Thank you for joining us! The meeting will begin shortly.

This meeting will be recorded and available online after the meeting.

For Questions

• At the bottom of the window, click Q&A.
• When you click on Q&A, a window will appear where you can type a question and see others’ questions.
• DOT.InnovativeProjectDelivery@Illinois.gov
Opening Remarks

Omer Osman

- Secretary of Transportation, Illinois Department of Transportation
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The purpose of today’s meeting is to introduce IDOT’s bridge bundling program, as well as engage with industry to solicit and gather feedback and input on how to best structure the program.
IDOT continually seeks innovative solutions to meet the growing transportation needs of Illinois.

Bureau of Innovative Project Delivery or IPD

- Established in 2016
- Identifies, evaluates, and develops projects that may benefit from innovative approaches, including the use of various forms of public-private partnerships ("P3"), and other contracting methods allowable under law.
Traditional delivery (design-bid-build) with bundling will **not** require legislation, also reduces time and cost savings, flexibility for DBE innovations.

Legislation will be required for **innovative, alternative** delivery options; more opportunities to reduce time and cost savings, flexibility for DBE innovations.
IDOT currently non-compliant with Federal law with >10% of National Highway System bridge deck “structurally deficient”

Increased Rebuild Illinois revenues and traditional delivery approaches remain insufficient to meet federal requirements

Freight movement is constrained due to load-posted bridges

Over 1,000 bridges “load posted” in Illinois

Nearly 2,500 structurally deficient bridges in Illinois

13% of the deck area on structures maintained by IDOT are classified as structurally deficient

43% of structures maintained by IDOT are over 50 years old

7,859 state bridges have an average age of 44

18,972 local bridges have an average age of 41
Bridge Bundling Feasibility Study - Overview

Evaluate bundling for state-owned bridges and culverts throughout Illinois to assist IDOT with understanding the benefits and considerations of establishing a bundling demonstration project and ongoing program.

Bridge bundling in Illinois could:

- Complete **more projects** in **less time** at **lower costs**
- **Leverage increased revenues** to deliver **more projects**
- Create new, innovative opportunities for **DBE engagement and growth**

Bundling Works!
How Bundling Works

1. Structures (bridges and culverts) in poor condition are screened to identify and that:
   - Need replacement
   - Technically **straight forward**
   - Have **similar replacement structure characteristics** (pier, columns beam, guardrail types)

2. Structures will be prepared for procurements:
   - Level of effort by IDOT will **depend on the delivery model selected**:
     - DBB: 100% design
     - CMGC: 1-5% design
     - DB & P3: 35% design to secure permits and estimate costs

3. Bundles could be procured based on:
   - **Proximity** of the structure to one another
   - **Capacity** of the market to deliver the structures
   - **Priorities** based on feedback

4. Selection of Best Proposals:
   - Bundles will **depend on structure similarity**
   - Goal: Contractors quickly deliver multiple projects by **minimizing the number of designs** and **optimizing the ability to apply economies of scale** to efficiently construct all of the structures
   - Compared to the traditional delivery (one structure at a time), **lower costs should be realized, and the cost savings should be able to grow overtime** as the process is repeated
Economic Benefits of Bundling

- Increased **investment in disadvantaged communities** and across the state via additional projects
- Improved **safety and connectivity** of the transportation network
- Bundled delivery **reduces costs** due to economies of scale, reducing deferred maintenance, and avoiding cost escalation and inflation; also provides opportunities for reduced staff time
- Delivering bundled structures means **additional projects** can be built *now* through Rebuild Illinois

Current pace of bridge construction:
- Hurts economic activity by limiting freight movements
- Inconveniences the traveling public
- Leads to increased costs from deferred maintenance and inflation
Timeline

Qualitative Analysis

**COMPLETE**

**Findings:** State structures identified as good candidates for bundling; bundling program could result in significant savings

Quantitative Analysis

**ON-GOING**

- **Screen** bridges and culverts in poor condition to identify potential structures
- **Prepare** state structures for delivery
- **Develop** bundles across the state in ways that encourage DBE participation

Procurement

**As soon as Summer 2022**

**On-Going** stakeholder engagement, including with DBEs, to build awareness of bridge bundling program and solicit input to ensure robust participation
Create new opportunities and work experiences for DBEs to grow and thrive

Improve the safety of the traveling public

Improve condition of the overall bridge inventory

Expedite the delivery of bridges and culverts

Ensure financial stewardship of public funds

Improve the connectivity of the transportation network
Guest Speakers:

- **Royce Meredith, P.E.**
  - Bridging Kentucky Program Manager, State Highway Engineer’s Office Kentucky Transportation Cabinet

- **Tony Hunley, P.E., Ph.D.**
  - Bridging Kentucky Consultant Team Manager
  - Vice President, Bridge Sector Lead, Stantec
Bridging Kentucky Program Overview

Created in 2018

Rehab/replace state county and local bridges

Mandates
- Address deficiencies
- Restore structures to appropriate capacities
- Expedite projects
- Create efficiencies
Typical bridges

- Avg. 900 crossing per day
- 18.5 feet wide / 60 feet long
- 60 percent locally owned
- Weight restrictions limiting:
  - School buses
  - Emergency vehicles
  - Commercial users
Progress to date

- Under Development/Designed: 142
- Awarded/Under construction: 99
- Completed: 301
Why bundling for Kentucky?

