

BRIDGE COLLISION NOTIFICATION SYSTEM

SYSTEM OVERVIEW



ACCELEROMETERS

Accelerometer sensors that detect and record the impact from collisions or "scrapes" are mounted to bridges.

- A learning algorithm is used to filter out normal traffic noise/vibration/movement.
- The sensor is mounted to the center of the bridge so it's secure and can detect collisions in either direction.
- Multiple accelerometers are used to pinpoint the location of the collision.



CAMERAS

Cameras on both sides of the bridge continuously take images of the vehicles coming and going. A bridge impact triggers the camera to save images, logged with a time stamp.

- All images are saved in a buffer and overwritten if no collisions are detected. When an impact is detected, pictures and data are saved locally and to the cloud.
- The system uses two bridge center cameras, one camera pointing in each direction.
- Two side cameras (or pole-mounted up or downstream of traffic) are used for a more comprehensive and complete view and to capture license plate information.



WIFI/CELLULAR CONNECTION

A Wifi and/or cellular connection is used to transmit notification messages that can be used to initiate an on-site investigation.

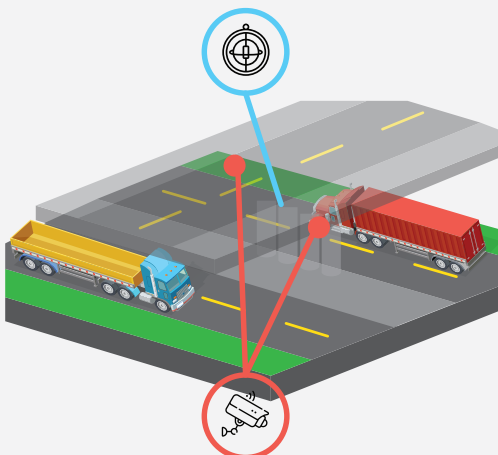
A text message and an email are sent to the recipients that you specify. You and the other recipients can then log into the system and review the images and data remotely.



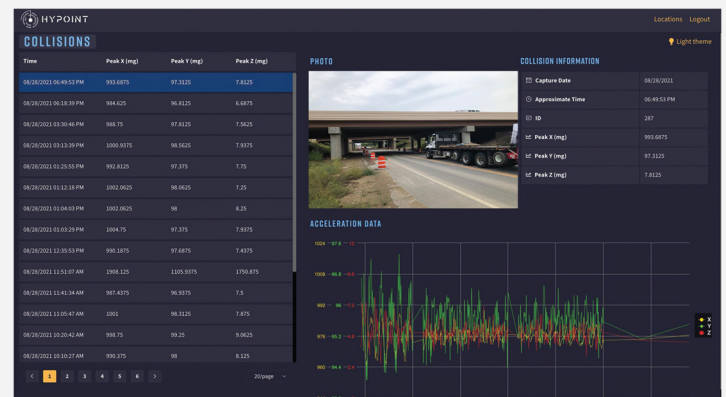
DATA PORTAL

For each incident, our software logs the impact time, location, and any images associated with the incident so you have all the data you need to fully review what happened.

System records severity of impact and sends notification to client.



Cameras record vehicle and impact location.



Bridge collisions dashboard