM
UC 114

PDH: 1

40. Web Portal for the Analysis of Collected Mobile LiDAR Data Along Indiana’s Transportation Corridors

Join us for an interactive demonstration of a web portal for the management, visualization, and analysis of collected mobile LiDAR data along Indiana’s transportation corridors.

SPEAKERS

Jinha Jung, Purdue University
Ayman Habib, Purdue University

MODERATOR

Joe Percy, Hendricks County

TIME
2:00-2:50 PM

ROOM
UC 114

PDH: 1

41. Evaluation of Lane Marking Reflectivity Using LiDAR Intensity

This session will explore using LiDAR intensity to evaluate lane marking retro-reflectivity. A visualization portal for conveying these results will also be presented.

SPEAKERS

Ayman Habib, Purdue University
Darcy Bullock, Purdue University

MODERATOR

Rahul Rajbhara, American Structurepoint

TIME
3:00-3:50 PM

ROOM
UC 114

PDH: 1

42. Solid State LiDAR for Stockpile Volume Estimation in Storage Facilities

The presentation will evaluate using solid state and multi-beam spinning LiDAR for the volume estimation of salt stockpiles in INDOT storage facilities.

SPEAKERS

Ayman Habib, Purdue University
Darcy Bullock, Purdue University

MODERATOR

Rahul Rajbhara, American Structurepoint

TIME
4:00-4:50 PM

ROOM
UC 114

PDH: 1

43. AI and Road Asset Management

The next generation of Roadway Asset Management technology has arrived and is taking the guesswork out of PASER ratings. With newly developed AI technology, 360-degree photography, and LiDAR hardware, the PASER and PCI rating process can be automated to generate the GIS data needed to create Asset Management Plans for Community Crossing applications in a fraction of the time.

SPEAKERS

Shawn Strange, First Group Engineering, Inc.
Grant Barker, First Group Engineering, Inc.

MODERATOR

Rahul Rajbhara, American Structurepoint

TUESDAY

MULTIMODAL TRANSPORTATION

TIME
11:00-11:50 AM

ROOM
STEW 218 CD

PDH: 1

44. Monon South Trail Project Updates

Design of the first phase of the Monon South Trail is underway, and the trail will be under construction as soon as this summer. Join us for project updates and a discussion of the successes and challenges of designing the first 20 miles of trail.

SPEAKERS
Ryan Hughes, Clark Dietz, Inc.
Jeff Quyle, Radius Indiana

MODERATOR
Venetta Keefe, INDOT

TIME
1:00-1:50 PM

ROOM
STEW 218 CD

PDH: 1

45. Reimagining Cherry Lane: A Road to Collaboration

Join us on a case study to learn how collaborative efforts between Purdue University and the City of West Lafayette created multimodal infrastructure through the realignment of Cherry Lane and supporting work. Presenters will discuss how this project is solving longstanding issues that the city and university have encountered over the years and how the community benefits from the implemented solution.

SPEAKERS
Adam Keyster, Purdue University
Ben Anderson, City of West Lafayette

MODERATOR
Tucker Born, Indianapolis DPW

TUESDAY

MULTIMODAL TRANSPORTATION

TIME
2:00-2:50 PM

ROOM
STEW 218 CD

PDH: 1

46. Rail Test Track at Purdue

The School of Construction Management Technology at Purdue University is building a new, full-scale test track facility for both educational and research purposes. This will help rebuild the railroad program at Purdue, provide students with active hands-on experience of railroad track components, and prepare for future railroad industry workforces. This facility will also be used to conduct research projects supported by INDOT and support research collaborations.

SPEAKERS

Shanyue Guan, Purdue University
Venetta Keefe, INDOT

MODERATOR

Tucker Born, Indianapolis DPW

TIME
3:00-3:50 PM

ROOM
STEW 218 CD

PDH: 1

47. Kentucky Statewide Interstate and Parkway Plan

The Kentucky Transportation Cabinet recently conducted a major planning study to support its current and future long-range transportation plans by developing practical visions of the statewide interstate and parkway system. The study evaluated multi-modal transportation needs, gathered insights from leaders and citizens, and used a data-driven approach to prioritize corridors that have the greatest potential to improve mobility, accessibility, equity, safety, and freight/logistics. The corridors are visualized and facilitated by an interactive GIS online tool.

SPEAKERS

Stephen De Witte, Kentucky Transportation Cabinet
Johnny Han, Corradino

MODERATOR

Jamey McPherson, Indianapolis DPW

TIME
4:00-4:50 PM

ROOM
STEW 218 CD

PDH: 1

48. Purple Line Bus Rapid
Transit Project Overview

The Purple Line will be Indianapolis’ second Bus Rapid Transit (BRT) Line, opening for revenue service in the fall of 2024. It will provide rapid transit service along 15.2 miles of E. 38th Street and Post Road, between Indianapolis and Lawrence, for a total cost of \$188 million. This presentation will provide an overview of IndyGo’s overall capital program with a focus on the Purple Line project—its unique design features and successful project delivery—from design through construction.

SPEAKERS
Rachel Wilson, HNTB
Mike Schneider, HNTB

MODERATOR
Jamey McPherson, Indianapolis DPW

TUESDAY

PAVEMENTS

TIME
1:00-1:50 PM

ROOM
STEW 306

PDH: 1

49. I-65 ATL Boone County: Pavement Instrumentation Lessons Learned

The I-65 Added Travel Lanes project in Boone County includes implementing pavement instrumentation on PCCP pavement sections and subgrade layers, a first for INDOT. This session will describe how data from collection devices can aid in future pavement design decision-making. Additionally, this session will provide lessons learned from the project’s interstate PCCP construction and the proposed pavement sections.

SPEAKERS

Boonam Shin, INDOT
Ken Olson, American Structurepoint
Doug Dillon, E&B Paving, Inc.

MODERATOR

Todd Shields, Michigan State University

TIME
2:00-2:50 PM

ROOM
STEW 306

PDH: 1

50. Designing the Thickness of Low-Volume Roads and Streets

Most roads and highways are relatively low volume, but they haven’t actually been designed. The NYSLTAP-Cornell Local Roads Program developed a tool to design the thickness of low-volume road (LVR) pavements for municipal roads and streets. This spreadsheet-based tool uses modern mechanistic-empirical methods but only requires inputs typically known by the local engineer or highway official. This session will review how pavements work structurally and show attendees the new LVR design tool.

SPEAKER

David Orr, Cornell University

MODERATOR

Todd Shields, Michigan State University

TIME
3:00-3:50 PM

ROOM
STEW 306

PDH: 1

51. Back-Calculating the Dynamic Modulus Master Curve from the Time History Data of FWD Deflections

This session proposes an advanced methodology for constructing a dynamic modulus (E^*) master curve using the back-calculated E^* obtained from the falling weight deflectometer (FWD) data at multiple testing temperatures. The approach overcomes previous E^* back-calculation limitations by defining an effective frequency range. This range, derived from FWD data across temperatures, ensures more accurate E^* values. These E^* values were then used to construct the E^* master curve, which was validated using field core test data.

SPEAKERS
Mohammad Ali Notani, Purdue University
Seonghwan Cho, INDOT

MODERATOR
Todd Shields, Michigan State University

TIME
4:00-4:50 PM

ROOM
STEW 306

PDH: 1

52. Temperature Correction Factors for FWD Deflections of Asphalt Pavements

This study investigates the effects of temperature variation on falling weight deflectometer (FWD) deflections for asphalt pavements. FWD tests were conducted twice within the same day at different temperatures on three asphalt sections with varying thicknesses, thereby minimizing pavement condition differences. A comprehensive finite element model was employed to cover broader temperature ranges. The results highlighted limitations in the AASHTO 1993 correction method and identified key influential parameters.

SPEAKERS
Pablo Orosa Iglesias, Purdue University
Seonghwan Cho, INDOT

MODERATOR
Todd Shields, Michigan State University

TUESDAY

PROJECT MANAGEMENT/PLANNING

TIME
1:00-1:50 PM

ROOM
STEW 202

PDH: 1

53. Demystifying Utility Coordination:
Understanding the Basics

This session will explain utility coordination to non-utility coordinators. It will help educate others about the role and responsibilities of a utility coordinator, an OSA, easy UC and design mistakes to avoid, scope and design considerations, items commonly overlooked, when to coordinate SUE, and how to work with your UC to request a letting adjustment. We will also highlight UC submittals and allow time for questions about the UC's role in a project's success.

SPEAKERS

Josshe Palm, WSP
Sandra Jones, WSP
Daniel McMurtry, INDOT

MODERATOR

Laura Hilden, INDOT

TIME
2:00-2:50 PM

ROOM
STEW 202

PDH: 1

54. Utility Construction Headaches

This presentation will discuss services points , grant charts, master relocation plans and utility effects on construction.

SPEAKERS

Aaron Day, American Structurepoint
Brandi Redd, INDOT
Andrew Wortkoetter, INDOT

MODERATOR

Laura Hilden, INDOT

TUESDAY

PROJECT MANAGEMENT/PLANNING

TIME
3:00-3:50 PM

ROOM
STEW 202

PDH: 1

55. Protecting Your Waterways: How to Prevent Pollution and Budget Effectively for Your Construction Site

This presentation focuses on maximizing pollutant capture on roadway construction sites. Implementation of BMP treatment trains that use both sediment and hydrocarbon removal, and the maintenance of those BMP's is a crucial aspect to ensure receiving waterways are minimally impacted by development. This session unpacks the BMP's, installation and maintenance practices, and the questions behind it all.

SPEAKER
Joe Moore, Erosion and Construction Services

MODERATOR
Laura Hilden, INDOT

TIME
4:00-4:50 PM

ROOM
STEW 202

PDH: 1

56. Stop Doing Schedules Wrong

This session will unveil the common errors, acts of non-compliance, and oversights in construction project scheduling and their impact on the management of the contract.

SPEAKER
Bernard Nartey, Purdue University

MODERATOR
Laura Hilden, INDOT

TIME
11:00-11:50 AM

ROOM
STEW 279

PDH: 1

57. Emerging Challenges to Project Delivery: Discussion and Solutions

Similar to the previous “Women of I-69 Corridor” panel, a small panel of consultant, contracting, INDOT, and LPA personnel will have an energetic discussion and solicit audience feedback. Their focus will be on how remote project teams have changed the project delivery landscape; the effects of growing manpower needs and a shrinking workforce; retirement trends and the loss of institutional knowledge; and the overall competitive nature of the transportation industry.

SPEAKERS

Steve Moriarty, Kosciusko County
Dan McCoy, R. L. McCoy, Inc.
Amber Thomas, INDOT
Angela Nicholson, INDOT
Prasad Narayan, Kapur, Inc.

MODERATOR

John Langmaid, Kapur, Inc.

TIME
1:00-1:50 PM

ROOM
STEW 279

PDH: 1

58. Managing Stormwater in Flat Floodplains

Communities across the Midwest have experienced chronic stormwater drainage and increased flooding of roadways and structures. While adequate storm drainage seems to be lacking in many rural communities, steps can be taken to address some of the nuisance flooding that plagues many regions. Walnut Township commissioned a stormwater study that included the development of a 2D model to understand and mitigate flooding in their area.

SPEAKER

Kari Mackenbach, ms consultants, inc.

TUESDAY

PROJECT MANAGEMENT/PLANNING

TIME
2:00-2:50 PM

ROOM
STEW 279

PDH: 1

59. Improving Highway Safety and Efficiency Using Weaving Data Analytics and CV2X Technology

Researchers from the Transportation and Autonomous Systems Institute (TASI) at IUPUI collaborated with engineers at INDOT to improve highway traffic management operations and safety using AI algorithms and vehicle to everything (V2X) communication technologies. A system was developed using videos simultaneously captured at the entry and exit of the weaving area to find the number and percentage of vehicles from each lane in the entry to each lane in the exit. We will also present preliminary results of RampCast, an innovative connected vehicle application.

SPEAKERS
Yaobin Chen, IUPUI
Lauren Christopher, IUPUI

MODERATOR
Rahul Sakhare, Purdue University

TIME
3:00-3:50 PM

ROOM
STEW 279

PDH: 1

60. Consultant Contracts Process Improvement

Are you curious about what happens after RFP selections are released or what happens after a proposal is submitted? The INDOT consultant contracts section completed a deep dive into identifying process improvements. This session breaks down our approach to process improvement review, implemented improvements, improvements that are planned, and an overview of lessons learned.

SPEAKERS
Joel Myers, INDOT
Gretchen West, INDOT

MODERATOR
Rahul Sakhare, Purdue University

PROJECT MANAGEMENT/PLANNING

TIME
4:00-4:50 PM

ROOM
STEW 279

PDH: 1

61. Progressive Contracting: Shifting Paradigms (KYTC’s Year in Review)

The Kentucky Transportation Cabinet (KYTC) has had tremendous success fostering competition using progressive contracting. However, the process has been anything but smiles and roses. Presenters will share lessons learned and stories of the successes and heart-ache that detail the industry struggle with this paradigm shift. Come learn the best ways to avoid the snares and be better prepared for progressive contracting.

SPEAKERS

William Stringer, American Structurepoint
Erika Drury, Kentucky Transportation Cabinet

MODERATOR

Rahul Sakhare, Purdue University

TUESDAY

PUBLIC WORKS

TIME
11:00-11:50 AM

ROOM
STEW 218 AB

PDH: 1

62. Women of Public Works

A panel of women representing various roles within Indiana’s public works will share their stories, knowledge, and wisdom to help others adapt and overcome challenges and help agencies better understand the advantages of employing diversity.

SPEAKER
Diana Clonch, DW Clonch, LLC

MODERATOR
Drew Storey, Clark Dietz, Inc.

TIME
12:00-12:50 PM

ROOM
STEW 218 AB

PDH: 1

63. City of Warsaw GIS and Asset Management

This session delves into ways the City of Warsaw is using GIS to help with asset management. Routing maps, storm water, and road maintenance plans will be discussed.

SPEAKER
Dustin Dillon, City of Warsaw

MODERATOR
Drew Storey, Clark Dietz, Inc.

TUESDAY

PUBLIC WORKS

TIME
1:00-1:50 PM

ROOM
STEW 218 AB

PDH: 1

64. The Role of the Owner’s Representative in Public Works Projects

This presentation will explain how an owner’s representative works with the municipality to deliver quality projects on behalf of the community.

SPEAKERS
Tim Jensen, Veridus Group, Inc.
Scott Willis, City of Westfield

MODERATOR
Kyle Winling, APWA Indiana Chapter

TIME
2:00-2:50 PM

ROOM
STEW 218 AB

PDH: 1

65. The Future of Smart Sewer Inspections

Artificial Intelligence (AI) has evolved into a highly valuable asset that has significant cost and time saving benefits. Burgess & Niple’s AI platform, PipeAId, combines AI with GIS technology to analyze CCTV video, detect pipe defects, assign NASSCOPACP codes, and generate a digital twin. This digital twin uses geospatial data to provide a comprehensive overview of sewer assets and precisely identify the location of defects and construction features along each pipe.

SPEAKER
Joshua Ford, Burgess & Niple

MODERATOR
Kyle Winling, APWA Indiana Chapter

TUESDAY

PUBLIC WORKS

TIME
3:00-3:50 PM

ROOM
STEW 218 AB

PDH: 1

66. The Importance of Standard Drawings and Specifications

Standard Drawings and Specifications aren't just important for your capital projects, they also shape the way your community is able to maintain its assets after construction is complete. This session will discuss the importance of local standards being a collaborative effort across multiple departments within your community and how they can save you from future issues.

SPEAKERS

Michael Pearce, City of Westfield
Jason Taylor, Burgess & Niple

MODERATOR

Kyle Winling, APWA Indiana Chapter

TIME
4:00-4:50 PM

ROOM
STEW 218 AB

PDH: 1

67. The Low-Cost Resurface Plan Creation

Are you trying to find a way to spend your infrastructure dollars on construction instead of spending it towards plan development? This session will focus on the creation of resurface plans that lower the consultant fees or can be designed in-house. Through the use of templates and GIS, a quality set of bid documents can be created for resurface plans that include ADA curb ramp upgrades, contract book, specifications, base repairs, and more.

SPEAKERS

Rich Bassett, City of Fishers
Jason Taylor, Burgess & Niple

MODERATOR

Kyle Winling, APWA Indiana Chapter

TUESDAY

SAFETY

TIME
1:00-1:50 PM

ROOM
WTHR 104

PDH: 1

68. Vulnerable Road Users: Session 1

Crashes have disproportionately impacted vulnerable road users both nationally and here in Indiana. Hear from national experts and learn more about Indiana’s VRU Assessment which was completed in the fall of 2023.

SPEAKERS

Rick Drumm, FHWA
Michael Holowaty, INDOT
Ryan Klitzsch, Cambridge Systematics, Inc.

