

## January 31, 2024, Meeting Minutes

Meeting Location: *ACOG (4205 N Lincoln Blvd, Oklahoma City, OK 73105)*

### Welcome and Opening Comments

**Joni & Souzan:** Thank you for attending and thank you to the champions for all your continued efforts in providing your updates and continued work on these initiatives.

Joni: A new reporting template is in the works and more information is forthcoming on it. This will be the new method used for tracking initiatives and the new templates will be used for presenting updates to executive leadership in ODOT along with DE's and department heads. Members to complete the reporting templates fully.

The goal is to attach documents to final products and pictures which are exceptionally important and helpful in depicting the great work that is going on and being done. Photos of a project can convey the process and grow the opportunity to learn more than getting someone to read about a project in a report.

The staff photographer retired in December; members are responsible for taking their own project photos. Develop partnerships with field personnel as they are great and are interested in the projects taking place. Communication with the DE's and the additional staff on those projects is highly encouraged. Develop those partners to assist with the photos as they'll be there to monitor progress.

By the next quarterly meeting, we anticipate having the final reporting template finalized, distributed and ready to use, closely working with FHWA to ensure reporting is simpler and concise. Also focus on deciding how final reports are to be done.

Since the last quarterly meeting, five initiatives were closed out:

1. The Phoenix Test Method
2. The Fiber Reinforced Asphalt Concrete
3. The CAV Taskforce
4. The Wireless Sensor for Detection of Black Ice
5. The Accelerating Innovation Deployment in Oklahoma

In addition to working with FHWA on the template, the intention is to showcase these initiatives, have a presentation, demonstrate lessons learned, future initiative ideas and put those ideas into implementation. Let's get started.

### Standing Committee on Pre-Construction

#### STIC Incentive Project:

Development of standard drawings for low-cost bridge options for use by Local Public Agencies (LPAs) on low-volume locally owned roads

(ODOT Champion: Justin Hernandez & FHWA Champion: Ralph Nguyen)

Justin: The drawings have been completed. Working on determining appropriate storage for the recordkeeping. The challenge right now is deciding how the information can be released to the public.

Information was kept on CD's and the drawings on the website but that is no longer a viable option. We're working with ProjectWise to see other viable solutions. Connections will be made to connect with other contacts/staff that will be useful in assisting with the recordkeeping processes as well as archived sources for reference. As this is the oldest STIC project and eager to close.

#### Develop Strategic Plan & Roadmap for Digital Delivery

(ODOT Champion: Katie Brown & FHWA Champion: James Bui)

Katie: The task order for this initiative was issued this month, January 2024. Draft plan and road map are due in a couple of weeks.

No issues are foreseen, at this time. ODOT received the ACDMS grant which will help with the implementation. Presenting this to senior staff in March. Updates on that will be presented at the next quarterly meeting.

#### 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: The Proposal is for SH-94 bridge over the Beaver River. This is for March letting. A bridge preservation meeting in South Dakota was attended, the presentation was from Indiana on what they call an internal curing product. They are claiming fantastic results and is similar to the internal curing we're wanting to do. According to Dr. Ley it is colloidal silica. Indiana DOT presented to us in detail, the plans we have for March letting is a free span bridge 135/100. The in-span is for the traditional internal curing. On the north span we're planning on doing the Indiana colloidal silica product. That will be our first instance of that. Dr. Ley can do some research from now till the construction timeline. We're a year out, there won't be much happening till then. This is going to take time. We had an SPR project proposed for Sr. staff to consider. The product is substitution by percentage; we substitute up to 18-20% of the fine aggregate if we're using the traditional expanded shield. It's a fine aggregate substitution. The evaluation will come from the mix design stage. It's a substitution of one material for this. The only indicator we have is mitigating the shrinkage cracking damage to prolong the deck of our bridges.

ODOT with FHWA help to develop a strategy to see the benefits for this, since we have invested the money ensure we're getting the results we need.

##### **STIC Incentive/AID Projects:**

#### Bridge Deck Cure and Seal

(ODOT Champion: Walt Peters/Bruce Arnold (not in attendance) & FHWA Champion: Ralph Nguyen (not in attendance))

Walt: Final report is pending. Due to an application of anti-graffiti, contaminated the results of the silencure on the original planned location.

SPR funds to continue research at a new location. Consideration of reapplication in 12 years, that has been presented to Division Engineers.

District 4 is doing reapplication of silen. Other districts have done epoxy only. The issue is with the application of the anti-graffiti, the silen does not work when the two are mixed. Do we really need silen on the vertical surface? That's the issue. The anti-graffiti is silicone-based which sheds everything off. There are two different products, silen is to seal bridge decks. Silencure is to seal the bridge decks but also using it as a curing agent.

