

## April 22<sup>nd</sup>, 2025 Meeting Minutes

2:00 pm – 4:00 pm

Meeting Location: Virtual

### Welcome and Opening Comments

*Tara:* Thank you for joining, we appreciate everyone turning in their reports.

*Souzan:* I appreciate your commitment in advancing innovation in Oklahoma. I do appreciate all the champions from ODOT and FHWA getting this going.

*Tara:* Let's get started with updates from Matt or Walt.

### Standing Committee on Construction, Materials, and Maintenance (Matt Romero) EDC-7 & STIC Innovation Combined Efforts:

#### Enhancing Performance with Internally Cured Concrete & Pilot Internal Curing for Bridge Decks

(ODOT Champion: Matt Romero/Walt Peters/ Nairi Matevosyan-FHWA Champion: Ralph Nguyen & Waseem Fazal)

*Walt:* Construction has been delayed due to weather but is proceeding on SH-94. Currently placing bridge decks for internal curing in span 1 and colloidal silica in span 3. Span 2 will be in control. Anticipated assessment stage in late summer. This will benefit our durability on our decks, give us a little more life. The more time we wait, you get more and more cracks, that's what we're looking for. It's about a four-hour drive each way. We don't want to make too many trips out there. Probably late summer, we'll make an assessment of the performance of the different materials. I think Dr. Ley intends to write the final report probably early in 26. He might make a secondary evaluation.

*Matt:* I appreciate all the hard work, and we're really interested in seeing how this goes and performs moving forward.

*Waseem:* Great experience seeing the concrete being poured, a few things noted: workability using light weight aggregate in finishing. Also, some issues controlling air content, I think after six, seven trucks, they got a little bit more control. I want to thank Morgan for great hospitality, she was there all the time with her staff, excellent job!

*Ralph:* We visited the mixing plant and got to see all the lightweight aggregates.

*Justin:* How are we going to quantify cracking or judge it against anything else? Are we going to map? Is there some way we're going to collect that information other than visual observation?

*Walt:* Not sure, in my opinion, we may want to pursue Dr. Li's technology. He's done a lot of good work for us. There would be some expense to use that technology, and I don't know if we'd be able to fund it. I think that would make it quick, and more of a uniform response.

*Matt:* To add to the question, I think originally, we did want to map it. We have to work on the details with OSU using that technology. Probably the best way to move forward. Although I'm still not in quite agreement with Dr. Ley, I want to map it quicker rather than waiting.

#### Innovative High-Performance Geotextiles for Stabilization of Problematic Roadway Subgrades

(ODOT Champion: Bryce Hanlon - FHWA Champion: Waseem Fazal)

*Bryce:* OU has completed 70% of the literature Review for the project. Completed processing, placement and compaction of the subgrade soil in the test box. They have started monitoring the effects of various geosynthetics on reducing vertical displacement and application to underlying subgrade soils by installing potentiometers, load and pressure cells. Currently testing subgrade to compare to various other subgrade conditions to establish models and reduction factors for various geosynthetics.

Right now, they're kind of getting the system the way they want, and then once that's set up, they'll be able to test all the different situations. The difference with and without aggregate, all the different things to see what it's actually providing.

No questions

### **Standing Committee on Safety, Mobility, and Technology**

#### **EDC-7 Innovation:**

##### Next-Generation Traffic Incident Management: Integrating Technology, Data, and Training

(ODOT Champion: Caitlyn Carolus & FHWA Champion: James Bui)

*Caitlyn:* Currently fine-tuning the use of Pi-Lit, most districts have integrated Pi-Lits into their daily operations. Continued analysis of the data and nearing readiness to share with the public through Oktraffic.org. Plans to distribute more Pi-Lits to more districts and select wrecker companies, it's been proven to be a valuable asset for all users. Additional training is needed on Pi-Links which connect to the Pi-Lit system when deployed. This will help in gathering the data more efficiently.

No questions

##### Nighttime Visibility for Safety

(ODOT Champion: Marty Farris & FHWA Champion: Huy Nguyen)

*Marty:* Two DOT members attended a Lighting Peer Exchange. Information gathered on the best current practices for lighting design, installation, operations and maintenance for review.

We are looking at redoing our safety plan and traffic for what we're looking at in our upcoming HSIP years. Some of that is going to have a dedicated lighting project over the next four years or so. Where we've identified previously from some analysis our engineers had done for locations that didn't have light but met lighting warrants and that had collision history.

