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Tri-County School Safety Pilot Project

St. Cloud, Minnesota

Project Quick Facts

Goal

- Improve emergency personnel's situational awareness and response time to school crises.

Approach

- Convert paper-based floorplans of seven pilot schools into GIS indoor maps for dispatch and emergency response.
- Train dispatch and response teams on effective use of GIS data.

Outcome

- Accurate, detailed indoor maps available to first responders.
- Mapping project is expanding to other schools and community facilities in the Tri-County area.

Indoor Map of Tri-County School

Project Overview

The Greater St. Cloud Public Safety Foundation is a collaboration of the private sector and public servants to create the support structure necessary to build trust in the community. The Foundation promotes efforts that support fire, police, and emergency service providers in Benton, Sherburne and Stearns Counties in Central Minnesota.

The Tri-County School Safety Pilot Project was a partnership between the Foundation, local school districts, county 9-1-1 emergency dispatch centers, and GeoComm. Together, this effort aimed to create detailed GIS indoor maps of seven pilot schools in the Tri-County area to improve response times to school incidents. The maps were shared with dispatch centers to be used in their 9-1-1 applications.

"This pilot project was a multi-faceted approach that considered the needs of local schools and recommendations from emergency responders," said Tom Grones, founder of GeoComm and former board member of the Foundation. *"The wider Tri-County community immediately understood the connection between indoor maps and school safety. Everyone worked collaboratively to make this project smooth and efficient."*

Indoor Maps Support Faster and Safer Crisis Response

Schools participating in the pilot project had architectural maps of their campuses, but most were paper copies and not easily available to emergency responders.

GeoComm, using Esri technology, applied its indoor mapping expertise to create accurate, enhanced GIS school maps for emergency response. The scope of the pilot project included:

- The creation of indoor maps at seven pilot schools.

- Upgrades of the mapping software at each county dispatch center, ensuring easy access to the schools' indoor maps.

- A Rave panic button for school faculty and administrators, giving them immediate connection to 9-1-1 services and the ability to communicate with other school staff in a crisis.

"The school floor plans were turned into GIS data by our teams using our several decades of public safety experience and patented technology," said Dan Craigie, Strategic Development Director of Public Safety GIS Content at GeoComm. *"Digital GIS maps are more accurate and actionable than paper maps, and we ensure the GIS maps stay updated, so responders always have a true representation of a location."*

Within a few months of the pilot project kick-off, the indoor maps were accessible for telecommunications and first responders in GeoComm Maps and other public safety mapping applications.

Project Results

Using GeoComm's indoor mapping technology, 9-1-1 telecommunicators and first responders can now pinpoint the exact location of an emergency call and the safest, most efficient route to address the issue.

*Mapping a school location **without** an indoor map within the 9-1-1 mapping application*

*Mapping a school location **with** an indoor map within the 9-1-1 mapping application*

"Most people think of active shooter scenarios when it comes to school safety, but there is a wide range of crises that demand a response," said Jim Steve, chairman of the board of the Greater St. Cloud Public Safety Foundation and former commander of the St. Cloud Police Department. **"Emergency services commonly respond to things like medical emergencies, fights or severe weather. Indoor maps improve response times in all types of events."**

Next Steps

With the successful completion of the pilot schools, GeoComm is taking the indoor mapping technology to other schools and major facilities in the areas, including higher education and health care campuses.

Applying map data effectively

The Foundation and GeoComm partnered to train Tri-County dispatch and responders on maximizing the benefits of indoor maps. "Maps alone aren't the answer," explained Craigie. "It's important to train the responders and put procedures in place to operationalize the map data."
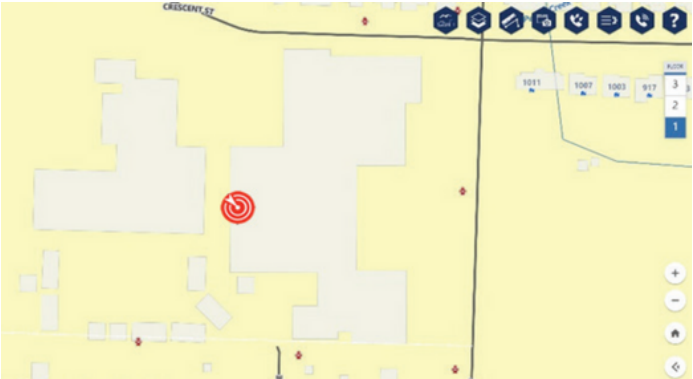
In the case of a major incident, many jurisdictions are likely to respond. They may not know the local area or the building, which makes indoor GIS maps especially essential for outside entities.

"Dispatch can now direct responders very specifically and accurately," said Steve. "For a major incident, the maps help us coordinate and deploy a major response."

Better visibility and situational awareness

Detailed indoor maps help first responders prepare and get to the emergency faster, while also having better situational awareness of their own safety. In addition, area responders can view locations of security cameras so they can see first-hand what's going on inside a building.

For instance, in the case of a classroom fire, responders may be directed to the north side of a building, and then to take 'Stairwell A' to the second floor where the 'Science Room' is located on the left – while being careful of the 'Chemical Storage Closet' that is three doors down.

"I'm very proud of the collaboration between the three counties and all the stakeholders involved," said Steve. **"If other communities want to replicate a project like this, I recommend getting a group of community members together – even if it's an informal group – to lead the charge."**

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