MODERATOR

Thomas Ford, INDOT

TIME
2:00-2:50 PM

ROOM
WTHR 104

PDH: 1

69. AI Video Analytics to Evaluate Roundabout Operations and Safety

With increased deployment of multi-lane roundabouts, there has been a reduction in fatal crashes. However, agencies have seen an increase in property damage crashes, which has created negative sentiments about roundabouts. Using video analytic tools and AI technology from drone footage at several high crash roundabout locations, we were able to identify the near misses, monitor lane behavior, identify potential accidents, and provide recommendations for geometric changes to improve safety for all. Join us to learn more about these innovations.

SPEAKERS

Hardik Shah, American Structurepoint
Murray Allan, Marr Traffic

MODERATOR

Thomas Ford, INDOT

TUESDAY

SAFETY

TIME
3:00-3:50 PM

ROOM
WTHR 104

PDH: 1

70. ATMA Pilot Implementation and Evaluation in Indiana

INDOT reported 153 truck mounted attenuator (TMA)-related accidents between 2016 and 2021. The autonomous TMA (ATMA) removes the driver from the TMA to enhance their safety; however, the functionality and workers’ perception of ATMA must be assessed comprehensively before its implementation in INDOT. This presentation summarizes the findings from 25 closed-road tests and five weeks of field tests of ATMA under four maintenance activities.

SPEAKERS
Yunfeng Chen, Purdue University
Yiheng Feng, Purdue University
Chi Tian, Purdue University

MODERATOR
Thomas Ford, INDOT

TIME
4:00-4:50 PM

ROOM
WTHR 104

PDH: 1

71. Horizontal Curve Alignment and Setting Advisory Speeds

The average crash rate for horizontal curves is about three times that of other types of highway segments, making horizontal curves prime sites for safety improvements. Join this session to see what you can do to keep the public on the road and how to properly set curve advisory speeds using procedures outlined in the MUTCD.

SPEAKER
Todd Morrison, University of Kentucky

MODERATOR
Thomas Ford, INDOT

TUESDAY

TRAFFIC OPERATIONS

TIME
1:00-1:50 PM

ROOM
STEW 310

PDH: 1

72. Demystifying Traffic Engineering for the Rest of Us

Have you ever uttered the phrase “I’m not a traffic engineer”? When traffic engineers go off on a tangent, can it start to sound like a foreign language? This session is for you! We will break down traffic engineering concepts, such as innovative intersections, traffic analysis buzzwords and acronyms, and more. This session will be geared towards non-traffic engineers and anyone else who might explain these concepts to the traveling public.

SPEAKERS
David Reamer, INDOT
Nathan Shellhamer, INDOT

MODERATOR
Drew Sorenson, INDOT

TIME
2:00-2:50 PM

ROOM
STEW 310

PDH: 1

73. Streamlining Trips: An Overview of Transit Signal Priority System Implementation at IndyGo

This presentation provides a holistic history of TSP at IndyGo (Indianapolis Public Transportation Corporation) starting with its initial implementation in 2019. We will review lessons learned, research and best practices, state of the art technology, prioritization methodology across the IndyGo network, implementation goals, and the development of transit signal performance metrics. Specific project experiences, procurements, and an overview of the current implementation stage at IndyGo will conclude the presentation.

SPEAKERS
Matthew Duffy, IndyGo
Michael Ruelle, Kimley-Horn and Associates, Inc.

MODERATOR
Drew Sorenson, INDOT

TUESDAY

TRAFFIC OPERATIONS

TIME
3:00-3:50 PM

ROOM
STEW 310

PDH: 1

74. Connecting TSMO to the TMC and to the Motorist

Join us as we connect the exciting world of Transportation System Management and Operations (TSMO) along I-465 in southeast Indianapolis to the Traffic Management Center (TMC) and the traveling public. We will share how the TSMO strategies of ramp metering and variable speed limit signs are connected and monitored at the INDOT TMC in real-time and how that information goes to the traveling public to improve safety and mobility on Indy’s southeast side.

SPEAKERS
Drew Sorenson, INDOT
John LaBlonde, Parsons Corporation

MODERATOR
Lauren Maenhout, EMCS, Inc.

TIME
4:00-4:50 PM

ROOM
STEW 310

PDH: 1

75. Revolutionizing Work Zone Implementation Using Big Data

This presentation discusses the ongoing I-494/I-35W design-build project in Minnesota. A challenging task on highway design-build projects is providing an effective maintenance of traffic (MOT) plan that allows construction to occur and preserves motorist level of service. Iteris is using big data to monitor traffic conditions at all hours on all routes to find periods where certain thresholds are exceeded. The results provide interesting insights, including whether traffic operations could sustain expanded MOT hours or whether additional strategies are required.

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

MODERATOR
Lauren Maenhout, EMCS, Inc.

TIME
11:00-11:50 AM

ROOM
STEW 278

PDH: 1

76. Transportation Equity Assessment in Indiana: Recent Findings

Using large-scale data from multiple sources, we explore the spatial patterns of transportation equity concerns in Indiana, specifically accessibility and environmental justice. Learn how we developed two parametric measures of accessibility and an emission equity index and modeled their relationship with socio-economic and geographical characteristics of regions at multiple scales in Indiana.

SPEAKERS

Rajat Verma, Purdue University
Mithun Debnath, Purdue University

MODERATOR

Doug Poad, Tippecanoe County

TIME
12:00-12:50 PM

ROOM
STEW 278

PDH: 1

77. Safe Routes to Health Centers Project

Health by Design embarked on a partnership with Eskenazi Health to create Safe Routes to Health Centers Plans, a project funded by the Indiana Department of Health and the Eskenazi Health Foundation. The initiative promotes safe and accessible routes for walking, rolling, and biking as both practical transportation and recreation. The plan also seeks to improve access to essential destinations and community services, thus fostering well-being and social connections.

SPEAKERS

Marjorie Hennessy, Health by Design
Kimberly McElroy-Jones, Eskenazi Health
Gregory Garrett, United Northeast Community Development Corporation

MODERATOR

Doug Poad, Tippecanoe County

TUESDAY

URBAN PLANNING

TIME
1:00-1:50 PM

ROOM
STEW 278

PDH: 1

78. Achieve Long-Term Management Success of Green Infrastructure

Long-term success of green infrastructure uses proper design and management methods. Success begins with open communication between engineers and management staff during the design phase. This presentation will cover an overview of successful criteria for plant selection, soils, and installation; a breakdown of management variables; and common issues.

SPEAKERS

Ben Hess, City of Fort Wayne
Kevin Rudolphi, City of Fort Wayne

MODERATOR

Austin Gibble, Santec

TIME
2:00-2:50 PM

ROOM
STEW 278

PDH: 1

79. It's Electric! EV Planning in Your Community

Planning for EV charging stations is more than understanding new technology. It's amending your community's guiding documents, performing site selection and feasibility, future-proofing and contingency planning, and understanding the financial considerations and available funding opportunities. Using our knowledge gained through our EVCS municipal planning experience, you'll learn the steps needed to prepare your community for the EV wave and to best situate yourself for successful grant applications.

SPEAKERS

Cheryl Sharp, Lochmueller Group
Stacy Milheiser, Lochmueller Group

MODERATOR

Austin Gibble, Santec

TUESDAY

URBAN PLANNING

TIME
3:00-3:50 PM

ROOM
STEW 278

PDH: 1

80. Planning for the Next Generation of I-65 and I-70

ProPEL Indy is a 2-year PEL planning study that is identifying needs and options that will modernize I-65 and I-70 within I-465. This study has the ability to inform and influence the next 20 years of interstate investment, while addressing quality of life, economic opportunity, transportation mobility, and equity considerations. The needs and options of this planning study are being discussed among hundreds of stakeholders, including residents, businesses, community leaders, and various organizations. Join us for a discussion.

SPEAKERS
Tim Miller, HNTB
Sandra Flum, INDOT

MODERATOR
Austin Gibble, Santec

TIME
4:00-4:50 PM

ROOM
STEW 278

PDH: 1

81. Addressing Risk and Uncertainty in Traffic Impact Studies

This presentation will discuss the seven highest-risk key elements during the development, preparation, and analysis of Traffic Impact Studies (TIS). Attendees will also review the importance that accuracy plays in the initial development and planning for a TIS, including the selection of land uses for the estimation of trip generation. Real-life examples will be given for avoiding some common pitfalls in preparing and planning for traffic impacts.

SPEAKER
John Beery, Beam, Longest & Neff, LLC

MODERATOR
Austin Gibble, Santec

WEDNESDAY

AVIATION

TIME
8:00-8:50 AM

ROOM
STEW 218 CD

PDH: 1

82. Challenges and Successes: The Runway 1-19 Project and Drone Usage in Construction

Runway 1-19: Greensburg Municipal Airport’s New 5,405-ft Runway: The Greensburg Municipal Airport completed the construction of Runway 1-19 on a new alignment in 2022. Runway 1-19 is 5,405-ft long × 100-ft wide and replaced the existing Runway 18-36 that was 3,430-ft long × 40-ft wide. This was a multi-year construction project with a broad scope that included land acquisition; construction in a flood-way; grading and drainage; paving and electrical; and extensive FAA coordination. Challenges and successes will be discussed.

SPEAKERS

John Feister, Butler, Fairman & Seufert, Inc.
Jeremy Books, Butler, Fairman & Seufert, Inc.

Drones: Using Today’s Technology to Define the Future: The use of drones in engineering has taken off, and for good reason. Their range, stability, and precision are a boon to many industries. Parsons drone pilots will discuss how they save time and money, improve safety, and enhance complex project data collection, visualization, and model building with point clouds (i.e., LiDAR/photogrammetry). See how drones can be used to add value to many clients’ needs in the infrastructure, environmental, and defense space.

SPEAKERS

Jeffrey Hong, Parsons Corporation
Tim Haney, Parsons Corporation
Sean Keene, Parsons Corporation

MODERATOR

Michael Buening, INDOT

WEDNESDAY

AVIATION

TIME
9:00-9:50 AM

ROOM
STEW 218 CD

PDH: 1

83. Indianapolis International Airport: RON Parking Project and Risk Management for Airfield Pavement

Indianapolis International Airport: New RON Parking Apron: The Indianapolis International Airport was at capacity for overnight aircraft parking at the terminal gates and the existing terminal apron. The solution required the design and construction of a new remain overnight (RON) parking apron with space for up to seven commercial aircrafts simultaneously. The project entailed extensive utility relocations, grading and drainage, concrete and asphalt paving, and airfield electrical. Join us for a discussion of the construction challenges and successes.

SPEAKERS

John Feister, Butler, Fairman & Seufert, Inc.
Tony McMichael, Indianapolis Airport Authority

Proactive Risk Management for Airfield Pavement at IND: Presenters will discuss the risk mitigation strategy that was applied by the Indianapolis International Airport during the reconstruction of a critical runway complex. The reconstruction enabled the safe operations of aircraft on an aging pavement network throughout a multi-year construction duration. Highlights of this session include the successful monitoring and maintenance approach for pavement conditions and midfield taxiway networks that were not originally designed for such high traffic volumes and heavy aircraft types.

SPEAKERS

Shannon Gunn, Kimley-Horn and Associates, Inc.
Tony McMichael, Indianapolis Airport Authority
Kathy Keegan, Kimley-Horn and Associates, Inc.

MODERATOR

Michael Buening, INDOT

WEDNESDAY

AVIATION

TIME
10:00-10:50 AM

ROOM
STEW 218 CD

PDH: 1

84. Air Hazards: Air Ambulance Accidents and Managing Tree Growth Near Airports

Lessons Learned from Helicopter Air Ambulance Accidents: Helicopter Air Ambulances (HAA) are a vital component of the healthcare system by bridging the gap between traditional ground-based ambulances and hospitals and transporting patients from remote areas to medical facilities. However, the accident rates during aeromedical transports remain high compared to other commercial air operations. This session presents an analysis of HAA accidents from the human factors perspective and changes in regulation, technology, and training during HAA operations over the last decade.

SPEAKERS

Mary Johnson, Purdue University
Gustavo Sanchez, Purdue University

ACRP04-27 Methods to Manage Tree Growth Near Airports: The presentation will review the recent ACRP 04-27 Methods to Manage Tree Growth Near Airports study report. Join us for a discussion.

SPEAKER

Stephanie Ward, Mead & Hunt

MODERATOR

Michael Buening, INDOT

WEDNESDAY

AVIATION

TIME
11:00-11:50 AM

ROOM
STEW 218 CD

PDH: 1

85. INDOT UAS: Obstruction Evaluations and WEB Tool Demonstration

INDOT UAS Approach Obstruction Evaluation: INDOT aviation has performed obstruction evaluations of trees at several non-NPIAS public use airports using UAS techniques. The presentation will review the procedure and results of the evaluations.

SPEAKER
Tyler Lewandowski, INDOT

INDOT UAS WEB Tool Demonstration: The INDOT Aviation Office has created a web tool to track UAS activities performed by INDOT and INDOT contractors all across Indiana. This presentation will summarize the tool and the functions it provides.

SPEAKERS
Tyler Lewandowski, INDOT
James Kinder, INDOT

MODERATOR
Michael Buening, INDOT

TIME
1:00-1:50 PM

ROOM
STEW 218 CD

PDH: 1

86. Put the Brakes on Airfield Friction Concerns

Low friction doesn't mean the pavement (asphalt or concrete) needs to be replaced. Safe friction enhancing treatments are available at a fraction of the cost of new pavement. Presenters will share the "need to know" details of all phases of successful rubber and paint removal projects and innovative friction enhancing techniques relevant for all airports—from small GAs to Part 139 Airports .

SPEAKER
John Hunter, Skidabrader Group

MODERATOR
Marty Blake, INDOT

WEDNESDAY

AVIATION

TIME
2:00-2:50 PM

ROOM
STEW 218 CD

PDH: 1

87. Purdue University Airport Terminal:
Innovation to Mitigate Risk

Purdue University is taking an innovative approach to the construction of a new commercial terminal building at the Purdue University Airport. This presentation will share existing airport infrastructure integration and building design considerations, and will also identify the risks, challenges, strategies, and solutions involved throughout the decision-making process of the construction.

SPEAKERS

Adam Baxmeyer, Purdue University
Amber Chellis-Omedo, Purdue University
Christopher Snyder, Woolpert
Don Petersen, Purdue University

MODERATOR

Marty Blake, INDOT

TIME
3:00-3:50 PM

ROOM
STEW 218 CD

PDH: 1

88. Indianapolis International
Airport Runway Reconstruction:
Sustainability in Action

One of two primary runways at the Indianapolis International Airport is in its third year of a phased 3-year reconstruction program with large-scale sustainability measures deployed through design, specification, and construction practices. Learn how the airport, FAA, design consultants and contractors planned and executed this major effort while maintaining commercial and air freight service at Indiana’s busiest airport.

SPEAKERS

Tony McMichael, Indianapolis Airport Authority
Nathan Summers, Kimley-Horn and Associates, Inc.
Matt Gessner, Milestone Contractors, LP

MODERATOR

Marty Blake, INDOT

WEDNESDAY

AVIATION

TIME
4:00-4:50 PM

ROOM
STEW 218 CD

PDH: 1

89. The Future is Here: Airport Energy Resiliency and Electric Aviation

Airport Energy Resiliency Roadmap and Implementation Steps: An airport needs to meet current and future energy demands, while also being sustainable. However, service from the grid may be vulnerable to natural and human-caused events. ACRP Project 02-98 Airport Energy Resiliency Primer and Roadmap provides a guide to executing an airport energy resiliency program. The critical elements of an energy resiliency roadmap will be presented along with case study examples from airports moving toward energy resiliency.

SPEAKER
Susan Zellers, Hanson Professional Services, Inc.

The Future is Here: Preparing for Electric Aviation: This session provides an overview of the current state of electric vehicles and planes and also highlights the rapidly increasing need for charging infrastructure at local airports. We will outline the different charging infrastructure options, frontrunners in the electric aviation space, and conclude with a guide on planning for current and future needs. The speakers will emphasize key considerations, tips, tricks, and lessons learned to aid in the electric aviation planning process.

SPEAKERS
Stacie Dovalovsky, Primera Engineers
Joseph Avram, Primera Engineers

MODERATOR
Marty Blake, INDOT

WEDNESDAY

BRIDGES

TIME
8:00-8:50 AM

ROOM
CL50 224

PDH: 1

90. Bringing the NEXT Beam to Indiana

INDOT partnered with CHA, Lochner, and Egis to bring the first NEXT beam bridges to INDOT’s inventory. The NEXT Beam was developed by the PCI Northeast Bridge Technical Committee, which is made up of owners, consultants, and precast manufacturers. The beam is a cost-effective precast solution to eliminate deck forming, save time, and increase safety for short span bridges. Representatives from CHA, Lochner, and Egis will provide a project spotlight on their NEXT Beam bridges.

SPEAKERS

Jordan Luther, CHA Consulting, Inc.
Adam Clauss, Egis Group
Adam Higgins, H.W. Lochner

MODERATOR

Michael McCool, Egis Group

TIME
9:00-9:50 AM

ROOM
CL50 224

PDH: 1

91. Modified Semi-Integral End Bent Details: Design and Construction

The INDOT-ASCE Structures Committee has been reviewing semi-integral end bent details to improve constructability and long-term durability and reduce future maintenance issues. We will discuss some of the background history of why new details were needed; when the new details will be incorporated in the design manual; our experience using the modified details on I-69 Section 6.5; and provide tips for plan development.

