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Collaboration in In-Service Performance Evaluation of Roadside Safety Hardware

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Abstract

The Iowa DOT is collaborating with participating enforcement agencies to have officers responding to crashes tag damaged infrastructure (traffic barriers, lighting features, signs, and fences) along the right of way on the primary road system. These tags allow the Iowa DOT to tie crash information to damage and link to our claims system making the transfer of information easier to manage.

After responding to a crash on a primary road where state infrastructure is damaged, the responding officer will create a pink tag to attach to damaged infrastructure. The tags have the incident ID (where available), agency, responding officer, and date. In cases where multiple crashes occur in the same location, or a single crash damaging multiple features, multiple tags can be attached. Iowa DOT maintenance field staff then log an inspection of the damaged item and enter the pink tags information as part of that process in our existing inspection application, then they log the damage costs in a cost memo tied to the inspection and then a report will be generated for our claims management staff.

This is based off a project initiated by the Indiana DOT, where they have been able to recoup \$7 million a year in their state as compared to \$1.5 million a year before this program was deployed.

Beyond the monetary savings for the taxpayers of Iowa and improved efficiency of sharing information, our safety and design teams are very interested in seeing how our roadside safety features are performing in a crash. Do signs and lighting pole breakaway like they are supposed to and do traffic barriers displace correctly. Does saving cost during initial install out weight the time and cost of our maintenance staff to do the repair. By tying the asset data, crash information and cost together, this allows the DOT to make better decisions about where and what hardware is installed in the roadway. The DOT is also taking part in a Pooled Fund with several other states looking at in-service performance of roadside safety hardware.

To learn more about the program see the videos and details about the crash tag kits here:
<https://iowadot.gov/crashtag>.