



# 2025 INDOT Highway Design Conference

Join us in innovating safe and efficient highway design for Indiana.

**Luis A. Lacuente**

Highway Engineering Director



# Engaging with Construction Experts at INDOT

This year, we are thrilled to welcome construction experts from the contracting industry to share their invaluable, real-world perspectives on highway design. Their sessions will cover critical topics, including roundabouts, resurfacing, and traffic maintenance on interstates. Engage with these experts to bridge the gap between design and construction, ensuring our plans lead to successful and cost-effective projects.





# Gratitude to Our Contributors

A heartfelt thank you to all who contributed their time and expertise.

# INDOT Project Enhancements

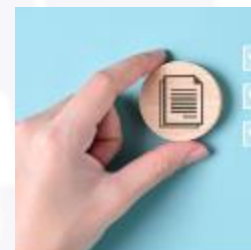
## Preliminary Geometrics Review

Required for all non-conventional intersections, fostering early collaboration and resolution of design issues prior to Stage 1 (DM 24-11).



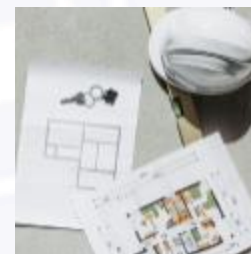
## Restructured PS&E Checklist

The FHWA-Indiana PS&E Checklist has been revamped for Stage 3 submittals, enhancing design review processes and ensuring better risk management and adherence to schedules (DM 24-15).



## Streamlined Plan Revisions

Plan revision procedures post-Ready for Contracts have been optimized for greater clarity and efficiency, ensuring smoother transitions in the design process (DM 25-12).



# Innovations in Highway Design

Innovation	Details
Horizontal Alignment	Standards have been rewritten as Chapter 305, introducing new guidance for complex curves, updated superelevation practices, and improved stopping sight distance evaluation (DM 25-09).
Pavement Patching Tables	Now standardized and delivered in a more useful format for field personnel (DM 24-10, Kumar Dave).
Void Reducing Asphalt Membrane (VRAM)	Use expanded; liquid asphalt sealant eliminated to improve pavement longevity (DM 25-10, DM 24-17, Kumar Dave).
Lean Concrete Base	Now standard for certain pavement designs, offering greater long-term support and durability (DM 25-11, Kumar Dave).

# Traffic Maintenance and Safety

---

## MOT Requirements Update



Updated requirements ensure two lanes of traffic are maintained when warranted, with alternatives analysis and robust documentation necessary (DM 24-08).

## Contract Documentation



Accurate closure schedules and mitigation measures are required to avoid contract risk and ensure safety (DM 25-01).

## Evaluating Work Zone Length



Evaluate whether longer work zones can save time and money while maintaining our unwavering commitment to safe and effective work zones

# Enhancing Highway Design Collaboration



## Thorough Documentation

Essential for compliance and clarity on design decisions.



## Open Communication

Foundation for effective collaboration among teams.



## Early Engagement

Helps identify issues before they escalate into costly problems.



## Seek Feedback

Collaboration with construction and traffic teams enhances MOT plans.



## Optimize Work Zones

Insights can lead to time and cost savings while ensuring safety.

# Innovating Highway Design Processes

1

## **Focus on Innovation**

INDOT is dedicated to fostering innovation in highway design to improve project outcomes and meet evolving needs.

2

## **Enhancing Efficiency**

The ongoing updates to Chapter 14 are aimed at streamlining processes, ensuring projects are delivered efficiently and on time.

3

## **Commitment to Safety**

Safety remains a top priority, with all changes designed to enhance the safety of Indiana's highways for all users.

4

## **Responsive Planning**

Future enhancements will focus on making INDOT's planning processes more responsive to the needs.

5

## **Continuous Improvement Culture**

A culture of continuous improvement will drive INDOT's future initiatives, ensuring that adaptations are made to reflect best practices.



# Thank You for Your Commitment

Thank you for your partnership and commitment to excellence. Let's make this a great conference that advances our profession.

2025 INDOT Highway Design  
Conference PDH Credits



thank  
you