SPEAKERS

Stephanie Wagner, INDOT
Robert Anderson, American Structurepoint

MODERATOR

Michael McCool, Beam, Longest & Neff, LLC

WEDNESDAY

BRIDGES

TIME
10:00-10:50 AM

ROOM
CL50 224

PDH: 1

92. Advanced Site Characterization for Improved Project Delivery

An important strategic focus area for the Federal Highway Administration is to advance geotechnical site characterization. The goal is to address two big picture areas through research and development activities. This lecture summarizes the current efforts to promote the use of underutilized technologies for conducting site investigations and to understand the value of an adequate geotechnical site characterization (e.g., quantity and type) to reduce risk in project delivery.

SPEAKER
Silas Nichols, FHWA

MODERATOR
Michael McCool, Beam, Longest & Neff, LLC

TIME
11:00-11:50 AM

ROOM
CL50 224

PDH: 1

93. 28+1 Bridge Preservation: From Silane to Epoxy Best Practices

Attendees will gain a comprehensive understanding of early prevention using penetrating Silane through the 20- to 25-year lifecycle of complimenting epoxy, LMC and other rehabilitative overlay methods, and managing temperature and viscosity for improved application and performance. This session summarizes county and state best practice in the Midwest region.

SPEAKER
Brad Ehle, Advance Chemical Technologies, Inc.

MODERATOR
Michael McCool, Beam, Longest & Neff, LLC

WEDNESDAY

BRIDGES

TIME
1:00-1:50 PM

ROOM
CL50 224

PDH: 1

94. Effective and Efficient Hydraulic Site Data Collection Sensors

Efficient and effective data collection at culverts is of huge importance. The current practice is manual measurement, which makes it a time-consuming endeavor. We studied the feasibility of using existing, commercially available depth sensing technologies (active stereovision, passive stereovision, structure for motion, and inexpensive LiDAR) that can be used for contactless estimation of relative elevation with high precision and efficiency. Join us to learn more.

SPEAKERS

Abhishek Subedi, Purdue University
Mina Joseph, Purdue University

MODERATOR

Jim Lesh, INDOT

TIME
2:00-2:50 PM

ROOM
CL50 224

PDH: 1

95. iTAMS Inspection Platform: Tips, Tricks, and Lessons Learned

The iTAMS inspection platform has been live for about one year. This session will discuss issues that have arisen from the software, lessons learned from how those issues were addressed, and tips and tricks on how to integrate the software into a successful bridge inspection program.

SPEAKERS

Kyle Kent, United Consulting
Jacob Gould, INDOT
Cristy Burlage, INDOT

MODERATOR

Jim Lesh, INDOT

WEDNESDAY

BRIDGES

TIME
3:00-3:50 PM

ROOM
CL50 224

PDH: 1

96. Including Inspection Details on the Milton-Madison Bridge

Many of B&N’s bridge engineers are also inspectors, so when B&N engineers helped design the replacement of the Milton-Madison Truss, they carefully considered details that would make access for future inspections easier, faster, and safer. These considerations proved beneficial at the recent inspection of the Milton-Madison. Based on this experience, attendees will learn best practices for standard bridges.

SPEAKERS
Scott Ribble, Burgess & Niple
Ivan Palencia, Burgess & Niple

MODERATOR
Jim Lesh, INDOT

TIME
4:00-4:50 PM

ROOM
CL50 224

PDH: 1

97. Assessment of Bridge Rehabilitation to Improve Asset Management

The widespread availability of structural monitoring technologies has led to a rise in adaptable use across various structural systems. With the U.S. infrastructure aging, the integration of technologies during new construction and rehabilitation of infrastructure provides opportunities for assessing innovative designs and material uses to extend the life of assets. This presentation focuses on the assessment of the Indiana Toll Road bridge rehabilitations and the effectiveness of overlay materials and integration of link slabs.

SPEAKER
Brittany Bullard, University of Notre Dame

MODERATOR
Jim Lesh, INDOT

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
8:00-8:50 AM

ROOM
FOWLER HALL

PDH: 1

98. Holistic Quality Management of Precast Concrete Construction for Transportation Infrastructure

Learn from a panel discussion about precast concrete construction methods in transportation projects. The discussion will cover the background and history of precast concrete construction, the experience of the first precast pavement project in Indiana, and preliminary results of a University Transportation Center (TRANS-IPIC)-funded project on life cycle quality management of precast concrete construction.

SPEAKERS

Tommy Nantung, INDOT
Andrew Pangallo, INDOT
Jeff Brechbill, First Group Engineering, Inc.

MODERATOR

Brent Wendholt, Dubois County

TIME
9:00-9:50 AM

ROOM
FOWLER HALL

PDH: 1

99. I-69 Finish Line: Techniques for Great Utility Coordination

Join the I-69 Finish Line project team for an overview of their utility coordination process. Learn the techniques and strategies they employed to manage utility adjustments in this fast-paced design-build environment with no construction delays. This session will highlight three key phases of the project—early coordination, modifying workplans during design, and utility adjustments during construction that ensure contractor safety.

SPEAKERS

Mike Randolph, Parsons Corporation
Terry Stanton, The Walsh Group
Aaron Day, American Structurepoint
Andrew Pangallo, INDOT

MODERATOR

Brent Wendholt, Dubois County

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
10:00-10:50 AM

ROOM
FOWLER HALL

PDH: 1

100. Success of Build-Operate-Transfer Projects in Plainfield

Learn about Build-Operate-Transfer (BOT) projects from a legal procurement perspective, explore considerations for financing BOT projects and discover how Plainfield used BOTs to accomplish transformational projects.

SPEAKERS

Emma Adlam, Baker Tilly
Andrew Klinger, Town of Plainfield
Cam Starnes, Taft Law

MODERATOR

Brent Wendholt, Dubois County

TIME
11:00-11:50 AM

ROOM
FOWLER HALL

PDH: 1

101. North Split Project Update

INDOT completely reconstructed the busiest interchange in central Indiana—the I-65/I-70 North Split in downtown Indianapolis. Join us for a final update on the project, as we unpack three significant themes: the impacts of closing downtown interstates, design and construction lessons learned while under the microscope, and the benefits of continuous public engagement.

SPEAKERS

Seth Schickel, HNTB
Brian Shattuck, INDOT

MODERATOR

Brent Wendholt, Dubois County

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
12:00-12:50 PM

ROOM
FOWLER HALL

PDH: 1

102. 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 see examples of both the right and wrong ways to present a Unique Special Provision, things to avoid, and questions to ask to adhere to legal, moral, and ethical construction standards.

SPEAKER
Scott Trammell, INDOT

MODERATOR
Subhi Bazlamit, INDOT

TIME
1:00-1:50 PM

ROOM
FOWLER HALL

PDH: 1

103. INDOT Alternative Project Delivery With CM/GC and PDB

This session will introduce INDOT’s new Alternative Contracting Methods Manual and the newly authorized construction manager/general contractor (CM/GC) and progressive design build project delivery methods. The team documenting the new processes will present an overview of the delivery methods available to INDOT and the comparative benefits of each.

SPEAKERS
Jeff Clanton, INDOT
Dave Ayala, Parsons Corporation
Kevin Jasinski, Burgess & Niple

MODERATOR
Subhi Bazlamit, INDOT

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
2:00-2:50 PM

ROOM
FOWLER HALL

PDH: 1

**104. I-69 ORX Section 3:
Completing the Connection**

The I-69 Ohio River Crossing (ORX) will be a key, final connection of I-69 between Evansville, Indiana and Henderson, Kentucky. The transformational project includes three contracts, two states and one much-anticipated new river crossing. In this session, you'll hear an update on the ORX project as a whole and learn about I-69 ORX Section 3.

SPEAKERS
Steven Nicaise, Parsons Corporation
Daniel Corbin, INDOT
Clint Scherzer, INDOT

MODERATOR
Wayne Bunnell, City of Westfield

TIME
3:00-3:50 PM

ROOM
FOWLER HALL

PDH: 1

**105. Surveying Today's AEC World
from Design to Construction**

Surveying dates back 4,500 years to the Great Pyramid of Giza. Surveyors today lend themselves to three distinct techniques: conventional, scanning, and drone surveys. Surveyors have a wide range of responsibilities, function in various markets, and perform a variety of tasks that require a great degree of expertise. We will explore the different techniques and technology available, proper use cases, and why robots and drone pilots are not a replacement for real-life surveyors.

SPEAKERS
Ronald Lumbrezer, DGL Consulting Engineers, LLC
Jerry Curry, DGL Consulting Engineers, LLC
Greg Weller, DGL Consulting Engineers, LLC

MODERATOR
Wayne Bunnell, City of Westfield

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
4:00-4:50 PM

ROOM
FOWLER HALL

PDH: 1

106. Utility Rope-a-Dope: The Muhammad Ali Approach to Conflict Analysis

Learn how to avoid getting hit with utility conflicts when they are coming at you quickly. Discussion will focus on designing around utilities; evaluating conflicts; right-of-way consideration for utility relocations; changes late in design and during construction; and lessons learned.

SPEAKERS
Deborah Porter, Clark Dietz, Inc.
Bill Read, INDOT
Nathan Frey, Clark Dietz, Inc.

MODERATOR
Wayne Bunnell, City of Westfield

TIME
12:00-12:50 PM

ROOM
LOEB THEATER

PDH: 1

107. Unlocking Precision for Municipalities Through LiDAR and Mapping

LiDAR and mobile mapping have revolutionized project efficiency. The laser-based scanning of LiDAR technology provides precise topographical data and enhancing site assessment accuracy. Mobile mapping solutions allow for real-time data collection and remote monitoring for planning, construction, and scheduling maintenance. These tools enable all skill sets to interpret detailed 3D models, optimize construction/maintenance processes, and ensure adherence. With LiDAR and mobile mapping at their disposal, municipalities are empowered to navigate the terrain with innovation and precision.

SPEAKERS
Dustin Allen, Midwest Aerial Survey Specialists
Austin Goodman, Midwest Aerial Survey Specialists
Paul Sanders, Genesis Factor, LLC

MODERATOR
Shan Gunawardena, City of Fort Wayne

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
1:00-1:50 PM

ROOM
LOEB THEATER

PDH: 1

108. Two Diamonds Are Better Than One

Take a deep dive into two new diverging diamond interchanges (DDI) constructed on I-65 at SR 267 and CR 550 in Boone County. HNTB’s designers worked with INDOT to modernize the design criteria for future DDIs with these interchanges serving as the prototype. Learn how the design team stayed flexible in a fast-growing area.

SPEAKERS
Jonathan Oakley, HNTB
Skyler Coombs, HNTB
Jessica Miller, INDOT
Michael Goralski, Boone County

MODERATOR
Shan Gunawardena, City of Fort Wayne

TIME
2:00-2:50 PM

ROOM
LOEB THEATER

PDH: 1

109. Ahead of the Curve with Bentley Infrastructure Cloud

How do you perform quality control on a 3D model that’s always changing? In this session you will learn how to capture, log, and resolve issues to make better, faster, data-driven decisions. Join us as we demonstrate how to use i-Models inside the Bentley Infrastructure Cloud web portal to compare snap shots of models throughout the life of a project.

SPEAKER
Nathan Goins, HNTB

MODERATOR
Ed Garrison, JQOL

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
3:00-3:50 PM

ROOM
LOEB THEATER

PDH: 1

110. Indy’s First BOT: Utilizing IC 5-23

To maximize our resources and to stretch tax dollars, DPW explored all delivery options available. In May of 2023, Indianapolis DPW awarded our first Build Operate Transfers (BOT) infrastructure project to Avenew Roads, Inc. This presentation will discuss the past, present, and future of the project from the owner and contractor perspective, and the project team will discuss opportunities to improve and expedite project delivery through the BOT process from project conception through final construction.

SPEAKERS
John Bowen, Indianapolis DPW
Travis Underhill, Avenew
Charlie Kacmar, Avenew

MODERATOR
Ed Garrison, JQOL

TIME
4:00-4:50 PM

ROOM
LOEB THEATER

PDH: 1

111. Best Practices in Design for Preserving Limestone Curbs

Indiana limestone has been used in roadway construction projects for over 100 years. This session will discuss the best design practices when confronted with limestone curbing along historic streetscapes and neighborhoods. Additional practices will be discussed that make use of limestone curbs that cannot be preserved in place. Several examples will be shared to demonstrate how creative design and collaboration with consultants has resulted in limestone curb preservation.

SPEAKERS
Scott Henley, SJCA, Inc.
Kelyn Alexander, INDOT
Larry Lawlor, Fleis and Vandenbrink

MODERATOR
Ed Garrison, JQOL

MARCH 13, 2024

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
8:00-8:50 AM

ROOM
STEW 302

PDH: 1

112. INDOT Digital Delivery Post Construction Data Intake

INDOT enterprise GIS is used for asset management, maintenance of assets, planning, and analysis. Its data sources serve as authoritative location, inventories, and inspections. To manage assets well, having an accurate and complete inventory is critical. INDOT is planning to implement GIS data as built submission standards and field validation for certain asset types. Join us to learn about the tools, manuals and data sources which will make up the solution.

SPEAKERS

Mark Bailey, INDOT
Kevin Munro, INDOT

MODERATOR

David Musi, Purdue University

TIME
9:00-9:50 AM

ROOM
STEW 302

PDH: 1

113. How Survey Technology Helped Transform the I-69 Project

Using the contributions of Kapur and Walsh on the I-69 project as an example, attendees will explore how using survey equipment and procedures on construction projects can help everyone involved deliver transformative results. To document the condition of the project, Kapur and Walsh used GPS rovers and equipment to record quantities, assist with survey layout, and build independent 3D models. This presentation will cover what this accomplished and how you can accomplish something similar.

SPEAKER

Dean Teska, Kapur, Inc.

MODERATOR

David Musi, Purdue University

MARCH 13, 2024

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
10:00-10:50 AM

ROOM
STEW 302

PDH: 1

114. Maximize Drainage Design with Bentley OpenRoads Technology

Whether you’re creating brand new drainage networks or tying into existing networks, learn how to maximize your efficiency with Bentley’s OpenRoads Drainage and Utilities (SUDA) Technology. We’ll explore tips, tricks, and lessons learned using this improved tool for drainage design on INDOT projects.

SPEAKERS

Nathan Goins, HNTB
Jennifer Basham, HNTB

MODERATOR

David Musi, Purdue University

TIME
11:00-11:50 AM

ROOM
STEW 302

PDH: 1

115. A Contractor’s Top 5 Keys to MOT Design and Implementation

Attendees will learn the five most important things designers, engineers and contractors should keep in mind throughout the project process.

SPEAKER

Brian Triska, Traffic Control Specialists

MODERATOR

David Musi, Purdue University

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
12:00-12:50 PM

ROOM
STEW 302

PDH: 1

116. Signs, Gateways, and Landscaping, Oh My!

Cities and towns want to welcome highway travelers with gateway signs or aesthetics. Whether that’s part of a road project or a standalone proposal, a key to proper planning is understanding safety-based limitations on what can be placed on state ROW and where. Even off-ROW, there are laws governing nearby visible signage. We’ll cover INDOT’s Public Art and Landscaping Policy, FHWA’s role, and the federal Highway Beautification Act.

SPEAKERS

George McCue, INDOT
Dimas Prasetya, FHWA

MODERATOR

Jeromy Grenard, City of Lafayette

TIME
1:00-1:50 PM

ROOM
STEW 302

PDH: 1

117. Indiana Transportation Team: ITT Updates

The Indiana Transportation team has made great strides in collaboration as we partner together to deliver transportation projects. We promise to approach each and every problem as a teammate of the Indiana Transportation Team and foster and maintain a spirit of cooperation to serve Hoosiers and the traveling public. In this session we will share updates on ITT deliverables and collaborate on future initiatives.

SPEAKERS

Roland Fegan, INDOT
Lyndsay Quist, INDOT
Beth Bauer, ACEC Indiana
Richard Hedgecock, Indiana Constructors, Inc.

MODERATOR

Jeromy Grenard, City of Lafayette

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
2:00-2:50 PM

ROOM
STEW 302

PDH: 1

118. Developments in INDOT Maintenance of Traffic Practices and Standards

We will share newly developed and revised standards, policies, and guidance for MOT planning. Revisions to INDOT’s Work Zone Traffic Control Guidelines—a good resource for shorter duration construction activities—and the recently issued Intelligent Work Zone Toolkit will be covered.

SPEAKERS

David Boruff, INDOT
John McGregor, INDOT
Scott Heydt, Horizon Signal Technologies, Inc.

MODERATOR

Amy Coombs, ASC Group, Inc.