No questions

#### **STIC Incentive Projects:**

##### Transportation AI Projects Team

(ODOT Champion: Lance Underwood & Sam Coldiron & FHWA Champion: Huy Nguyen)

*Sam:* In February we kicked off phase two. Full implementation beyond the pilot. OMES AI Team is working on updating the Image Recognition Model and building out an interactive Dashboard in ArcGIS Online to view the extracted asset information. We're pivoting from building the output into a Power BI dashboard, which we had for the pilot. We're switching it into an Esri dashboard. This will allow for better workflow integration with our current staff and kind of direct access into where the rest of the asset collection data is currently up on the Esri ArcGIS platform.

*Souzan:* is there a possibility for a demo to see how the system works?

*Sam:* Definitely, we can set up a demo for what we have currently, with Stephanie's team.

*Tara:* Do we want to do a small demo at our next STIC meeting or separate?

*Souzan:* Lets combine it with our next STIC meeting.

*Tara:* We'll work out logistics.

### **Standing Committee on Special Initiatives**

#### **EDC-7:**

Strategic Workforce Development & Pre-Apprenticeship Stakeholder-Focused Training Program-Final Report Due

(ODOT Champion: Jennifer Hankins & FHWA Champion: Viplav Reddy)

*Jennifer:* ODOT participated in three Peer Exchanges, that allowed us to develop contacts in other states. Learned shorter classes are more cost effective for general construction training. In depth focused training for more complex CDL training. ODOT identified industry partners for engaging in community needs, which also brought more areas of expertise that helped identify future projects.

No questions

### Closing Comments:

*Tara:* Reminder FFY25 STIC Applications Due April 28<sup>th</sup>. We received one so far, I encourage the rest of you to fill out the application. If you have any questions, please reach out to myself, Zachary, or Souzan or any of our FHWA partners.

*Souzan:* We look forward to receiving additional proposals from you all. Zach has some information about what constitutes a proposal eligible for STIC funds, and if you guys have any questions, reach out to me, to her, or to Zach.

*Zachary:* This is a great opportunity to get \$125,000 to bring in an innovation to implement here into your state. This is a fantastic opportunity to make an impact on your state. So please, share any ideas that you may have.

*Tara:* There's a match but STIC covers the majority at the 80%. Please share with your employees.

*Souzan:* Everyone is short-staffed. So, this is about working smarter, not harder. An opportunity to streamline processes is valuable. A prime example is the AI proposal, which will significantly help us make that process more efficient.

*Tara:* Next meeting will be in-person since we're trading off virtual and in-person. I appreciate everyone turning in their progress reports and final reports so that we can get those sent off. I'll work with Sam about the demo.

*Tim:* Kind of a follow-up to Justin's question as to the technology of how to handle the cracking. Do we or should we look into what it would cost? I don't know how much it would cost or whether there's any money in the budget.

*Walt:* I believe I have an estimate from Josh Li, I thought about making that a state proposal.

*Tara:* It's worth further conversation to see. See if we can get a cost estimate and turnaround time before the next meeting.

*Matt:* I think that'd be a great idea to maybe extend that by doing another STIC proposal just to monitor that bridge because we don't know how it's going to be unless we give it the time to actually do what it's going to do and along with the control spans. Those would go hand in hand with mapping of the three different spans with three different curing methods.

*Zachary:* Possible ideas, that might be a help spur thoughts going into the closeout of this application timeline.

We could do things like developing standards or specifications for an innovative process. We can develop or deliver training based on an innovation. We can refine current specifications or evaluate some lessons learned from an innovation. Sponsoring an innovation workshop or an exchange for sharing best practices.

Those are some of the ideas that could possibly be worked into one of these STIC incentive applications.

I do want to say thank you for all your hard work. I'm very proud of the group and very proud of the hard work that you guys have put into this.

I do want to extend a couple of reminders. EDC & STIC, final reports are due to Federal Highways by April 28th. If you have questions on anything regarding those items, please do not hesitate to contact Souzan, myself, Tara, any of us.

*Souzan:* We don't have any information regarding EDC-8 at this time. But as soon as we get any updates, we'll pass it along.

Meeting concluded.

Next Meetings/Events:

July 30th, 2025 – In-Person TBD