

Denco 9-1-1 District Implements Indoor Mapping Program for K-12 and Universities

Providing 9-1-1 Actionable Location Information



Image - Denco 9-1-1 telecommunicator accessing indoor map

Addressing Challenges of Locating 9-1-1 Indoor Callers

Denco Area 9-1-1 District (Denco 9-1-1) initiated an Indoor Map Development Project with Geo-Comm, Inc. (GeoComm) in late 2019. The project goal was to address the challenges of locating 9-1-1 callers indoors by utilizing indoor maps and Denco 9-1-1's Geographic Information Systems (GIS) data to extend Emergency Communications Center (ECC) mapping capabilities. Indoor maps can have a tremendous impact on public safety response by providing better situational awareness for responders, visual representation for key buildings, and improving emergency response times.



Denco 9-1-1 serves a population of **over 800,000** in **33 jurisdictions** throughout North Texas.

“Recognizing tremendous public safety benefits, the Denco 9-1-1 Board was very supportive of the adoption of indoor mapping for critical locations. The District continues to work with industry partners to enhance location accuracy of 9-1-1 callers. As location accuracy improves, the emergency communications centers in the district will receive location information **identifying not only the building from where the 9-1-1 call originates, but more precise location within the building.** The addition of indoor maps integrated with our 9-1-1 software supports emergency personnel identification of specific room locations of 9-1-1 callers.”

— **Greg Ballentine**, Executive Director, Denco Area 9-1-1 District

Project Quick Facts

GOAL

Implement an indoor mapping program for schools aimed at furthering indoor location GIS data also extends ECC mapping capabilities.

APPROACH

- Provided education about urgency of indoor mapping and challenges it addresses for ECCs, K-12 schools and Universities
- Requested school floor plan resources
- Analyzed school floor plan resources
- Leveraging Esri technology, GeoComm created indoor dataset for utilizing quality floor plan resources or scanned output data to provide an indoor dataset from GeoComm for use in the Denco 9-1-1's dispatch mapping software

OUTCOME

~35,000,000 sq ft of public, private and higher education school buildings mapped out across the Denco 9-1-1 service area

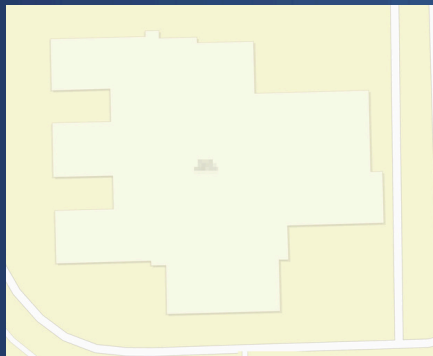


**431
School
Buildings**
mapped to date

Project Results

These are two images of a map with the same location of a Denco 9-1-1 area school. The left image is the 9-1-1 map application view of a school without an indoor map of the school building. The second image on the right is the 9-1-1 map application view of a school with an indoor map of the school building. These visuals illustrate the difference and value of the indoor map.

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



With the addition of an indoor map, **the Denco 9-1-1 telecommunicator will be able to clearly tell the 9-1-1 call is coming from inside the school** including specifics such as room number, common area locations, and more.



“We are excited about the improved location information our Emergency Communications Center is able to provide our first responders” - Angela Sherrod, Public Safety Communications Coordinator for the city of Lewisville

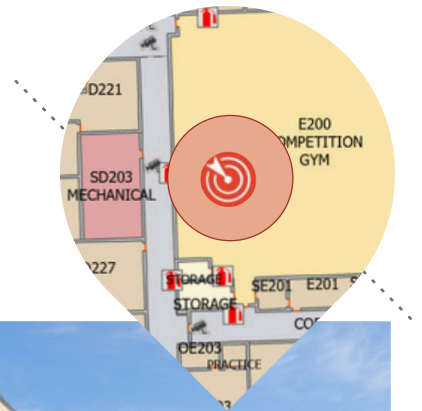
Angela further explained, “The exact caller location in the school and more context about the surroundings provides better situational awareness for responders. These map enhancements will help us save valuable response time to 9-1-1 calls from schools.”

Next Steps

Denco 9-1-1 continues to work with area schools to ensure the indoor map data is current. In addition, Denco 9-1-1 is also focusing on key buildings to add to the indoor mapping program such as government buildings, health care facilities, event venues, transportation hubs, churches, and more.

“This program has generated a lot of excitement in the Denco 9-1-1 area. Location accuracy has long been a challenge for the public safety industry, especially indoors, since it can be difficult for a telecommunicator to pinpoint the exact location of the caller’s device. With an indoor mapping program and continued work with the carriers, **we can begin to fully unlock the location accuracy potential of GIS data** precision like sub-address elements and indoor maps.”

— Vanessa Green-Montgomery, ENP, GIS Supervisor, Denco Area 9-1-1 District



For more information about the Denco 9-1-1 indoor mapping program or to begin working with GeoComm on your indoor mapping program — check out the excitement by [clicking here](#).