TIME
3:00-3:50 PM

ROOM
STEW 302

PDH: 1

119. Exit 10 Renovations for the Indiana Toll Road Concession Company

Built in 1956, the infrastructure at Exit 10 of the Indiana Toll Road (ITR) needed multiple repairs, including bridge rehabilitation, pavement restoration, and lighting improvements. ITRCC invested in cost-effective renovations on 12 bridges in the Exit 10 vicinity that that would reduce long-term maintenance. The project experienced challenges due to the complexity of construction and mainline work occurring simultaneously to accelerate construction. This presentation will focus on the design approach, contractor procurement, and construction of this investment.

SPEAKERS

Brett Sauter, Ciorba Group
Will Deuter, Ciorba Group
Brian Cherry, ITR Concession Company

MODERATOR

Amy Coombs, ASC Group, Inc.

MARCH 13, 2024

WEDNESDAY

DESIGN/CONSTRUCTION

TIME
4:00-4:50 PM

ROOM
STEW 302

PDH: 1

**120. Precast Box Culvert
Design and Installation**

This presentation will provide attendees with proper design and installation techniques for precast box culverts and increase awareness of common innovations. We will identify national standards to determine critical components for common box culvert systems. This course will empower engineers, inspectors, and installers with a product that can be competitively and creatively enhanced for a growing infrastructure.

SPEAKERS

Donald McNutt, American Concrete Pipe Association
Mark Bailey, INDOT

MODERATOR

Amy Coombs, ASC Group, Inc.

WEDNESDAY

ELECTED OFFICIALS

TIME
8:00-8:50 AM

ROOM
STEW 320

PDH: 1

121. Breaking Down Communication Barriers Between Engineers, Supervisors, Elected Officials, and the Public

Attendees will gain a deeper understanding of the dynamics at play and practical tools and techniques to facilitate effective communication. Come explore the unique communication challenges faced by engineers, supervisors, elected officials, and the public. Leave with practical insights on how to foster better understanding, collaboration, and alignment.

SPEAKER
Kevin Elliott, Applied Research Associates, Inc.

MODERATOR
Paula Bennett, Tippecanoe County

TIME
9:00-10:50 AM

ROOM
STEW 320

PDH: 2

122. Local Agency Round Tables: County Commissioners, Mayors, and Councils

Join us for a round table discussion with Indiana’s county commissions about transportation concerns that Indiana counties are facing. This is great chance to network with your peers; brainstorm; and discuss ideas, problems, plans.

SPEAKERS
Richard Domonkos, Purdue University
Meredith Camp, Purdue University

WEDNESDAY

ELECTED OFFICIALS

TIME
1:00-1:50 PM

ROOM
STEW 320

PDH: 1

123. Maximizing Your Project Outcomes With Statements of Qualifications

This session explains to elected officials and transportation representatives how their community can develop a preliminary scope of services, manage a project timeline checklist, create a scoring process, ask the right interview questions, and negotiate the best terms for a project. Attendees will walk away with resources to develop an efficient qualifications-based selection process for transportation infrastructure projects.

SPEAKERS

Scott Wilkinson, Egis Group
Hatem Mekky, City of Fishers
John Ayers, Hendricks County
Gary Pool, Hancock County

MODERATOR

Jim Meece, Parke County

TIME
2:00-2:50 PM

ROOM
STEW 320

PDH: 1

124. Turn Building Assessments Into Capital Plans

Join us for an overview of how to perform proper land and building condition assessments and use the results to build and develop a proper capital spending plan.

SPEAKERS

Tim Jensen, Veridus Group, Inc.
Tim Belcher, Town of Plainfield
Dan Weekes, Veridus Group, Inc.

MODERATOR

Jim Meece, Parke County

MARCH 13, 2024

WEDNESDAY

ELECTED OFFICIALS

TIME
3:00-3:50 PM

ROOM
STEW 320

PDH: 1

125. Elected Official Emergency Planning, Response, and Recovery

Attendees will hear what Indiana is doing, what considerations should be planned for, and what resources are available to assist with planning efforts.

SPEAKER
Mary Moran, INDHS

MODERATOR
Jim Meece, Parke County

Session 125 is canceled

MARCH 13, 2024

WEDNESDAY

ELECTRIC & CONNECTED VEHICLES

TIME
9:00-9:50 AM

ROOM
MTHW 210

PDH: 1

126. Quantifying Roadway Complexity for AV Freight Deployments

This presentation will discuss identifying economically feasible routes for deploying automated freight vehicles and evaluating the complexity of those roadways within Indiana. The focus for this analysis is the Primary Highway Freight System (PHFS), and “last-mile” routes since they may be required to access the PHFS to and from major concentrations of manufacturing and distribution centers for advanced manufacturing and logistics (AML).

SPEAKERS

Paul Avery, AECOM
Tara Pearson, Conexus
Jason Smeak, AECOM

MODERATOR

Jay Grossman, Valparaiso University

TIME
10:00-10:50 AM

ROOM
MTHW 210

PDH: 1

127. Charging the Crossroads: Indiana’s Electric Vehicle Infrastructure Program

2023 marks the completion of year one for the National Electric Vehicle Infrastructure (NEVI) Program. Charging the Crossroads is Indiana’s plan to create a reliable, equitable, and sustainable network of EV fast charging infrastructure along Indiana’s interstates and highways. Join us for a program update and a look at the procurement process, site selection and contracting, and public engagement efforts.

SPEAKERS

Nathaniel Sturdevant, INDOT
Diane Newton, HNTB
Kaylee May, Greater Indiana Clean Cities, Inc.

MODERATOR

Jay Grossman, Valparaiso University

MARCH 13, 2024

WEDNESDAY

ELECTRIC & CONNECTED VEHICLES

TIME
11:00-11:50 AM

ROOM
MTHW 210

PDH: 1

128. Public Opinion Surveys: Electric Vehicles and EV Charging Preferences

Hoosiers’ Attitudes Towards Electric Vehicles:
Results from a Statewide Public Opinion Survey: This presentation will share the findings of a recent statewide public opinion survey about electric vehicles (EV) and EV charging infrastructure. The survey focused on the following topics: EV knowledge and experience, current travel patterns, public perceptions about EVs, EV incentives and barriers, EV adoption curves, charging knowledge and experience, charging perceptions, and socio-demographic data.

SPEAKERS
Bruno Cesar Krause Moras, Purdue University
Nadia Gkritza, Purdue University

EV Charging Preferences: A Multivariate Analysis Using a Stated-Preference Survey in Indiana: This study investigates the charging preferences of electric vehicles (EV) and non-EV users in Indiana. Using a SP survey administered in Indiana, we analyzed user responses associated with the trip cost, charging time, access to charging station, waiting duration, total travel time, restroom availability, and restaurant accessibility under a number of alternative scenarios. Our findings shed light on the nuanced factors that influence EV charging choices and provide crucial insights for infrastructure development and policy formulation to accelerate mobility electrification.

SPEAKERS
Kenny Wijaya, Purdue University
Nadia Gkritza, Purdue University

MODERATOR
Jay Grossman, Valparaiso University

WEDNESDAY

ELECTRIC & CONNECTED VEHICLES

TIME
1:00-1:50 PM

ROOM
MTHW 210

PDH: 1

129. INDOT Dynamic Wireless Power Transfer Pilot Project

INDOT, in collaboration with Purdue University/Aspire and AECOM, is conducting a pilot project for dynamic wireless power transfer (DWPT) on US-52/231 in West Lafayette, IN. High-power DWPT has the potential to reduce range anxiety and allow for smaller and lighter batteries in vehicles. This presentation will give an overview of our project, why this is important for Indiana, how this relates to the future of wirelessly charged vehicles, and other AECOM DWPT projects.

SPEAKERS

Greg Reilly, AECOM
Aaron Brovont, Purdue University
Tommy Nantung, INDOT

MODERATOR

Nathaniel Sturdevant, INDOT

TIME
2:00-2:50 PM

ROOM
MTHW 210

PDH: 1

130. Ohio Rural Automated Driving System Project

Ohio DOT/Drive Ohio is deploying automated driving systems (ADS) in both light-duty and heavy-duty vehicles on Ohio rural roads. The three L3 vans are being deployed on three rural routes near Athens, Ohio. The two tractors using truck platooning technology are being deployed on Ohio routes by a host fleet in revenue service. The objective of these deployments is to collect vehicle operating data on rural roads. This project is sponsored by a USDOT ADS grant.

SPEAKER

Benjamin Ritchey, CDM Smith

MODERATOR

Nathaniel Sturdevant, INDOT

MARCH 13, 2024

WEDNESDAY

ELECTRIC & CONNECTED VEHICLES

TIME
3:00-3:50 PM

ROOM
MTHW 210

PDH: 1

**131. Practical Methods to Design
and Construct Electric Roads
Using Concrete or Asphalt**

Electric roads promise to dispel range anxiety by transforming electricity into a magnetic field, that electric vehicles use, to charge batteries and provide propulsion. The embedded transmitters should not affect pavement life. Also, a high percentage of the electrical power should be transferred without generating heat that might damage paving materials. This talk will discuss practical methods to construct concrete and asphalt pavements with embedded transmitters and evaluate heat generated during transmitter operation.

SPEAKERS
Rafael Acevedo-Daunas, Magment GmbH
Gerry Huber, Heritage Research Group

MODERATOR
Nathaniel Sturdevant, INDOT

WEDNESDAY

ETHICS

TIME
8:00-8:50 AM

ROOM
LOEB THEATER

PDH: 1

132B. 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.

MODERATOR
David Kish, Purdue University

TIME
9:00-9:50 AM

ROOM
LOEB THEATER

PDH: 1

133B. 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.

MODERATOR
David Kish, Purdue University

WEDNESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
8:00-8:50 AM

ROOM
STEW 206

PDH: 1

134. Burnout: How to Spot It and Take Action

Every project’s goal is to meet or exceed scope, schedule, and budget. However, despite excellent project management, employee burnout can hinder this objective. Burnout causes employees to lose focus, make mistakes, and take longer to finish tasks. Burnout is also terrible for your short and long-term well-being. This presentation will identify early indicators of burnout and offer a recovery plan that can help employees recover from burnout and prevent it from occurring again.

SPEAKER
Geri Boyer, Kaskaskia Engineering Group, LLC

MODERATOR
Mindy Peterson, Parsons Corporation

TIME
9:00-9:50 AM

ROOM
STEW 206

PDH: 1

135. Improving Operational Success Through Communication and Leadership

We will discuss the power of timely decision-making, effective communication, and how crucial these elements are in improving productivity. Our thought-provoking and collaborative session will also elaborate on the principles of effective leadership that empower others to make hard decisions with confidence and how to avoid the negative consequences caused by a lack of integrity in business relationships.

SPEAKERS
Jessica Miller, INDOT
Kenny Franklin, Parsons Corporation

MODERATOR
Mindy Peterson, Parsons Corporation

WEDNESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
10:00-10:50 AM

ROOM
STEW 206

PDH: 1

136. Five Generations Walk into an Office...

Attendees will discover what can happen when five generations step into the workplace. There is greater age diversity than ever before in the workforce and the transportation industry serves as a prime example. Each generation has unique wants, viewpoints, and motivations which may cause misinterpretations and conflict. Learn about the characteristics of the different generations, areas of potential friction, and resolutions to create an inclusive environment for all.

SPEAKER
Kerrie Leonard, INDOT

MODERATOR
Mindy Peterson, Parsons Corporation

TIME
11:00-11:50 AM

ROOM
STEW 206

PDH: 1

137. Developing a Culture and Building a Cohesive Team

Organizational culture, or encompassing shared attitudes and values, greatly impacts employee retention. Recent studies show that culture has up to 10 times more influence than compensation. This presentation explores the definition of workplace culture and focuses on key drivers of diversity, job security, and recognition, and the steps being taken to build a cohesive team.

SPEAKERS
Josh Cook, Burgess & Niple
Brady Hagerty, Burgess & Niple

MODERATOR
Mindy Peterson, Parsons Corporation

WEDNESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
1:00-1:50 PM

ROOM
STEW 206

PDH: 1

138. Curb Ramps: Ramp Up Your Career

ADA curb ramps can be an essential tool for developing skills as a young professional. From building upon CADD basics and reading design standards, to communicating with the client and managing a team, this presentation will explore how important a common element like curb ramp design can be in your career development.

SPEAKERS

Jennifer Alexander, HNTB
Kole Taylor, HNTB
Samuel Schein, HNTB

MODERATOR

Kyle Ross, City of Columbus

TIME
2:00-2:50 PM

ROOM
STEW 206

PDH: 1

139. Employment Based Immigration for A/E Managers

Are you managing or hiring an employee going through the U.S. immigration process and want to understand it better? Have you encountered the terms “sponsorship,” “H1B,” “Green Card,” “CPT,” “OPT,” and “visa” but aren’t 100% comfortable with what they all mean? This entry-level presentation will demystify the U.S. employment-based immigration process.

SPEAKER

George Watson, WSP

MODERATOR

Kyle Ross, City of Columbus

WEDNESDAY

HUMAN CAPITAL/LEADERSHIP

TIME
3:00-3:50 PM

ROOM
STEW 206

PDH: 1

140. Bringing Out the Best in People

Join us as industry leaders discuss their individual leadership styles and philosophies and provide examples of bring out the best in people to achieve team success. After a short presentation by each leader, the floor will be open for audience questions.

SPEAKERS
Kelli McNamara, HNTB
Mike Smith, INDOT
Jennifer Pyrz, IndyGo

MODERATOR
Kyle Ross, City of Columbus

TIME
4:00-4:50 PM

ROOM
STEW 206

PDH: 1

141. My Role as a Transportation Practitioner on Equity

This presentation will include national best practices on assuring inclusion, diversity, and equity. Topics will include personal responsibility, being aware of potential biases, ideas on creating and cultivating an inclusive workplace, and ways to assure an unbiased approach to planning and design activities.

SPEAKER
Regine Beauboeuf, HNTB

MODERATOR
Kyle Ross, City of Columbus

WEDNESDAY

LOCAL AGENCY

TIME
8:00-8:50 AM

ROOM
STEW 214 CD

PDH: 1

TIME
9:00-9:50 AM

ROOM
STEW 214 CD

PDH: 1

142. TTC: Emergency Response

From storms and snow, to crashes and tornadoes, it's our duty to respond. At night or during the storm, we have to get the job done, but how do we do that and keep stay safe? Join this session to explore TTC best practices for emergency situations and practical work zone safety measures during response efforts.

SPEAKER
Todd Morrison, University of Kentucky

MODERATOR
Nick Batta, Crawford, Murphy & Tilly, Inc.

143. Practical Math for Roadway Workers

This interactive session will discuss how to estimate highway maintenance work in real-world situations using the math you already know. Using a step-by-step approach, complex situations encountered by highway and street departments will be broken down into simple pieces.

SPEAKER
Todd Morrison, University of Kentucky

MODERATOR
Nick Batta, Crawford, Murphy & Tilly, Inc.

WEDNESDAY

LOCAL AGENCY

TIME
10:00-10:50 AM

ROOM
STEW 214 CD

PDH: 1

144. A Local Government’s Approach to Context Design Policies

Hillsborough County, Florida has historically been one of the most dangerous metropolitan areas for roadway fatalities. In 2020 the County began an initiative to redevelop their planning and design policies and standards to reflect a context-sensitive transportation system that incorporates improved safety strategies. This was done through revisoning their Vision Zero and Comprehensive Plan goals, and creating a new Context Classification System, Complete Streets Guide, and a design manual.

SPEAKERS

Angelo Belluccia, Burgess & Niple
Karddy Rodriguez, Burgess & Niple

MODERATOR

Nick Batta, Crawford, Murphy & Tilly, Inc.

TIME
11:00-11:50 AM

ROOM
LOEB THEATER

PDH: 1

145. Community Crossings Matching Grant Funding

This presentation is an introduction for newly elected officials who have never been involved in the grant program and for local officials who need a refresher. Attendees will gain a comprehensive understanding about the requirements of the grant program and learn of the success of the program since its inception.

SPEAKER

Kathy Eaton-McKalip, INDOT

MODERATOR

Patrick Conner, Purdue University

WEDNESDAY

LOCAL AGENCY

TIME
1:00-2:50 PM

ROOM
STEW 314

PDH: 2

**146. Local Agencies Round Tables:
County Engineers and Supervisors**

Join us for a round table discussion with Indiana’s county engineers and supervisors about transportation concerns that Indiana counties are facing. This is great chance to network with your peers; brainstorm; and discuss ideas, problems, and plans.

SPEAKERS
Richard Domonkos, Purdue University
Meredith Camp, Purdue University

TIME
3:00-3:50 PM

ROOM
STEW 214 CD

PDH: 1

**147. Local Agency Workforce
Challenges and Opportunities**

This session will explore the workforce issues faced by Indiana’s local road agencies and provide strategies to inform local leaders and policy makers.

SPEAKER
Jennifer Sharkey, Purdue University

MODERATOR
Cale Stephens, Montgomery County

TIME
4:00-4:50 PM

ROOM
STEW 214 CD

PDH: 1

148. ADA/Title VI

This session will discuss new ADA/Title VI.

