

DHS Science and Technology Directorate

Integration of Video Data to Improve Situational Awareness in Response to an Active Shooter Event

Improving Situational Awareness through Enhanced Information Technology Infrastructure

First responders rarely have an accurate picture of what is happening inside of a school during an emergency. The Department of Homeland Security Science and Technology Directorate (S&T) sponsored the Johns Hopkins University Applied Physics Laboratory (JHU/APL) and its subcontractor, SpectraRep, to develop an enhanced information technology infrastructure to better integrate and distribute video to address this issue and design an exercise to evaluate the potential of video integration to improve school safety.

Integrating Video Data and Assessing Impact

JHU/APL, under the direction of S&T, is supporting a field exercise to assess requirements related to integrating and using video data for improved situational awareness within the Adams Central Community School System in Indiana for a critical event, such as an active shooter. The exercise will focus on the following capabilities:

- Improved Environmental Response/Health and Safety by reducing or eliminating surprises when responding to an incident;
- Better incident command decisions based on enhanced Situational Assessment; and

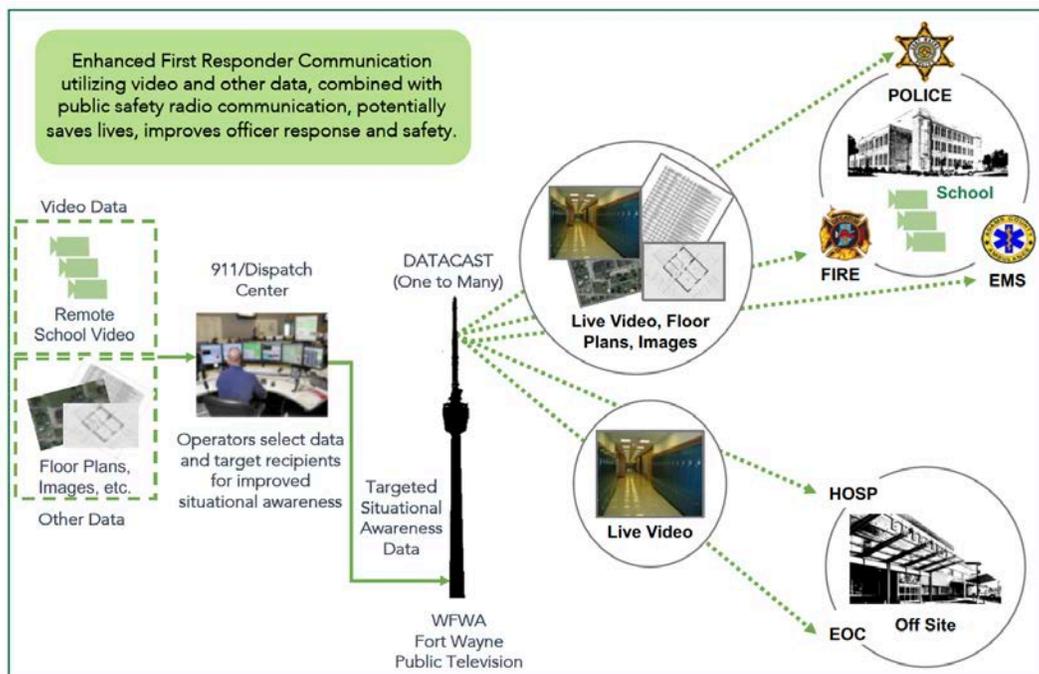
- Improved time-to-action for better Operational Coordination & Operational Communications.

Camera feeds from the Adams Central School's GeoVision security system have been integrated into the Adams County 911/Dispatch Center. Dispatch personnel can then review the video streams from different cameras to gain better situational awareness during an incident. They can select relevant camera feeds and forward them to the command officers outside the school or to other agencies, including the bomb squad, emergency medical services (EMS) and hospitals.

Datacasting provides a means to stream relevant video and other data to laptops located in command centers, on-scene command posts or stationary data terminals. Selected content is securely inserted into the television signal of WFWA (Fort Wayne, Indiana) to broadcast. Access controls and encryption are applied to ensure that only authorized, targeted recipients can access the content. DHS S&T will evaluate system performance and how it enhances mission response.

Partners:

- Adams County Sheriff's Office
- Adams County Emergency Management Agency
- Adams Central Community Schools
- Adams County EMS
- Adams Memorial Hospital
- Berne Police Department
- Berne Volunteer Fire Department
- Decatur Police Department
- Decatur Fire Department
- Geneva Police Department
- Geneva Volunteer Fire Department
- Indiana Integrated Public Safety Commission
- Indiana DHS
- Preble Volunteer Fire Department
- Monroe Marshal
- Monroe Volunteer Fire Department
- PBS39 WFWA



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