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## **ASCE January Meeting Minutes**

Speakers: Amy Wegner, PE, PTOE – Civil Engineer, Gannett Fleming TranSystems

Shivraj Patil, PE, PTOE – Traffic Engineering Team Leader, Gannett Fleming TranSystems

Topic: Wichita Transportation Management Center

Date: Wednesday, January 15, 2025

Location: Sedgwick County Emergency Communication Center

714 N. Main

Wichita, KS 67203

President Caleb Coltrane called the meeting to order at 12:00 pm and opened with announcements.

**Announcements**

* Hands on engineering will be happening each month and USGS is volunteering on February 1st.

The speakers were introduced. Amy Wegner and Shivraj Patil are with Gannett Fleming TranSystems. Both speakers are local to the Wichita area.

**Presentation Notes**

Amy Wegner opened the presentation by describing the purpose and the history of the Wichita Transportation Management Center. The TMC is co-located with the Sedgwick County Emergency Communications Center. The TMC began in 2009 with six cameras and six digital message signs (DMS) and has since expanded to include over 100 cameras, DMSs, sensors, and nineteen truck parking signs. Many of the devices are in the Wichita area, but several are spread out through the state as well. The TMC uses operations engineers which work 24/7 to ensure the system is up and running and to coordinate with agencies such as Sedgwick County and KDOT about incidents, crashes, roadwork, and KTA events to make sure they are correctly displayed on the KanDrive website. In 2019 the Wichita TMC took over these operations for the entire state except for the KC Metro Area.

Employees at the WTMC also manage several different types of traffic equipment and the system is managed by a series of sensors and interpretive software. They keep track of device uptimes, submit tickets to the maintenance contractor, and troubleshoot any issues. The cameras are CCTV and live video feeds. They are also Point-to-Zoom capable and can move to zoom in on an event; however, events are not recorded. The cameras were added to KanDrive in 2020. The Digital Message Signs (DMS) display messages which follow standard KDOT and MUTCD formats. Typically a safety message is displayed on Fridays and Saturdays during peak travel periods. Drivers usually have about 6-8 seconds to view the sign. Traffic sensors are updated every thirty seconds and are used to determine any slow-downs as a result of incidents or weather. These sensors are what determine the “congestion colors” that show up on the KanDrive map. The University of Minnesota has designed the software that determines the amount of available truck parking. The software works by using a camera to count the number of trucks parked in a certain area and then by displaying the number of available spaces.

One of the most beneficial improvements has been the Truck Overturn Protection System. At the K-96 and US-54 interchange on the north side of Wichita, there used to be several truck overturns per year. The sensor works by detecting the speed that the truck is travelling and if the truck is travelling a certain speed then a warning message will show. The Truck Overturn Protection System (TOPS) has greatly reduced the number of truck rollovers in recent years.

All of the sensors output to KanDrive, the public-facing side of the system. The non-public facing side of the system is referred to as KaITS. Castle Rock is the software developer. KanDrive is currently compatible with Apple CarPlay, Alexa, and soon it will be compatible with Android Auto.

Another relatively new feature of the traffic management system is oversize load tracking. When a driver with an oversized load enters the state, they will enter their permit and then KanDrive will track it as it moves across the state. One example of this in action is the US-83 oversize load corridor; employees in the traffic management system will post signs as the oversize load moves through the corridor. This helps reduce accidents when people try to pass the oversize load.

The Traffic Management Center (TMC) puts out a report to KDOT every year. This report helps KDOT track the uptime of the system, identify hot spots, and track incident frequency. For Traffic Incident Management (TIM), the TMC staff will do a four hour training with new first responders on how to track incidents. TMC staff will also coordinate with other agencies to create a plan for incident management during winter weather.

Future projects may include a kiosk with visible videos, kind of like an iPad, at location such as the Kansas City airport to give drivers the chance to review road conditions before heading out. The TMC is also looking at doing a drive speed warning in McPherson. Finally, beyond the highways and the sensors displayed on KanDrive, there are other projects such as floodgates near White Cloud near the Kansas/Missouri border. They are automatic gates that close when floodwaters are detected, thereby closing the road. This can reduce the risk for emergency response staff who will no longer have to go out during flooding conditions to manually close the road.

Attendees then received a tour of the TMC which was given by both Amy Wegner and another employee of the Sedgwick County Emergency Communications Center. Attendees were able to see how the Sedgwick County 911 system works, how an operator can add a message to the digital message signs, and how the highway cameras are visible to operators.

Meeting adjourned by Vice-President Macee Crowell at 1:10 p.m.

Minutes respectfully submitted by Secretary Allison Atkinson.

**Meeting Attendees**

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| 1 | Allison | Atkinson |
| 2 | Scott | Bernhardt |
| 3 | Caleb | Coltrane |
| 4 | Macee | Crowell |
| 5 | Ahmad | Farraj |
| 6 | Harlan | Foraker |
| 7 | Derek | Hake |
| 8 | Sadiksha | Katwal |
| 9 | Derek | Kratzer |
| 10 | Steve | Lackey |
| 11 | Ky | Louanghaksaphone |
| 12 | Dakota | McKee |
| 13 | Daniel | Mealiff |
| 14 | Logan | Mills |
| 15 | Tia | Raamot |
| 16 | Behrooz | Rahbar |
| 17 | Garrett | Reed |
| 18 | Jessica | Rhein |
| 19 | Kanchan | Sapkota |
| 20 | Jessica | Slavik |
| 21 | Anne | Sephens |
| 22 | Luke | Vohs |
| 23 | Amy | Wegner |
| 24 | Shivraj | Patil |
| 25 | Larry | Schaler |