- Large number of bridges
- Expedited project delivery
- Significant savings (owner & contractors)
- Scalable solution – not one size fits all

Goal was efficiency!
Preparing for Bundling

Talked with all stakeholders
- Agencies/partners
- KYTC Divisions
- Districts

Recognized potential challenges
- Bundling considerations
- FHWA Peer Review
- Industry Forums provided insights
Is bundling efficient for items outside construction?

Yes!

KY bundled elements through program
- Batched environmental/permitting (Archaeological, Section 106, Section 7, etc.)
- Utility coordination
- Railroads
- Most bridge design
Is bundling efficient for items outside construction?

- Bundled construction contracts
  - Bundles awarded to date: 35
  - Bundled bridges: 140
  - Value of contracts awarded: $80.68 million
  - Average contract: $2.1 million

- Significant cost savings for construction
What’s an ideal bundle size?

- No one size fits all
- Needs required entire industry
- Large and small firms involved

### Bridging KY Construction Contracts Data

- **Bundles**: 35
- **Bundle Size**: 2
- **Bundle Cost Min-Max**: $552K - $8.59M
- **Construction Contracts & Volume of Work**: 41 - 303
How do you decide which bridges to bundle?

3 ways to think about bundling
- Project development
- Design
- Construction
Questions from the industry:

How do you decide which bridges to bundle?

Project development/design
- Agency collaboration
- Timeline/priority
- Efficiency in design process

EXPEDITED PROJECT DEVELOPMENT TIMELINE

- 20 WEEKS: Site Assessment
- 15 WEEKS: 30% Plans
- 10 WEEKS: 90% Plans
- 8 WEEKS: PSE
- 0 WEEKS: Project Letting
How do you decide which bridges to bundle?

Construction bundles driven by
- Priority/timeline
- Scope of work
- Locations
Is it good to mix work types in bundles?

- Not in construction
  - Different capabilities/specialties
  - Rehabs/replacements separated
  - Full and superstructure replacements combined

- Design bundling
  - Seek similarities
  - Rehab/replacement teams
  - Standardized design elements
Is bridge location a major factor in bundling?

- Some efficiency for concurrent schedules
- More flexibility - less location matters
- KY adapted – Longer contract lengths
  - Increased flexibility
  - Focused on reducing impacts
Questions from the industry:

How do you manage across district boundaries?

- Was a concern in Kentucky
- Previously had mowing/paving contracts cross boundaries

- Established single point of responsibility
- Utilized same resident/inspection crews
- Communication is important
Now we will now ask a series of polling questions. Responses to these polling questions will assist IDOT with further developing the Bridge Bundling Program.

**Chat Function:**

- When you click on chat, a window will appear where you can also type responses to the polling questions. Responses will remain anonymous. A member of the project team will be reviewing your responses in the chat.
Polling Question #1

**Structure Types:** Would you be able to achieve cost savings with bundles that include all bridges or all culverts or a mix of both?

a. All bridges  
b. All culverts  
c. Mix of bridges and culverts  
d. All of the above  
e. Additional feedback (please use chat)
Polling Question #2

**Bundle Size:** How many structures per bundle would create the lowest cost per bridge or culvert in the bundle? (assuming the typical DBB risk allocation between IDOT and the contractor)

a. 2 - 5
b. 6 - 10
c. 11 - 20
d. 21 +
e. Additional feedback (please use chat)
Polling Question #3

**Bundle Cost:** Should IDOT keep a bundle of structures within an overall estimated cost range in order to produce good competition for the bundle and achieve cost savings? (assuming the typical DBB risk allocation between IDOT and the contractor)

a. $1-5 Million
b. $6-10 Million
c. $11-20 Million
d. $21+ Million
e. Additional feedback (please use chat)
Polling Question #4

**Proximity:** How close in proximity would structures in a bundle need to be in order to create cost savings for the Project?

a. 5 to 10 miles of one another
b. 11 to 15 miles of one another
c. 16 to 20 miles of one another
d. 20 to 30 miles of one another
e. Additional feedback (please use chat)
Local Hiring: Would local hiring preferences or innovative contracting approaches create positive or negative impacts to participation in the program?

a. Positive impacts (please add to the chat)
b. Negative impacts (please add to the chat)
c. Additional feedback (please use chat)
Prioritization of Structures to be Included in Bundles: IDOT has considered several criteria to prioritize structures for bundling, including:

- Overall condition;
- On the National Highway System (NHS);
- Currently load-posted;
- Located in an Environmental Justice community.

Do these criteria seem appropriate for aligning IDOT’s bundling program with stated goals? Any other considerations?

a. Yes
b. No
c. Additional feedback (please use chat)
DBE/ Small/ Local Participation Encouragement: How can IDOT help support and/or encourage participation by small/local/DBE firms through a bundling program?

Please use respond using the chat function
Questions?

- Overall bridge bundling effort? Feedback on industry webinar and engagement?
- For additional feedback or thoughts please feel out the online survey before September 22\textsuperscript{nd}. You can find the survey at:

IDOT.Illinois.gov -> Doing Business -> Innovative Project Delivery or by using the following link.
Next Steps

Compile Results from Industry and DBE Webinars

Industry/DBE Survey (available until 09/22/21)

Risk Assessment

Identify Bundle Structures

Recommend Optimal Delivery Approach
Thank You

For more information and for our survey please see the IDOT Bureau of Innovative Project Delivery Webpage or email the program team at:

DOT.InnovativeProjectDelivery@Illinois.gov