Oklahoma Construction App

By Oklahoma Department of Transportation
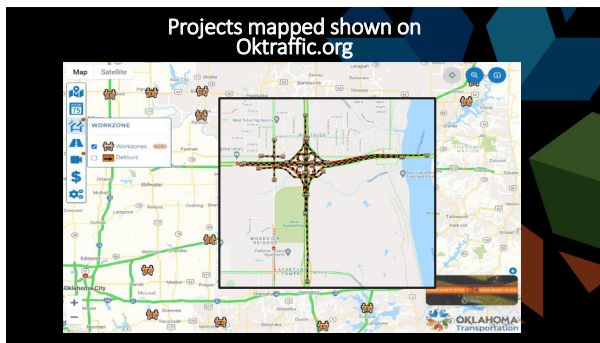12/28/2023

Benefits Statement

The Oklahoma Department of Transportation (ODOT) created Oktraffic.org, a comprehensive traffic information platform that integrates various data sources to reduce incidents and congestion, particularly in construction zones. They developed the "Oklahoma Construction App" for precise project location data collection and streamlined internal organization. Local news channels and the public rely on Oktraffic.org for traffic updates. It benefits ODOT employees by enhancing project organization and communication, with around 85% of projects mapped at all times. This initiative improves overall state communication and collaboration, benefiting both the public and ODOT.

In this case study you will learn:

1. How Oktraffic.org aggregates Google, Waze, NOAA weather, cameras, and more for extensive traffic information.

2. How the Oklahoma Construction App gathers precise project details, reducing incidents and congestion.

3. How real-time work zone updates improve safety and reduce congestion. Enhanced communication and 85% project mapping benefit ODOT and third parties.
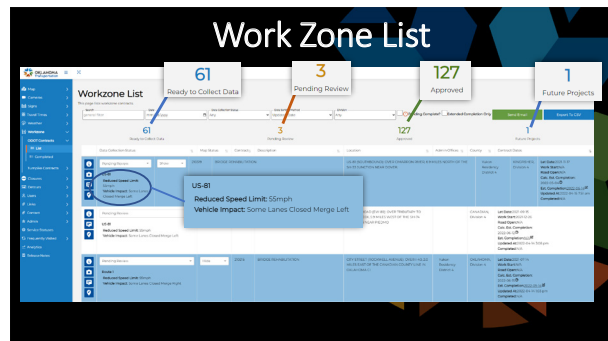
BACKGROUND

We developed Oktraffic.org to be the public's "go-to" source for all traffic related information. First, we started with the base map layer and added Google and Waze traffic data. Then, we enhanced the map by incorporating National Oceanic and Atmospheric Administration (NOAA) weather data. Afterwards, we added web cameras, Dynamic MessageSigns (DMS), and Sensor Cameras to the map. Our next step was to integrate the construction projects on the public site. We designed a unique way to collect that data (TheOklahoma Construction App). We ultimately wanted to reduce the number of incidents, queue times, and frustration. Since construction zones are a high risk for incidents, we knew that we needed to provide exact project location to better inform our travelers. We know that providing this information to the public will keep them in the loop of expected slowdowns, changing traffic conditions, and construction zones. Which will ultimately lead to reduced congestion and improved safety.

Projects mapped shown on Oktraffic.org

TSMO PLANNING, STRATEGIES AND DEPLOYMENT

We began by integrating the ODOT Construction Data into the internal Oktraffic.org website. This data included all the projects that would affect lanes of travel on the highway. Every month we pull from the ODOT data which gives us the new/upcoming projects that will need to be mapped out. To map out these

projects we created a private mobile app called the "Oklahoma Construction App". The app is used by each Division Construction Engineer (or whomever they appoint). They go out and physically drive the construction zone to get an accurate location reading for the length, start, and end of the work zone. The app tracks location, has video and picture capabilities, and has a section for comments and notes. All the data collected through the app is then submitted to the Oktraffic.org website. Once submitted to the website, the team reviews and approves the mapped data to check that the information submitted is accurate. Once the data is approved, we make it public on Oktraffic.org!
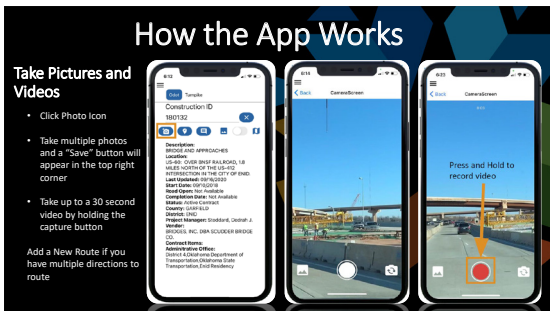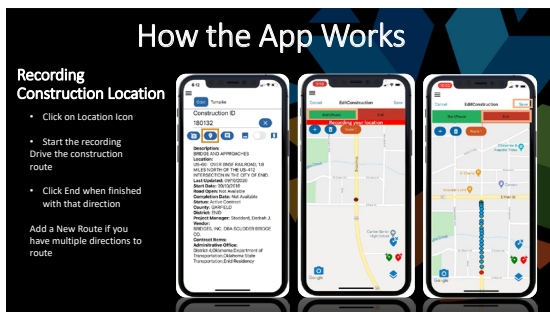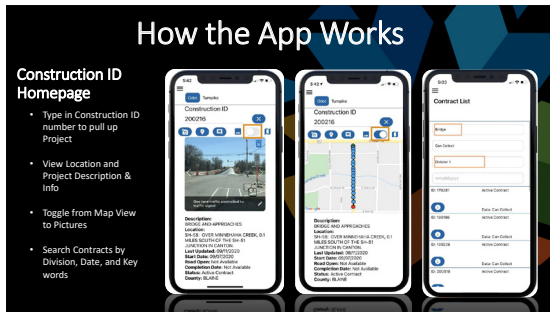

Work Zone List

COMMUNICATIONS PLANNING AND EXECUTION

The Oklahoma Construction App has succeeded being a great tool internally, keeping each District organized and on-track. We are currently working with ODOT's Traffic Division to start recording videos of the construction zones from the Oklahoma Construction App for the audits they conduct on each project. The construction data from Oktraffic.org is frequently used by our local news channels as an additional source of information when reporting traffic conditions and new work zones. The Construction App and Oktraffic.org have become a reliable source of information for all Oklahoma traffic related inquiries. We work with ODOT's Strategic Communication group to promote our website through social media. In addition, we work together to

promote work zone safety by linking to information on their website.

improved tremendously as we continually work as a team. As construction projects and their impact to the public are identified, Oktraffic. org will increase its ability to reduce incidents, manage traffic, extend knowledge, and improve safety for our workers and drivers.

OUTCOME, BENEFITS AND LEARNINGS

The Oklahoma Construction App's largest benefit is the continuously updated information to the public on work zones and traffic conditions. With this information they can make better driving decisions from multiple sources, as our data is available for third party services. The Construction App has also positively impacted ODOT employees. Each District has become more responsible over their work zones and keep their projects organized and on schedule. We typically have 85% or more of our projects mapped out at all times. The overall communication throughout the State has