SPUR Meeting Notes: Effective Data Use

August 2023

Meeting Summary

Fatalities and injuries are often the focus of trespass and suicide related data exploration, but valuable data may come in many forms and from a wide variety of places. Video data, analyzed by hand or using advanced technology, may be helpful for determining trespass event frequency (without incident). Talking with employees is often overlooked as a source of information to improve safety decision making but can be very useful. Effective data use will help agencies explore trends, inform decision making, and determine the best mitigation strategies.

Key Takeaways

There are many ways to collect data to be used in an effective way in combating rail trespass and suicide:

- Using cameras to gather data about trespassing events.
    - Live camera surveillance footage can provide real-time information about dangers at stations and crossings.
- Using Artificial Intelligence (AI) to detect trespass activity.
    - AI can be used to augment camera surveillance to more efficiently analyze data to reveal insights.
    - Cameras with AI software can detect trespassers and build a risk profile for dates/times when trespass activity was higher.
    - AI software can help to identify what paths are used to access the track area, allowing railroads or communities to use this info to implement mitigation strategies.
- Interviewing staff who have been involved in an intervention or witnessed certain events may be helpful for knowing how to best approach these types of situations or what training is most critical.
- Interviewing front-line staff about completed interventions.
- Data collection can also include interviews with trespassers about their motivations and knowledge about trespassing as well as certain demographic information.
- Collecting close call event data.
- Geofencing, which may be used to slow trains down using alerts when someone has entered the right-of-way.

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