SPEAKER
Taffanee Keys, INDOT

MODERATOR
Cale Stephens, Montgomery County

WEDNESDAY

LOCAL AGENCY

TIME
8:00-8:50 AM

ROOM
STEW 214 AB

PDH: 1

149. Design and Maintenance
Considerations for Buggies

Based on experiences in Elkhart County, Indiana, this session will cover topics related to designing and maintaining roads in areas with large Amish populations and heavy horse and buggy usage. Some of the topics covered will include coordination with the Amish community; implementation of buggy plates and user fees for non-motorized vehicles; characteristic road distresses caused by horse usage and maintenance options to address these impacts; adaptation of intersection sight distance design parameters for horse-drawn vehicles; and the financial impact of these changes.

SPEAKERS

Charles McKenzie, Elkhart County Highway Department
Jay Grossman, Valparaiso University

MODERATOR

Kevin Russel, Harrison County

TIME
9:00-9:50 AM

ROOM
STEW 214 AB

PDH: 1

150. Local Safety Funding and Needs

Attendees will discuss Indiana’s fatalities and injury accident statistics on local roads and Indiana’s need to make our local transportation infrastructure safer for all types of transportation.

SPEAKER

Kathy Eaton-McKalip, INDOT

MODERATOR

Kevin Russel, Harrison County

WEDNESDAY

LOCAL AGENCY

TIME
10:00-10:50 AM

ROOM
STEW 214 AB

PDH: 1

37B. What is in the New Edition of the MUTCD?

The session will provide a brief overview of the updates to the new 11th edition of the MUTCD that would be of interest to local agencies.

SPEAKERS
Karen Stippich, FHWA
David Boruff, INDOT
Laura Slusher, Purdue University

MODERATOR
Kevin Russel, Harrison County

TIME
11:00-11:50 AM

ROOM
STEW 214 AB

PDH: 1

151. Prioritizing Small Structure Inspections: Safeguarding Roads and Budgets

Small structure inspections (those under 20 ft) are often overlooked but are crucial when maintaining highway infrastructure. While not mandatory, INDOT and FHWA recommend routine inspections every 4 to 6 years. Identifying these structures beneath our roadways is vital for timely repairs or replacements and can prevent costly emergencies. A robust inspection program supported by tools like USI’s IVY software, ensures efficient data management and enables agencies to plan and act proactively based on inspection results.

SPEAKERS
Phil Beer, USI Consultants, Inc.
Rob Coop, USI Consultants, Inc.
Jason Peters, Marshall County

MODERATOR
Kevin Russel, Harrison County

WEDNESDAY

LOCAL AGENCY

TIME
1:00-1:50 PM

ROOM
STEW 214 AB

PDH: 1

152. Local Bridge Inspections

We will discuss local bridge inspection requirements, how to make your program successful, and federal requirements that locals need to be aware of.

SPEAKERS
Anne Rearick, INDOT
Anthony Marino, INDOT

MODERATOR
Kim Bowdell, KHC GCC

TIME
2:00-2:50 PM

ROOM
STEW 214 AB

PDH: 1

153. Subsurface Utility Engineering for Municipalities

This presentation will discuss what SUE (subsurface utility engineering) is, what a proposed scope of work would look like, how much it might cost, why it should be done, when, who does it, and how it will benefit them.

SPEAKER
Natalie Parks, Kimley-Horn and Associates, Inc.

MODERATOR
Kim Bowdell, KHC GCC

WEDNESDAY

LOCAL AGENCY

TIME
3:00-3:50 PM

ROOM
STEW 214 AB

PDH: 1

154. Broadband Money is Coming! What Do Local Governments Need to Know?

The federal government will allocate \$42 billion to expand broadband across the U.S., thus providing Indiana with \$100 million or more for unserved areas. This is a transformative opportunity for Indiana municipalities, but those without a clear plan risk missing out. Join us as we cover essential steps for securing broadband funds, applications, permits, and safe installations. Don't miss the chance to benefit from this infrastructure investment!

SPEAKERS

Monica Hartke-Tarr, INDOT
Angela Hobbs, INDOT
Stephen Cox, Indiana Broadband

MODERATOR

Kim Bowdell, KHCGCC

TIME
4:00-4:50 PM

ROOM
STEW 214 AB

PDH: 1

155. Municipal Engineering in a Post-Pandemic Environment

The pandemic has been one of the greatest challenges to face municipal governments. Residents have dealt with sickness, quarantines, loss of income, and the loss of loved ones. South Bend felt the systematic challenges of falling short of projected revenues, shifting to remote work, and then losing employees during the Great Resignation. We will share South Bend's experience of overcoming challenges and creating opportunities in the current economic environment.

SPEAKERS

Kara Boyles, City of South Bend
Rebecca Plantz, City of South Bend

MODERATOR

Kim Bowdell, KHCGCC

WEDNESDAY

MAINTENANCE & OPERATIONS

TIME
8:00-8:50 AM

ROOM
UC 114

PDH: 1

156. Renewable Energy Sources in INDOT ROW or Properties

INDOT is collaborating with Purdue to determine the viability, selection, and applicability of renewable energy sources within INDOT right-of-ways and state-owned properties. The goal is to reduce our energy consumption and carbon footprint.

SPEAKER
Soowon Chang, Purdue University

MODERATOR
Bill Flora, INDOT

TIME
9:00-9:50 AM

ROOM
UC 114

PDH: 1

157. VAC Truck Operations and Best Practices

This presentation will provide a thorough overview of best practices in VAC truck operation, including rodder hose identification, inspection, care, and repair; combination unit water system flow and pressure; types of water pumps and basic component identification; common water system performance loss issues; and sanitary sewer cleaning best practices. Attendees will also be taught tips and tricks to avoid unwanted lateral blow ups; pressure vs. flow for effective sewer cleaning; nozzle types, proper nozzle selection, troubleshooting, and maintenance; and combination unit vacuum systems.

SPEAKER
Ryan Stevenson, Best Equipment Company

MODERATOR
Bill Flora, INDOT

WEDNESDAY

MAINTENANCE & OPERATIONS

TIME
10:00-10:50 AM

ROOM
UC 114

PDH: 1

**158. Innovation in Transportation:
What’s next for the Operation and
Maintenance of Indiana Roadways?**

This session provides a dynamic look at operations and maintenance across all transportation agencies in Indiana. Attendees will learn innovative ways to maintain their infrastructure system and to connect with innovators across the country to solve everyday challenges. Partnerships between local agencies and INDOT will also be investigated.

SPEAKERS

Todd May, INDOT
Jennifer Sharkey, Purdue University

MODERATOR

Bill Flora, INDOT

TIME
11:00-11:50 AM

ROOM
UC 114

PDH: 1

159. Using Your Data to Make Decisions

We spend so much time and resources gathering data for our assessments and inventories, but how are we using that data to make decisions about our network? This session will explore data from an operational perspective to guide us in our decision making for road and culvert inventory and assessments. We will walk through Hendricks County’s decision-making process while developing our operation’s plan for future construction seasons.

SPEAKER

Joe Percy, Hendricks County

MODERATOR

J.D. Brooks, Interstate Business Solutions, LLC

WEDNESDAY

MAINTENANCE & OPERATIONS

TIME
12:00-12:50 PM

ROOM
UC 114

PDH: 1

160. Bridge Inspectors’ Consistency Assessment Using Virtual Reality

U.S. infrastructure requires a data-driven approach to asset management. In the case of bridges, inspectors visit these structures and collect data, which DOTs will use to evaluate conditions, predict deterioration, and make repair/retrofit decisions. An inspector’s capacity for defect detection varies, which results in varied results. Through a virtual reality (VR)-based testbed, the variability among inspectors in examination and documentation practices is measured and analyzed to enhance the inspection training programs.

SPEAKER

Luis David Fernandez Vasquez, Purdue University

MODERATOR

J.D. Brooks, Interstate Business Solutions, LLC

TIME
1:00-1:50 PM

ROOM
UC 114

PDH: 1

161. Compressed Natural Gas and How It Works

Join us for a discussion about compressed natural gas (CNG) and how it works. Attendees will learn safety measures, where CNG works and where it doesn’t, cost and operation comparisons, fuel efficiency, infrastructure, emissions, and garage modifications.

SPEAKER

Ryan Lisek, Drive Clean Indiana

MODERATOR

J.D. Brooks, Interstate Business Solutions, LLC

MARCH 13, 2024

WEDNESDAY

MAINTENANCE & OPERATIONS

TIME
2:00-2:50 PM

ROOM
UC 114

PDH: 1

162. Post-Fire Assessment and Evaluation of INDOT Bridges

This presentation will summarize the findings and recommendations from recent JTRP projects that focus on assessing and evaluating bridge girders (prestressed or steel) that are subjected to hydrocarbon fire scenarios. The focus of these studies is on assessing the potential intensity and duration of the fire event, the temperatures reached on the surfaces and through the thickness, the cooling duration/path, and the effects of fire scenario on the material degradation and structural deterioration. The lecture will conclude with recommendations for evaluating bridge girders and decisions related to repair vs. replacement.

SPEAKERS

Amit Varma, Purdue University
Shivam Sharma, Purdue University
Raikhan Tokpatayeva, Purdue University

MODERATOR

Craig Parks, Avenew

WEDNESDAY

MAINTENANCE & OPERATIONS

TIME
3:00-3:50 PM

ROOM
UC 114

PDH: 1

163. Scanning, Assessing, and Repairing Corroded Steel Bridge Girders

Bridges constitute a vital segment of the U.S. transportation infrastructure. In order to evaluate the structural integrity of a bridge, regular inspections are carried out. This presentation offers insights into cutting-edge research of the application of 3D scanning technologies in bridge inspections. Additionally, it delves into assessing the remaining capacity of corroded steel girders and innovative repair techniques developed to restore the full strength of these girders.

SPEAKERS

Deven Kanakamedala, Purdue University
Kyu Kang, Purdue University
Anna Tarasova, HNTB
Jungil Seo, Purdue University
Jinwu Xiao, Purdue University

MODERATOR

Craig Parks, Avenew

TIME
4:00-4:50 PM

ROOM
UC 114

PDH: 1

164. Unmanned Aerial Systems

This session discusses unmanned aerial system applications from a DOT perspective, provides quick ROI applications, and warnings on what to avoid.

SPEAKER

Travis Long, West Virginia DOT

MODERATOR

Craig Parks, Avenew

WEDNESDAY

PAVEMENTS

TIME
8:00-8:50 AM

ROOM
STEW 218 AB

PDH: 1

165. Resilient Modulus Enhancements in Geogrid Stabilized Pavement Bases

Current INDOT design practices for geogrid-stabilized pavement bases lack a mechanistic approach for quantifying geogrid benefits in pavement design. The SPR-4723 research studied field test sections built with and without geogrids during the reconstruction of US-20 in Elkhart County, IN. Bender Element field sensors, earth pressure cells, automated plate loading, and in situ resilient modulus testing were used to evaluate geogrid stabilization mechanisms. Preliminary results and observations will be shared in this presentation.

SPEAKERS

Syed Faizan Husain, University of Illinois Urbana-Champaign
Peter Becker, INDOT

MODERATOR

David Heyde, E&B Paving, Inc.

TIME
10:00-10:50 AM

ROOM
STEW 218 AB

PDH: 1

167. Concrete Pavement 101, “Back to Basics”: Long-Lasting Concrete Streets and Roads

Do we need to seal joints? Why is water to cement ratio important? How do we handle utility cuts and patches? Significant advancements in concrete pavement materials and processes have evolved during the past decade; however, fundamental practices in concrete pavement construction remain more important than ever if we want to achieve the desired service life and value for the taxpayer. This session takes us “back to the basics” with appropriate updates on what’s change and what hasn’t changed in concrete materials and construction.

SPEAKERS

Mike Byers, Indianan Chapter ACPA
Christopher Tull, CRT Concrete Consulting

MODERATOR

David Heyde, E&B Paving, Inc.

WEDNESDAY

PAVEMENTS

TIME
11:00-11:50 AM

ROOM
STEW 218 AB

PDH: 1

168. Data Management System for FWD Analysis and Visualization

This session proposes a data management system for efficient FWD data analysis and visualization. The system includes a data analysis tool that can handle calculations of batches of FWD data and a visualization dashboard that can visualize the analyzed FWD data together with road imagery on an interactive map.

SPEAKERS

Wen Tang, Purdue University
Boonam Shin, INDOT

MODERATOR

David Heyde, E&B Paving, Inc.

TIME
1:00-1:50 PM

ROOM
STEW 218 AB

PDH: 1

169. Inexpensive Pavement Management System Using Crowdsourced RGB-D Data

A cost-effective pavement condition evaluation system was developed through crowdsourcing and features a vehicle-mounted data acquisition system for 3D pavement surface data collection. Using RGB-D sensors capable of capturing both 2D color and 3D depth information across entire road lanes, these equipped vehicles systematically traverse city roads on a weekly basis, ensuring timely data collection.

SPEAKERS

Yu-Ting Huang, Purdue University
Nikkhil Vijaya Sankar, Purdue University

MODERATOR

Kirsten Fowler, APAI

WEDNESDAY

PAVEMENTS

TIME
2:00-2:50 PM

ROOM
STEW 218 AB

PDH: 1

170. Performance Evaluation of Power Transfer Roadways

In partnership with INDOT, Purdue University constructed two small-scale power transfer pavement sections at the Accelerated Pavement Testing (APT) facility in spring of 2021 to assess construction procedures and analyze the pavement’s mechanical and thermal behavior. This presentation delves into the performance of both sections to date and explores their performance mechanics in preparation for the upcoming construction of the 1/4th mile DWPT road pilot project on US-231 (West Lafayette, IN) in the spring of 2024.

SPEAKER
Oscar Moncada, Purdue University

MODERATOR
Kirsten Fowler, APAI

TIME
3:00-3:50 PM

ROOM
STEW 218 AB

PDH: 1

171. Use of GPR to Evaluate Pavement Subgrade Problems

Ground penetrating radar (GPR) is a non-destructive field test that can provide a continuous profile of existing road conditions. It has the potential to be used for a variety of pavement applications, including measuring the thickness of asphalt pavement structure and assisting in the analysis of pavement distress mechanisms. We will share the experiences gained from GPR testing to evaluate pavement subgrade problems.

SPEAKERS
Sung Min Yoon, INDOT
Cherif Amer-Yahia, Resource International, Inc.

MODERATOR
Kirsten Fowler, APAI

WEDNESDAY

PAVEMENTS

TIME
4:00-4:50 PM

ROOM
STEW 218 AB

PDH: 1

172. Sustainable Pavement Design Using Geosynthetics

Improving the sustainability and resilience of pavements is a major priority for both private sector and government agencies. One of the largest challenges is accurately quantifying the pros and cons for design and material options, especially over the full life cycle of the pavement. Environmental product declarations (EPDs) provide the information needed for this assessment. This presentation will discuss the current status of life cycle assessments (LCAs) for pavements, and highlight key considerations for accurate LCAs, the importance of establishing standard factors and approaches, and the necessity of a comprehensive approach.

SPEAKERS
Bryan Gee, Tensar
Paul Schmitz, Tensar

MODERATOR
Kirsten Fowler, APAI

TIME
8:00-8:50 AM

ROOM
STEW 306

PDH: 1

173. Nano-TiO₂-Based Surface Treatments on Pavements: Effect on Proactive Properties

Adding nano-TiO₂ into concrete pavements is known to provide the material with proactive properties, such as depollution and self-cleaning ability. However, nano-TiO₂ is an expensive photocatalyst that needs UV radiation to react, thus restricting its effectiveness to the top layers of the pavement. In this presentation, we will present the results of assessing the effect of Nano-TiO₂-based surface treatments on the pavement's proactive properties. These treatments present a cost-effective way to deliver nano-TiO₂ to pavements.

SPEAKERS
Marina Garcia Lopez-Arias, Purdue University
Manuel Aspilcueta, Purdue University

MODERATOR
Dan Osborn, Indiana Constructors, Inc.

WEDNESDAY

PAVEMENTS

TIME
9:00-9:50 AM

ROOM
STEW 306

PDH: 1

174. Indiana Asphalt Binder Specification Changes

The Indiana DOT is significantly revising asphalt binder specifications that will impact all contracts as early as 2024. The base asphalt binder grade in Indiana is changing from PG 64-22 to PG 58-28 and the testing requirements for all asphalt binders will change from PG binder testing to MSCR and percent recovery. This session will provide the background, overview, and expectations needed for pavement designers, consultants, contractors, DOT, and local agency personnel to understand.

SPEAKERS

Jason Wielinski, Asphalt Institute
Matt Beeson, INDOT

MODERATOR

Dan Osborn, Indiana Constructors, Inc.

TIME
10:00-10:50 AM

ROOM
STEW 306

PDH: 1

175. Novel Self-Heating and Sustainable Pavement System

The presence of snow and ice affects 70% of U.S. transportation, leading to 25% of vehicle accidents and over 2.3 billion in removal costs. Our new pavement system with carbon-modified cold mix asphalt (CMA) offers controlled curing, self-healing, and self-heating capabilities. This multifunctional pavement may enable the use of recycled CMA instead of the more contaminant hot mix asphalt, while also reducing ice and snow on roads and extending the pavements' service life.