Discussions on this will be presented in the next DE meeting. To ensure this research is warranted to continue.

### **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: Raghu Kowshik)

Caitlyn: The process of retraining has started in the districts with the TIMs program. Renewed interest was had after the winter operations meeting. Currently replacing existing snowplow tablets with Samsara cameras. As of 01/30/24, 454 Samsara have been installed. The goal is to install the Samsara cameras in 500 ODOT vehicles. An additional 50 cameras are on order for the turnpike. The Samsara cameras have already shown to be beneficial. There have been multiple snowplow collisions (none of the snowplow drivers were at fault) the cameras recorded these events. The total number of collisions are still pending at this time. That information will be provided by the end of day, those numbers are closer to double digits and most of those accidents were rear collisions. The Pi-lits are in and are being distributed to all interstate maintenance crews of ODOT. Discussions have not been had with OTA to see if they are interested. Since this is our pilot, that is why we haven't discussed it with them. January 18<sup>th</sup>, 2024, a meeting was had with DPS regarding their integration of drones and the CAD system. We offered to share information about our snowplows with them. In addition, connections were made with Eric Canaday, DPS IT, this is going well. The new contacts at DPS are a welcome relationship. On the coordination side, we had a meeting in December with FHWA NextGen TIM NC17, to identify ODOT's needs for training and technical assistance. There's another meeting scheduled for March 5<sup>th</sup>. The website is currently being developed; discussions will be had to upload some of those videos there. At some point the public should see them, as it will impact them in an influenceable manner, but we do have to release them in a careful way. It will impact them as it did us, it was very impressionable. The system and everything about it will pay for itself. This could save us in the long run when it comes to lawsuits and such.

#### **Nighttime Visibility for Safety**

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

Marty: A class is scheduled for the first week in March with all our internal ODOT staff and some of our consultants' partners and the surrounding cities to come together for the lighting training course. To ensure we're all on the same page regarding what we're trying to accomplish with lighting on our roads. Light levels and how to design it and set it up. The final planning meeting is this week. In December the team got to drive and check signs on the interstate from Oklahoma City to the border. Different sections of I-35 & I-40 on sign reflectivity at night for documentation. Collecting the data to see how our interstate signages look like. Updates have been made to our stripping specifications to make it more performance based instead of product based. That is currently in review. This process has taken some time, it will be sent over to FHWA as soon as possible. A matrix is currently being built, with materials, and pavement specs with reflectivity data included. Would like to see about adding additional research on the positions of the headlights for both ODOT and OTA snowplows lights to ensure they are

facing and illuminating appropriately. Possibly to be added to next year's STIC incentive. All new installations have been switched from copper to aluminum to discourage theft. Theft is still occurring but not as prevalent.

### **STIC Incentive Projects:**

#### Expand Utility Surveying Capabilities

(ODOT Champions: Siv Sundaram & FHWA Champion: Scott Armstrong)

Siv: In the process of developing a GIS database for storing information. Utilities has been working with GIS in acquiring utility information collected during design survey on a GIS map. Utilities is currently providing proposed utility relocation files to share with contractors. A consultant was selected to update the outdated Construction Survey Manual. First task order is to capture current practices and compare them to other states best practices. The biggest roadblock we're experiencing is other DOTs hesitating to share their information with us. In some cases, it has been a security issue.

Siv is serving on the NCHRP panel where it's being looked at a national level to remove barriers in sharing utility engineering. The panel is in the process of selecting engineering surveys, selections for surveys will be in March.

#### Standing Committee on Special Initiatives

### **EDC-7 & STIC Innovation Combined Efforts:**

#### Strategic Workforce Development & Pre-Apprenticeship Stakeholder-Focused Training Program

(ODOT Champion: Jennifer Hankins & FHWA Champion: Souzan Bahavar)

Jennifer: Working with two non-profits organizations, Job Corp and CEO. The main focus of the positions would be for heavy equipment operators; the results of the survey showed it was the highest need, second to electricians. With ITS ramping up, the demand for engineers in those seats and control what is happening with the traffic lights etc. Discussion about the VO-techs to provide training for non-engineers. Like an engineer in training or apprenticeship of sorts. For some of the seats to be held by those to have that engineer evaluate more complicated issues.

### **Closed Project on Two-Coat Deck Seal:**

Modification should be considered on the final report to include ODOT's perspective as the cover letter.

#### Other Business:

- Submit FY24 STIC-funded proposals – Due by 06/03
- Submit EDC-7 progress reports (May 2023 through April 2024) – Due by 4/19

### **Closing Comments:**

#### Next Meetings/Events:

- April 24th 2024, STIC Quarterly Meeting Virtual