TxDOT Innovations and Technology Deployment Briefs Nighttime Inspection Suite of Applications



the reflectivity of signs and other markings. Protocol dictated that the inspection vehicle stop on the roadside to manually record information. This method of recording data created a potentially unsafe scenario for crews and the traveling public. Additionally, this method lacked consistency and uniformity for data collection methods, sharing, and retention.

SOLUTION

Provide technology that allows for in-vehicle assessment using the Nighttime Inspection App. Utilize transit vans outfitted with monitors that show the dashboard in real-time for night inspections. This allows people in the back seat to see and record everything in real-time. The nighttime driving van also has GPS tracking, which allows the crew to record and log asset conditions easily.

BENEFITS

- Eliminates need for TxDOT personnel to stop on the side of the road to write on a tablet, making data collection much faster, safer, and easier for the crew and safer for the traveling public.
- Data collection is in real-time and uniform across Districts and/or within Districts.
- Data is shareable and more accurate.
- The visual representation is quicker and easier to interpret than the same information on a spreadsheet.
- Documentation is more accurate and easier for prioritizing and tracking repairs.
- Ease of use—push a button and record a deficiency with a GPS location.
- Use of sign inventory standards.
- Ease of transitioning new employees.
- Easier to review repeat issues and locations.





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KEY TASKS

- Equip 15-passenger van with overhead screens displaying dash camera views and mirroring the app.
- Train personnel on the use of the app.
- All passengers see inspection in real-time.
- Multiple personnel able to see and assess at the same time.
- Inspection conducted in less time with more input.
- Coordinates report of incident and images are on a map with GPS.

DATA SOURCES

Dash cameras provide real-time display for all personnel in the van. Data are transmitted and accurately displayed on a map.

PROACTIVE APPROACH

This new Nighttime Inspection App is safer for the crews and traveling public. Data gathering is easier, more accurate, and shareable, which allows for greater collaboration between Districts for efforts such as contract bidding. Further use will determine other inventory assessment applicability.



Nighttime Inspection Locations.



Nighttime Inspection Apps.



Data Report.



POINT OF CONTACT

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