SPEAKERS

Manuel Aspilcueta, Purdue University
Pablo Orosa Iglesias, Purdue University

MODERATOR

Dan Osborn, Indiana Constructors, Inc.

WEDNESDAY

PAVEMENTS

TIME
1:00-1:50 PM

ROOM
STEW 306

PDH: 1

176. Concrete Pavement for Intersections and Roundabouts

Roundabouts and intersections successfully meter the confluence of traffic approaching a single point from multiple directions. Since these pavements also experience all the wheel loads from corresponding traffic from every direction, the durability and uninterrupted service life provided by concrete deserves serious consideration. Common pavement distresses, like rutting, shoving, and wash boarding, require frequent repair, more service disruptions, and a higher cost to maintain.

SPEAKER

Luke McHugh, National Ready Mixed Concrete Association

MODERATOR

Luis Laracuente, INDOT

TIME
2:00-2:50 PM

ROOM
STEW 306

PDH: 1

177. Preserving Roads: Ensuring Municipalities’ Sustainable Infrastructure Future

This presentation explores the vital role of pavement preservation in maintaining and enhancing municipal infrastructure. This informative session delves into the benefits of proactive pavement management and highlights cost-effective strategies for prolonging road lifespan and minimizing long-term maintenance expenses. Attendees will gain insights into the latest preservation techniques, innovative technologies, and best practices for sustainable infrastructure development.

SPEAKERS

Chad Denison, SealMaster
Bryan Sergesketter, SealMaster
Dave Paramski, SealMaster

MODERATOR

Luis Laracuente, INDOT

WEDNESDAY

PAVEMENTS

TIME
3:00-3:50 PM

ROOM
STEW 306

PDH: 1

178. Verifying Pavement Foundation Construction Using Roller Mapping Technology

Accepting pavement subgrade/subbase construction at INDOT relies on random spot tests complemented with proof rolling, which only indicate relative stiffnesses over small areas. COMP-Score technology uses soil compactors to provide engineering properties (resilient modulus, k-value) for 100% of the pavement foundation area. This presentation will provide an overview of COMP-Score capabilities and INDOT’s experiences employing the technology on recent projects.

SPEAKERS
John Puls, Ingios Geotechnics
Peter Becker, INDOT

MODERATOR
Luis Laracuate, INDOT

TIME
4:00-4:50 PM

ROOM
STEW 306

PDH: 1

179. Machine Learning for Resilient Subgrade Soil Predictions

Evaluating subgrade soil for resilient modulus is vital in pavement design. The traditional method, Repeated Load Triaxial (RLT) testing, is complex, resource-intensive, and time-consuming. This presentation spotlights a project that uses machine learning to create resilient modulus prediction models using decades of INDOT test data to minimize the need for RLT testing, thereby reducing costs and time.

SPEAKER
Sara Khoshnevisan, University of Cincinnati

MODERATOR
Luis Laracuate, INDOT

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
8:00-8:50 AM

ROOM
STEW 202

PDH: 1

180. Tips and Tricks for Successful Project Management

Project management can be a very stressful job. INDOT and consultant group project managers will provide perspectives on best practices, tips, tricks, tools, and lessons learned to help reduce attendees workday stress and make project management fun again.

SPEAKERS

Richard Gilyeat, INDOT
Ken Olson, American Structurepoint

MODERATOR

Sarah Baty, Lochmueller Group

TIME
9:00-9:50 AM

ROOM
STEW 202

PDH: 1

181. Alternative Procurement for Assessment Management: ID/IQ and MSE Walls

INDOT is always investigating alternate delivery methods to accelerate construction within the state. INDOT recently used an indefinite delivery/indefinite quantity (ID/IQ) contract method for the rehabilitation of MSE wall projects throughout the state. The designing engineer, the contractor, and INDOT will discuss the lessons learned from this contract application and how it could be implemented for projects and funding opportunities for other agencies.

SPEAKERS

Chase Schneider, INDOT
Kevin Gorak, American Structurepoint
Jordan Heltsley, Beaty Construction, Inc.

MODERATOR

Sarah Baty, Lochmueller Group

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
12:00-12:50 PM

ROOM
STEW 202

PDH: 1

183. Navigating Complex Section 106 Mitigation

Section 106 requires mitigation when impacts to historic resources cannot be avoided or minimized. We will examine how the complexity of a project can influence mitigation outcomes, the role of agencies and interested parties in the process, and successful mitigation outcomes.

SPEAKERS

Bethany Natali, Weintraut & Associates, Inc.
Jessica Simpson, Weintraut & Associates, Inc.
Haley Brinker, INDOT

MODERATOR

Jim Knapp, Purdue University

TIME
1:00-1:50 PM

ROOM
STEW 202

PDH: 1

184. Best Practices for Implementing Large Data Systems

Interested in learning what it takes to upgrade aging systems or implement new ones? INDOT implemented a new system to help process over 100,000 tolling transactions across the Ohio River Bridges every day. This presentation will provide tips for navigating through the complex challenges of designing, procuring, and implementing critical software tools.

SPEAKERS

Joe Guerre, HNTB
Matt Fulkerson, INDOT

MODERATOR

Jim Knapp, Purdue University

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
2:00-2:50 PM

ROOM
STEW 202

PDH: 1

185. Better Project Management Using Microsoft Teams

Post pandemic, many teammates are now working remotely a few days a week. This has created new challenges for delivering projects on time, within scope, and on budget, leading to Microsoft Teams to emerge as a guiding star. With seamless communication, file sharing, and collaborative tools, it transformed chaos into cohesion. Teammates, scattered across distances, united under its virtual roof and projects thrived in digital realms. Join us as we discuss how Teams has helped foster innovation and camaraderie.

SPEAKERS

Nathan Frey, Clark Dietz, Inc.
Ryan Hughes, Clark Dietz, Inc.
Drew Storey, Clark Dietz, Inc.

MODERATOR

Jim Knapp, Purdue University

TIME
3:00-3:50 PM

ROOM
STEW 202

PDH: 1

186. Risky Business: Identify and Mitigate Risks in Project Development

Join us for a discussion on how consultants and INDOT project managers collaborate on risks and how to identify, monitor, and mitigate risks throughout a project's life. From INDOT's project identification through a designer's final tracings, learn how this risk-focused collaboration resulted in the successful delivery of INDOT's program.

SPEAKERS

Austin Hastings, HNTB
Skyler Coombs, HNTB
Richard Gilyeat, INDOT

MODERATOR

Jim Knapp, Purdue University

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
8:00-8:50 AM

ROOM
STEW 279

PDH: 1

187. Above and Beyond: LiDAR Mapping Technology

If you want to start a project in the safest, most efficient way, consider using LiDAR. Combined with conventional surveying practices, LiDAR’s advanced mapping technology goes beyond the initial needs of a project without having to return to the site. In this session, we’ll explore how LiDAR data is collected and how it can reduce your project schedule and budget.

SPEAKERS
William Jones, HNTB
Michael Conley, HNTB

MODERATOR
Brandon Burgoa, INDOT

TIME
9:00-9:50 AM

ROOM
STEW 279

PDH: 1

188. Survey and R/W: Bookends of a Successful Project

In this session, our experienced team will share best practices to keep a project successfully on schedule. From involving the land acquisition team early, to reducing the likelihood of condemnation, surveying and right-of-way are the bookends of a successful project.

SPEAKERS
Michael Conley, HNTB
Jason McCort, HNTB
Patrick McCallister, WSP
Howard Stevenson, Stevenson Legal Group, LLC

MODERATOR
Brandon Burgoa, INDOT

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
10:00-10:50 AM

ROOM
STEW 279

PDH: 1

189. ProPEL US 30/US 31 Study Update

Getting community feedback early, before projects are even identified, helps support community engagement from planning all the way to construction. INDOT is using the Planning and Environment Linkages (PEL) process to engage stakeholders for feedback along the US 30 and US 31 corridors in northern Indiana. Join us for a project update, including progress on the engagement and what to expect moving forward.

SPEAKERS

Sandra Flum, INDOT
Jonathan Wallace, INDOT
Adin McCann, HNTB

MODERATOR

Brandon Burgoa, INDOT

TIME
11:00-11:50 AM

ROOM
STEW 279

PDH: 1

190. Understanding and Implementing INDOT’s Noise Analysis Procedure

INDOT recently updated the Noise Policy and Traffic Noise Analysis Procedure. As INDOT’s first on-call noise analysis team, we will provide a synopsis of the changes, uncover lessons learned, and provide best practices to help you navigate these new standards effectively.

SPEAKERS

Richard Connolly, HNTB
Ron Bales, INDOT
Andrew Passmore, INDOT

MODERATOR

Brandon Burgoa, INDOT

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
1:00-1:50 PM

ROOM
STEW 279

PDH: 1

191. Identifying Bat Species from Feces

Bats are becoming more common on projects across Indiana, with several species listed as endangered. Construction impacts to bats and their habitat require significant coordination and could cause project delays. Learn how to investigate your project site and collect bat guano to identify species, while keeping your projects compliant and on schedule with early coordination and accurate identification.

SPEAKERS

Christine Meador, HNTB
Daniel Miller, HNTB
Jennifer Curry, INDOT

MODERATOR

Jessica Miller, INDOT

TIME
2:00-2:50 PM

ROOM
STEW 279

PDH: 1

192. Navigating the Environmental Critical Path: Effective Coordination Strategies

Navigating permitting and the environmental processes of Section 106, NEPA, can prove to be a challenging experience no matter the scope of the project. This presentation will provide effective coordination strategies to use when engaging with your environmental and cultural resources team, such as learning what information is needed and why communicating early and often is important. These strategies will set up the project team for success and create a smooth environmental experience.

SPEAKERS

Scott Henley, SJCA, Inc.
Victoria Veach, SJCA, Inc.
Cindy Mauro, INDOT

MODERATOR

Jessica Miller, INDOT

WEDNESDAY

PROJECT MANAGEMENT/PLANNING

TIME
3:00-3:50 PM

ROOM
STEW 279

PDH: 1

**193. Innovation Through Adaptability:
Navigating Project Complexities**

The US 31 and 236th Street Interchange project presented a number of challenges related to environmental coordination and mitigation, real estate acquisition, and public involvement. The project was able to not only construct a dual-roundabout interchange at 236th Street, but also successfully mitigated wetland and floodway impacts with on-site mitigation and by relocating a historic farmhouse and barn.

SPEAKERS
Adam Burns, Crawford, Murphy & Tilly, Inc.
Jennifer Beck, INDOT

MODERATOR
Jessica Miller, INDOT

WEDNESDAY

PUBLIC RELATIONS/COMMUNICATIONS

TIME
8:00-8:50 AM

ROOM
STEW 278

PDH: 1

194. Importance of Public Outreach for Reimagine Pleasant Street

Reimagine Pleasant Street is more than just a road project, it’s a strategic transformation of Noblesville, Indiana. City leaders have developed and implemented a successful public outreach strategy for multiple audiences. With partners, they are creatively including and educating stakeholders using various effective communication channels. Presenters will share a brief overview of the project, success stories and insights, and the long-term project benefits of effective communication.

SPEAKERS

Kathy Wolf, American Structurepoint
Chris Jensen, City of Noblesville
Robert Herrington, City of Noblesville

MODERATOR

Danielle Judin, INDOT

TIME
9:00-9:50 AM

ROOM
STEW 278

PDH: 1

195. PRD and Me

Join members of the INDOT public relations team to learn how other internal departments and external contracting partners can work with us to strengthen our communication with the public. We’ll cover when to loop us in, what information we might need, and how we can be of assistance to better inform the public about INDOT programs and projects.

SPEAKERS

Hunter Petroviak, INDOT
Cassy Bajek, INDOT
Kyleigh Cramer, INDOT

MODERATOR

Danielle Judin, INDOT

WEDNESDAY

PUBLIC RELATIONS/COMMUNICATIONS

TIME
10:00-10:50 AM

ROOM
STEW 278

PDH: 1

196. Elevating Equity in Public Engagement

Public engagement is the foundation of our work. For engagement to be meaningful and equitable, agencies must meet people where they are and connect with them using tools and tactics that allow all voices to be heard. Attendees will learn about the development of the INDOT Public Engagement Guide, which leverages socioeconomic, demographic, and social equity data to help the agency make data-informed decisions about how to best reach the people it serves.

SPEAKERS

Natalie Garrett, INDOT
Scott Manning, HDR, Inc.

MODERATOR

Danielle Judin, INDOT

TIME
11:00-11:50 AM

ROOM
STEW 278

PDH: 1

197. Driving Success: Effective Communication and Storytelling in Transportation

Join us as we uncover the essential building blocks for clear, compelling communication and how to use storytelling when engaging with the community. This session will walk through case studies that highlight impactful storytelling, listening to community voices, social media engagement, and creating high-impact videos and relatable graphics for the public.

SPEAKERS

Stacey Osburn, HNTB
Natalie Garrett, INDOT

MODERATOR

Danielle Judin, INDOT

WEDNESDAY

PUBLIC RELATIONS/COMMUNICATIONS

TIME
1:00-1:50 PM

ROOM
STEW 278

PDH: 1

198. Mastering Difficult Conversations: A Practical Guide

Enhance your ability to navigate tough talks with confidence and effectiveness using practical tools and techniques for successfully managing difficult conversations at public engagement and workplace interactions. Attendees will walk away with valuable insights into active listening, empathy, and communication skills that can transform challenging discussions into opportunities for growth and collaboration.

SPEAKER
Stacey Osburn, HNTB

MODERATOR
Megan DeLucenay, INDOT

TIME
2:00-2:50 PM

ROOM
STEW 278

PDH: 1

199. Link 101: Navigating Challenging Terrain and Challenging Public Opinion

The Link 101 project is studying an improved connection between the Markland Dam and US 50 in south-east Indiana. It’s a large, rural project area that spans four counties, has challenging terrain, and opposition. Learn how the project team has navigated bumps in the road to define the project’s purpose and identify preliminary alternatives.

SPEAKERS
Dan Prevost, Parsons Corporation
Kyanna Wheeler, INDOT
Nick Batta, Crawford, Murphy & Tilly, Inc.

MODERATOR
Megan DeLucenay, INDOT

MARCH 13, 2024

WEDNESDAY

PUBLIC RELATIONS/COMMUNICATIONS

TIME
3:00-3:50 PM

ROOM
STEW 278

PDH: 1

200. Clear Path 465: Know Before You Go

This informative session delves into the \$450 million interchange improvement project currently under construction on the northeast side of Indianapolis. We'll explore the day-to-day challenges of effectively communicating with the public and multiple stakeholders, including a major hospital complex; and multiple jurisdictions, schools, and two major shopping malls.

SPEAKERS

Brian Shattuck, INDOT
Alex Lee, Parsons Corporation
Cedric Diefenbaugh, Parsons Corporation

MODERATOR

Megan DeLucenay, INDOT

WEDNESDAY

SAFETY

TIME
8:00-8:50 AM

ROOM
WTHR 104

PDH: 1

201. Tools to Implement the Safe System Approach

To advance implementation of a Safe System Approach, FHWA initiated a project to identify Safe System solutions for highway safety improvement projects. Two tools have been developed to measure the alignment of projects and policies with the Safe System. Real applications will be used to demonstrate the tools and the findings from this effort.

SPEAKERS

Kendra Schenk, Burgess & Niple
Rick Drumm, FHWA
Cory Hopwood, Cambridge Systematics, Inc.

MODERATOR

Ryan Klitzsch, Cambridge Systematics, Inc.

TIME
9:00-9:50 AM

ROOM
WTHR 104

PDH: 1

202. Indiana Observational Weather Needs to Mitigate Road Hazard Risk

Hazardous weather can cause serious road safety risks in a very short time period. Transportation and emergency managers' preparedness and response are often dependent upon quality high-resolution (mesoscale) forecasts and available surface weather observation networks. This presentation will overview the observation networks currently used in Indiana and will present a unique opportunity to expand and increase the density of these networks across the state to fill critical spatial gaps that will improve safety.

SPEAKER

Beth Hall, Purdue University

MODERATOR

Ryan Klitzsch, Cambridge Systematics, Inc.

WEDNESDAY

SAFETY

TIME
10:00-10:50 AM

ROOM
WTHR 104

PDH: 1

203. Confessions of a Former City Vision Zero Coordinator

Maria Cantrell, P.E. served as the City of Columbus Vision Zero Coordinator from 2019 to 2023. She lead the development of the City’s multiagency plan and program intended to eliminate fatal and serious injury crashes. Learn about what efforts and strategies worked, what didn’t, and a few pointers picked up along the way.

SPEAKER
Maria Cantrell, Burgess & Niple

MODERATOR
Ryan Klitzsch, Cambridge Systematics, Inc.

TIME
11:00-11:50 AM

ROOM
WTHR 104

PDH: 1

204. Vulnerable Road Users: Session 2

This panel session discusses vulnerable road users (VRU) from local experiences and provides insight on projects that improve safety for vulnerable road users. Panelists will include local agency officials from cities and towns in Indiana and will be moderated by In-LTAP Safety & FHWA Office of Safety members.

SPEAKERS
Andrew Cibor, City of Bloomington
Aaron Ott, City of Warsaw
Dan Cartwright, Town of Bargersville

MODERATOR
Rick Drumm, FHWA

WEDNESDAY

SAFETY

TIME
1:00-1:50 PM

ROOM
WTHR 104

PDH: 1

205. Speed Management

Speed-related fatalities represent a significant portion of fatal crashes nationally. This session will discuss the Safe Systems Approach (SSA) element, Safer Speeds; explore how speed differentials affect crash outcomes; and provide information on proven safety countermeasures.

SPEAKERS
Eryn Fletcher, FHWA
Rick Drumm, FHWA

MODERATOR
Mike MacNeill, INDOT

TIME
2:00-2:50 PM

ROOM
WTHR 104

PDH: 1

206. SAFERoad Solutions: Explaining Road Designs to the Public

SAFERoad Solutions is a guide to designs that improve safety, mobility, and efficiency across roadways. This online toolkit was created for the Kentucky Transportation Cabinet to explain both innovative and standard road designs to the public and to serve as a resource for engineers and other transportation officials. This presentation will highlight the SAFERoad Solutions guide, explain how to effectively communicate transportation topics to the public, and provide methods to creating content and specific topics.

SPEAKERS
Ed Green, C2 Strategic Communications
Wendy Southworth, Kentucky Transportation Cabinet

MODERATOR
Mike MacNeill, INDOT

WEDNESDAY

SAFETY

TIME
3:00-3:50 PM

ROOM
WTHR 104

PDH: 1

**207. GIS Analysis Informs
Lighting Location Selection**

The Louisville-Jefferson County Metro Government addressed areas within the right-of-way that had poor lighting levels and might contribute to vehicle crashes or crime occurrence. GIS data from the state and local government was used to identify hot spots where additional lighting might be desired. These hot spots were evaluated, and additional lighting locations were recommended for implementation.

SPEAKERS

Kyle Henderson, Strand Associates, Inc.
Andrea Bland, Strand Associates, Inc.
Dirk Gowin, Louisville Metro Government

MODERATOR

Mike MacNeill, INDOT

TIME
4:00-4:50 PM

ROOM
WTHR 104

PDH: 1

**208. Slow Down! South Bend's
Progress on Traffic Calming**

The City of South Bend's Neighborhood Traffic Calming plan has developed a data-driven approach to identify locations for speed table installations on neighborhood streets. Spoiler alert—the requests are not going down!

SPEAKERS

Leslie Biek, City of South Bend
Charlotte Brach, City of South Bend
Oluwanifemi Oluwatomi, University of Notre Dame

MODERATOR

Mike MacNeill, INDOT

WEDNESDAY

TRAFFIC OPERATIONS

TIME
8:00-8:50 AM

ROOM
STEW 310

PDH: 1

209. Work Zone Safety Fundamentals and Best Practices

Join us for a discussion of fundamental principles and best practices of temporary traffic control (TTC) that promote work zone safety. This session will cover topics that designers should know and consider when developing TTC plans. Attendees who will most benefit from this session are designers new to TTC and experienced designers looking for a refresher.

SPEAKER
Mischa Kachler, INDOT

MODERATOR
Jonathan Sutterer, INDOT

TIME
9:00-9:50 AM

ROOM
STEW 310

PDH: 1

210. Automated Work Zone Enforcement Update

House Bill 1015 was signed into law in May 2023 and required INDOT to establish the worksite speed control pilot program. INDOT and its consulting team have been working toward a rollout of the pilot project in the 2024 construction season. This presentation will explain House Bill 1015, highlight the planning efforts undertaken, provide information on the planned launch of the pilot, and discuss how effectiveness will be measured.

SPEAKERS
Ryan Huebschman, HNTB
John McGregor, INDOT
Benjamin Snyder, RK&K

MODERATOR
Jonathan Sutterer, INDOT

WEDNESDAY

TRAFFIC OPERATIONS

TIME
10:00-10:50 AM

ROOM
STEW 310

PDH: 1

211. Intelligent Transportation System Monitoring

INDOT and AECOM have partnered to develop an ITS device monitoring system. The system provides real-time diagnostics of all of the ITS devices, which include dynamic message signs (DMS), closed circuit television (CCTV), and standard networking devices. The system provides email messaging to the technicians to reduce response time for system failures. Dashboards and customizable graphical user interfaces make it user friendly.

SPEAKERS

Troy Boyd, AECOM
Edward Cox, INDOT

MODERATOR

Jonathan Sutterer, INDOT

TIME
1:00-1:50 PM

ROOM
STEW 310

PDH: 1

212. INDOT's Intersection Development Process

Reliable, curated intersections benefit INDOT by allowing many datasets to be quickly related, such as assets and safety/mobility metrics. FHWA has set a deadline of 2026 for states to have MIRE-compliant GIS intersection inventories for all state and local routes. INDOT is working towards those standards while considering a variety of stakeholders, both internal and external. See the progress we have made so far and where we plan to go.

SPEAKER

Adam Tyra, INDOT

MODERATOR

Jill Palmer, Indianapolis DPW

WEDNESDAY

TRAFFIC OPERATIONS

TIME
2:00-2:50 PM

ROOM
STEW 310

PDH: 1

213. Simulating Traffic Calming Effects on the Neighborhood.

The City of South Bend carried out a neighborhood-focused traffic calming plan involving the use of speed humps and lane diets (among others) to reduce speed, prevent cut-through traffic, and minimize crashes on streets. This presentation shows how microsimulation of the measures using Simulating Urban Mobility (SUMO) can help guide the placement of the measures and predict likely outcomes from the traffic calming measures.

SPEAKER
Oluwanifemi Oluwatomi, University of Notre Dame

MODERATOR
Jill Palmer, Indianapolis DPW

TIME
3:00-3:50 PM

ROOM
STEW 310

PDH: 1

214. INDOT ITS Future Deployments

The ITS program at INDOT has exploded from a handful of cameras to more than 2,000 field devices in the past 20 years. Since the first deployment, ITS at INDOT has had an increasing role in improving safety and mobility on Indiana’s roadways. We will start with a brief overview of the existing ITS footprint and then discuss new and future deployments of ITS. Topics will include new hardware, new software, new deployment strategies related to TSMO, future projects, future goals, and ongoing efforts to improve ITS design and construction standards.

SPEAKERS
Jonathan Sutterer, INDOT
Drew Sorenson, INDOT

MODERATOR
Jill Palmer, Indianapolis DPW

WEDNESDAY

TRAFFIC OPERATIONS

TIME
4:00-4:50 PM

ROOM
STEW 310

PDH: 1

215. 2+1: The Good, the Bad and the Ugly

The recent project experience on KY 155/55 provided valuable lessons on the true benefits of a 2+1 and where they are less efficient than a two-lane roadway nearing capacity. Traffic analysis enabled the PDT to identify the measure of utility for design segments and provided anticipated durations of when the 2+1 became obsolete based on projected traffic volumes. This presentation will focus on critical design parameters, best practices, key traffic/safety analysis, and when other solutions should be considered.

SPEAKER
Kyle Chism, Parsons Corporation

MODERATOR
Jill Palmer, Indianapolis DPW

HOURS

PROFESSIONAL DEVELOPMENT/CONTINUING EDUCATION

Professional Development Hours (PDHs) / Continuing Education Units (CEUs) are available for applicable sessions. Attendance at the entire session is required for credit. Three different options are available for recording/reporting your PDHs/CEUs.

HOW TO OBTAIN YOUR PDH/CEU STATEMENT

1. You may retain a self-reporting, Professional Development Hours Credit Statement for your own records (available at registration).
2. You may access the Road School Event App (Attendee Hub) and select the sessions that you attend live during the Road School program. Please be sure to select only those sessions that you attend in full to receive CEU credit. You may remove any sessions you do not attend via the app by navigating to "My Agenda" and unselecting any session that you did not attend. Please make all updates to your agenda by the self-reporting deadline of April 17th.
 - If you see a plus button, you are not registered for the session. If you see a check mark, you are registered for the session.
3. You may modify your registration and receive an event specific PDH/CEU statement from Purdue University. By modifying your registration, you certify that you attended all sessions selected.
 - Below are instructions on how to modify your registration to receive an event specific PDH/CEU statement from Purdue University.
 - Visit <http://tinyurl.com/2024RS-RegModification> at the conclusion of Road School (The self-reporting link and website below will not be activated until March 14th, directly following the Road School programming, and will remain available until April 17th.).
 - Select the hyperlink "Modify Registration for PDH".
 - Log in by completing the requested fields (email address and confirmation number as they appear on your confirmation email).
 - After logging in, click on the "Modify Registration" button on the "Confirmation" tab.
 - You will advance to the "Terms & Conditions" page. Click the "Next" button at the bottom of the page and proceed to the "Registrant Information" page. Click the "Next" button at the bottom of the page and proceed to the "Sessions" page.
 - The list of sessions, ordered by Day and Presentation will appear on the next page. Select the session(s) you attended and then click on the "Next" button at the bottom of the page.
 - Follow the prompts to continue and complete the PDH/ CEU recording process.

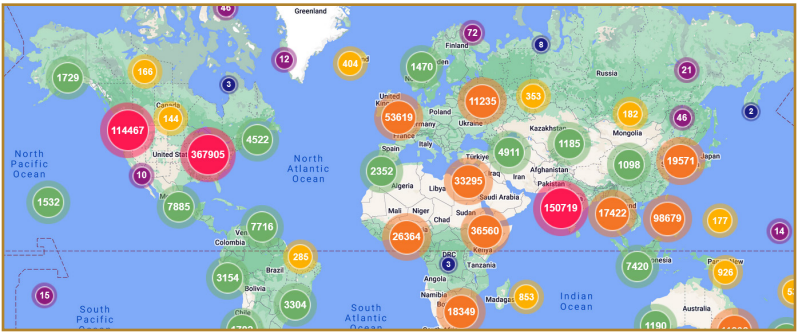
Sessions attended must be reported between March 14th and April 17th to be eligible to receive the event CEU/PDH Certificate. An event-specific PDH/CEU statement will be sent to your registration email address on April 18, 2024.

ARCHIVES

ROAD SCHOOL PUBLICATIONS ON PURDUE E-PUBS

Since 2011 with author’s permission, we have digitally published Road School presentations in Purdue e-Pubs, the Purdue Libraries’ open access repository. In 2015 we archived the proceedings of previous Road Schools dating back to 1924. You may access the presentations and proceedings here: <http://docs.lib.purdue.edu/roadschool/>.

We have over 1,092,000 downloads since we placed the Road School presentations on the web. Nearly 60% of those downloads are from outside the United States, representing 226 countries. This is a great testament to the impact Road School is having not only in Indiana and the U.S., but around the world, as shown by the distribution map below.



SUBMIT PRESENTATIONS HERE



2024 Road School presenters can stop by the Purdue Libraries exhibit area on the second floor of Stewart Center to submit their presentations either before or after their session.

EXHIBITORS

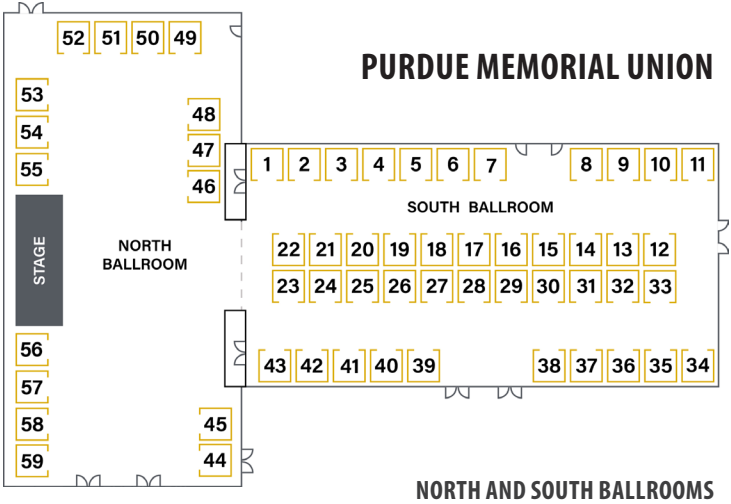
EXHIBITORS LISTED BY NAME

- 36** Acrow Bridge
- 53** Advanced Chemical Technologies, Inc.
- 13** Advantage Highway Company
- 19** Alchemco
- 3** Align
- 42** American Structurepoint, Inc.
- 47** Aquaphalt
- 57** ASC Group, Inc.
- 1** Asphalt Materials Inc.
- 41** Asphalt Pavement Association of Indiana
- 32** Asphalt Zipper, Inc.
- 35** ATMAX Equipment Co.
- 26** Best Equipment Company
- 33** CHA
- 20** Co-Alliance
- 5** Collins Engineers Inc.
- 28** Construction Site Technologies
- 48** Cylv.ai
- 50** Davey Resource Group
- 38** Egis
- 37** Equipment Marketing Company
- 49** Frost Solutions
- 24** GAI Consultants Inc.
- 17** GeoStabilization International
- 56** Globe Asphalt Paving
- 54** GovDeals
- 39** Hanson Professional Services Inc.
- 4** Highway Safety Specialists
- 14** HNTB
- 34** Horizon Signal Technologies
- 16** IKO Concrete Pipe Association
- 9** IN LTAP
- 10** IN LTAP
- 11** IN LTAP
- 40** International Right of Way Association Chapter 10
- 21** JQOL
- 31** Kapur and Associates Inc.
- 43** Kessler Soils Engineering Products Inc.
- 8** Kwik Bond Polymers LLC
- 7** Mason Private Locating LLC
- 44** Midwest Aerial Survey Specialists/Genesis Factor LLC
- 51** ms consultants inc.

EXHIBITORS

EXHIBITORS LISTED BY NAME

- 2 National Gunitite
- 52 Parsons
- 45 PlastiFab Geofoam EPS Solutions
- 55 Purdue Manufacturing Extension Partnership
- 12 Reading Rock Inc.
- 30 Resource International Inc.
- 59 Sherwin Industries Inc.
- 46 SJCA Inc.
- 22 Specialties Company
- 27 Tensar, a Division of CMC
- 25 Thatcher Foundations
- 23 The Hoosier Company
- 18 Traffic Control Products
- 29 United Consulting
- 15 V3 Companies
- 58 Valmont Structures
- 6 Volkert, Inc.



EXHIBITORS

ACROW



ADVANCED
CHEMICAL
TECHNOLOGIES, INC.

Advantage
Highway
Company



ALCHEMCO®
SUBSURFACE MEMBRANE WATERPROOFING



EXHIBITORS



AMERICAN
STRUCTUREPOINT
INC.

AQUAPHALT[®]
permanent repair for asphalt + concrete



Asphalt Zipper[®]

Quicker, Easier, Longer Lasting Road Repairs for Less Than Half the Cost

EXHIBITORS



EXHIBITORS



EXHIBITORS



EXHIBITORS



INDIANA • KENTUCKY • OHIO
CONCRETE PIPE
ASSOCIATION



Local Technical Assistance Program (LTAP)



**KESSLER SOILS
ENGINEERING
PRODUCTS, INC.**

EXHIBITORS



EXHIBITORS



EXHIBITORS



EXHIBITORS



MAPS

CAMPUS MAP

110th ANNUAL
PURDUE ROAD SCHOOL
MARCH 12-13, 2024



CAMPUS MAP KEY

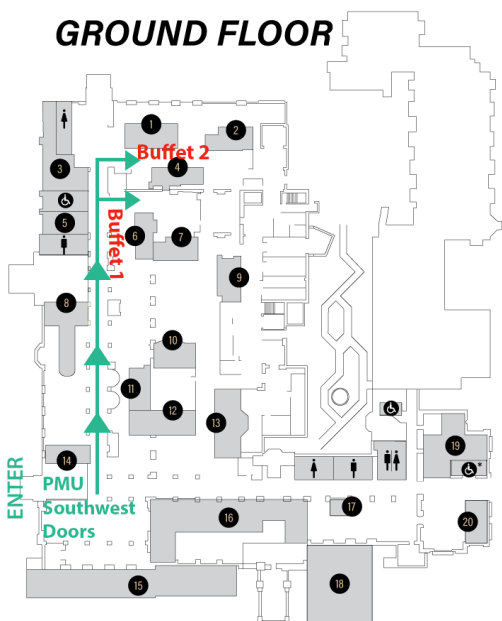
- REGISTRATION, EXHIBIT HALL & LUNCH
- OPENING SESSION
- BREAKOUT SESSIONS

CL50 Room 224, MTHW Room 210, RAWL Room 1086, UC Room 114, WTHR Room 104

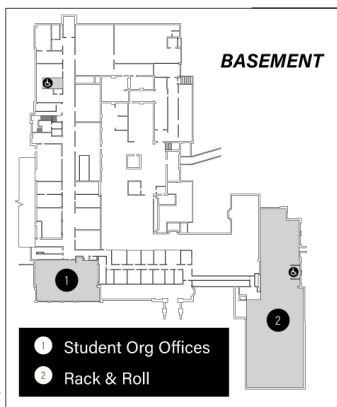
MAPS

PURDUE MEMORIAL UNION, GROUND FLOOR

GROUND FLOOR



Gender Neutral Restroom
 Men's Restroom
 Women's Restroom
 Elevator
**to Rack & Roll only*



FOOD VENUES

- 1 BBQ District
- 2 Fresh Fare
- 4 Latin Inspired
- 6 Sol Toro
- 7 Pizza & Parm
- 8 Starbucks
- 9 Zen
- 10 Sushi Boss
- 11 Chef Bill Kim's
- 12 Aatish
- 16 Walk-Ons
- 19 Boilermaker Market

EVENT VENUES

- 3 G083 Meeting Room
- 5 G077 Meeting Room
- 13 Fireside Lounge
- 14 Hail Purdue Stage
- 15 West Terrace
- 17 Ever True Stage
- 18 East Terrace
- 20 1869 Meeting Room

MAPS

PURDUE MEMORIAL UNION, FIRST FLOOR



EVENT VENUES

- 1** North Ballroom
- 2** South Ballroom
- 8** West Main Lounge
- 9** East Main Lounge
- 10** Great Hall (Info Desk)
- 11** 118 Lounge
- 12** Union Club Hotel Lobby

RETAIL TENANTS

- 3** UPS Store
- 4** Fidelity Investments
- 5** Purdue Federal Credit Union
- 6** Evans, Piggot and Finney Eye Care
- 7** Amazon @ Purdue

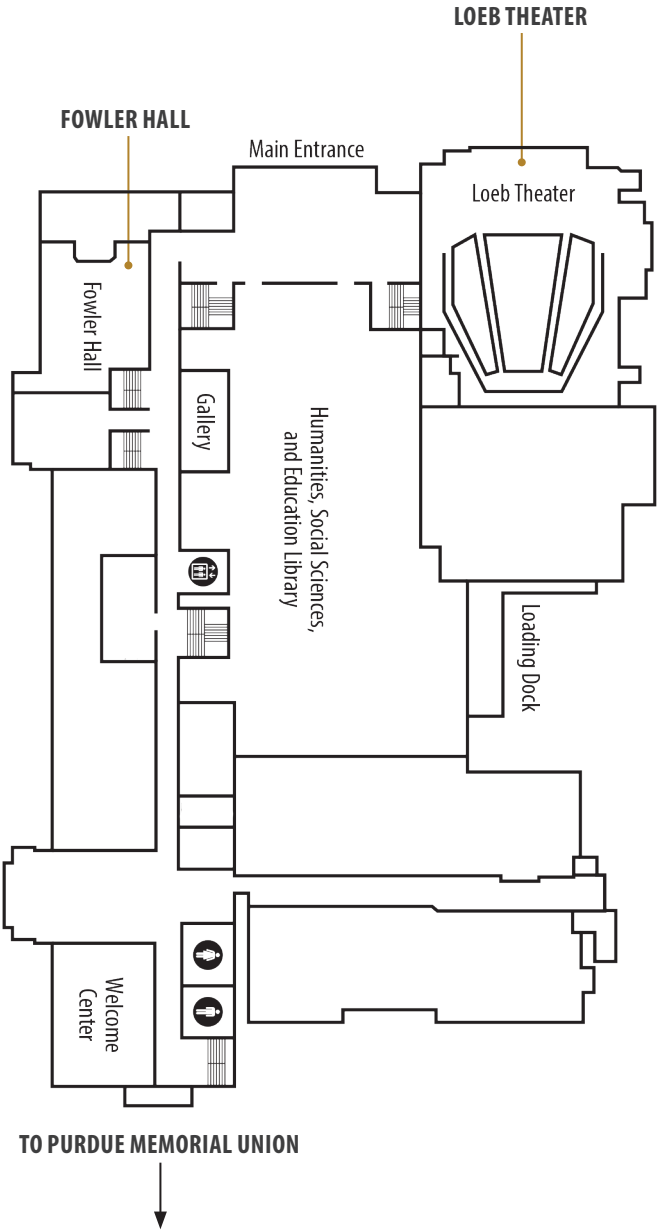
FOOD VENUES

- 13** Leaps Coffee
- 14** Boiler Up Bar
- 15** 8Eleven Modern Bistro

MAPS

STEWART CENTER, FIRST FLOOR

Opening session (Loeb Theater)
Technical sessions

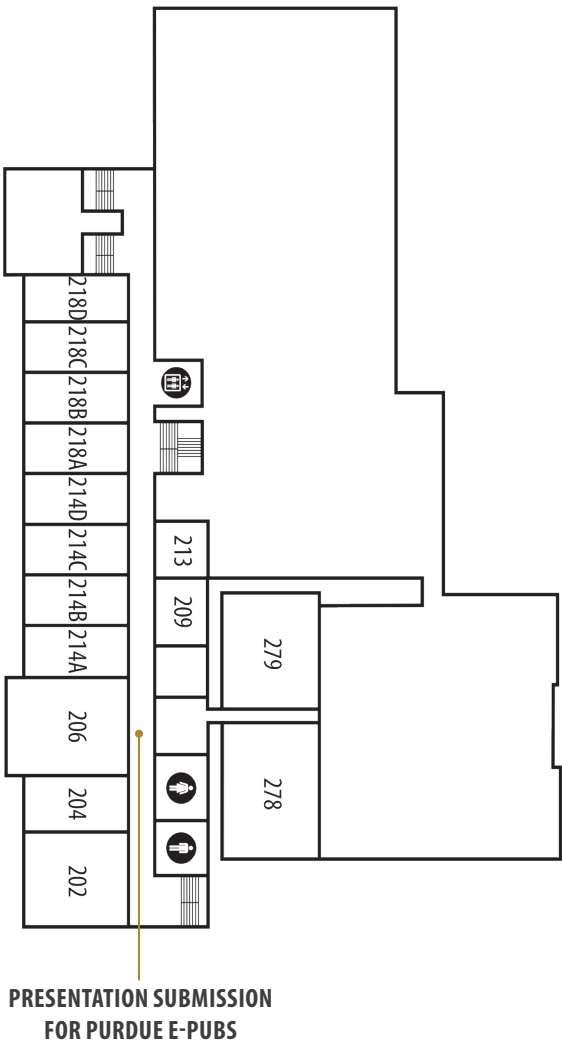


MAPS

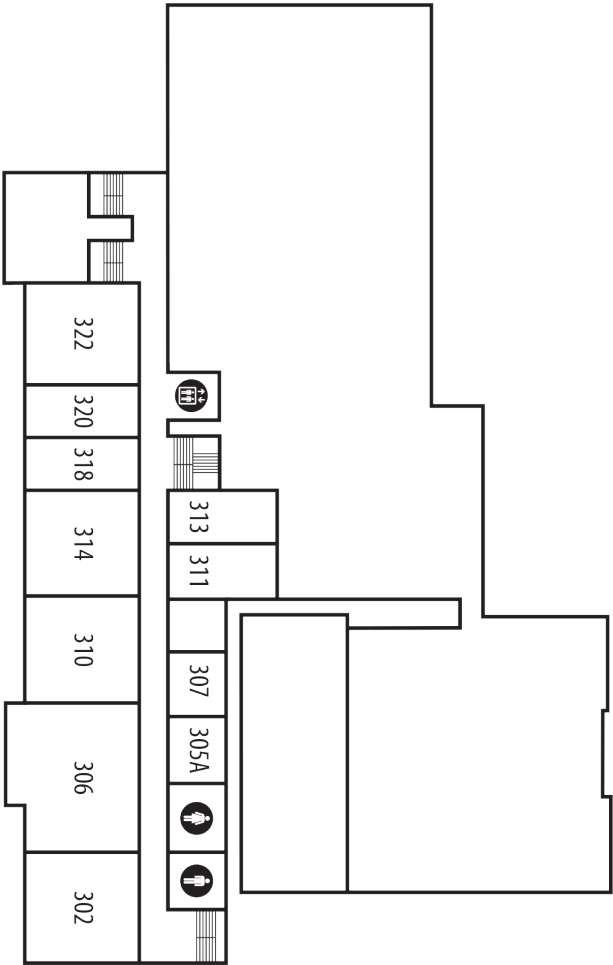
STEWART CENTER, SECOND FLOOR

Technical sessions

Presentation submission for Purdue e-Pubs



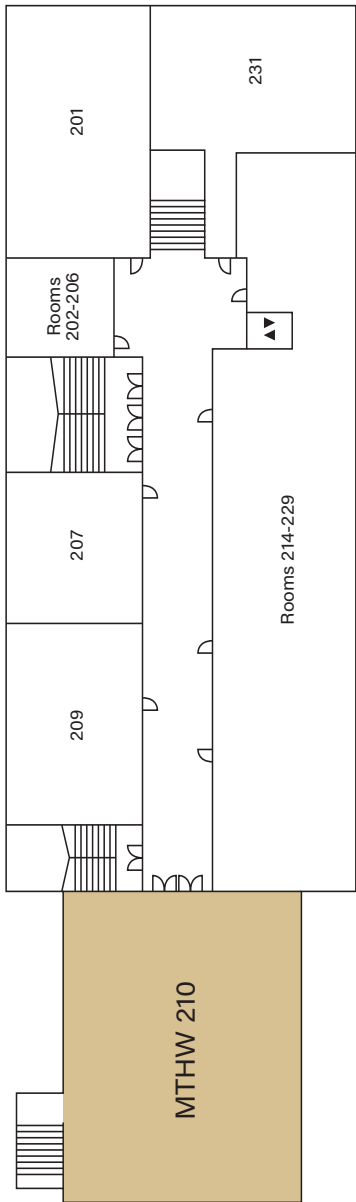
Technical sessions



MAPS

Matthew Hall (MTHW)

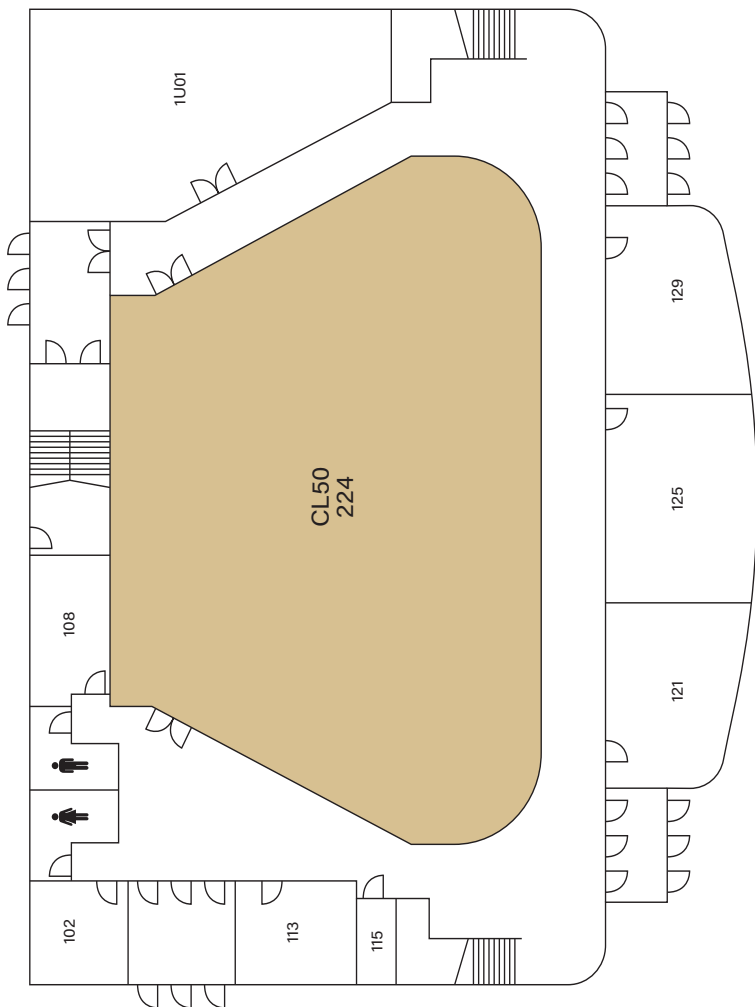
Technical sessions



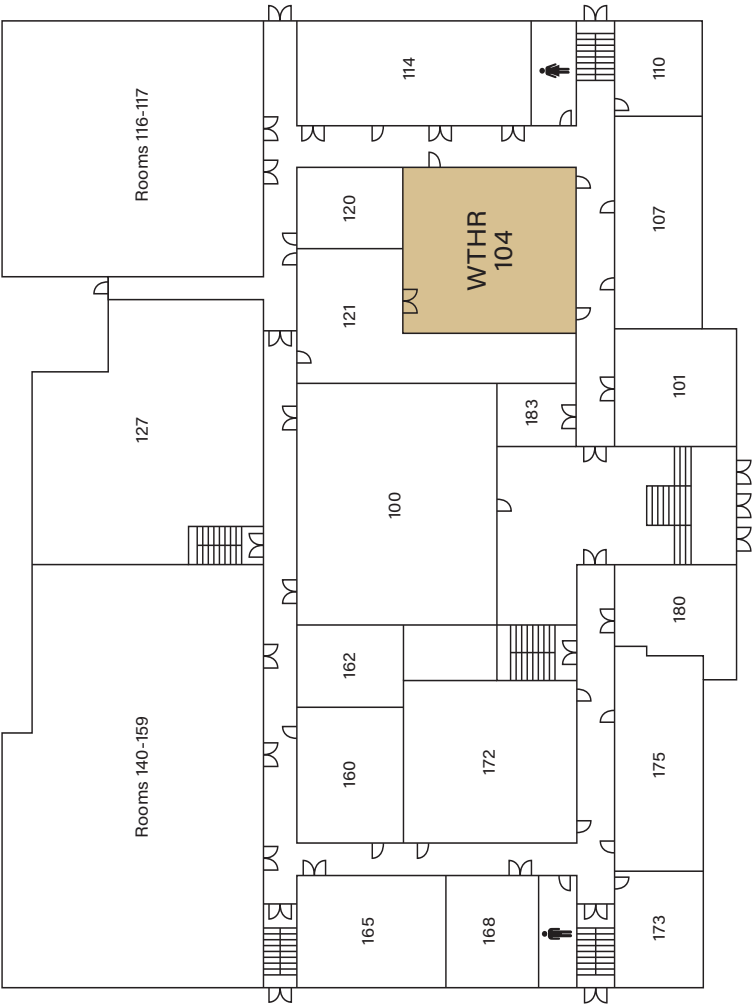
MAPS

Class of 1950 Lecture Hall (CL50)

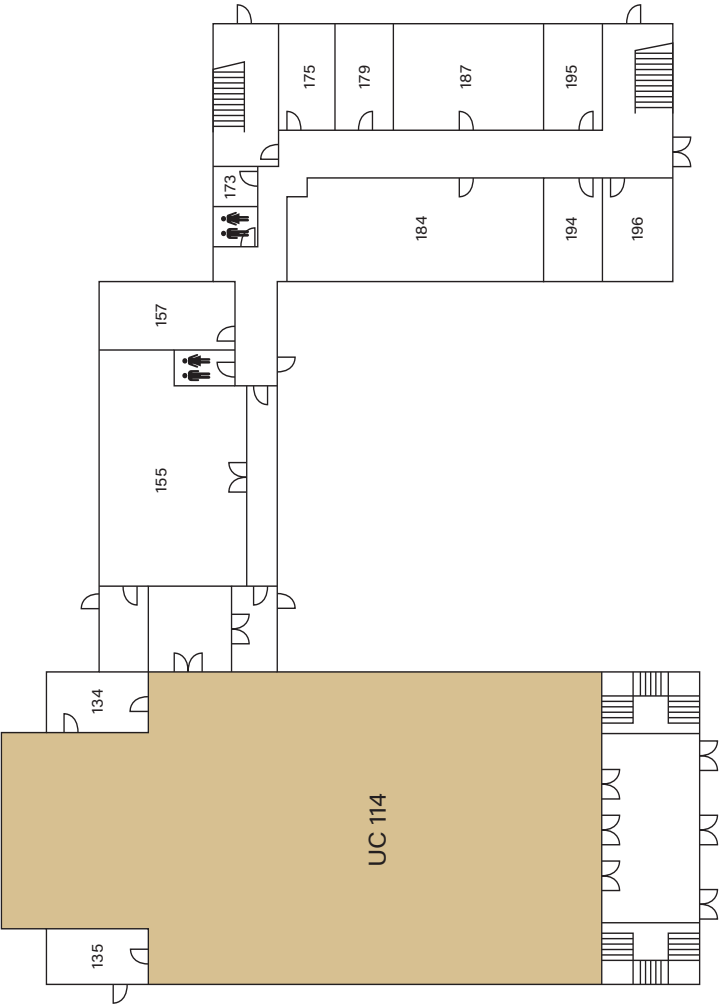
Technical sessions



Technical sessions



Technical sessions



MAPS

Rawls Hall

Technical sessions

