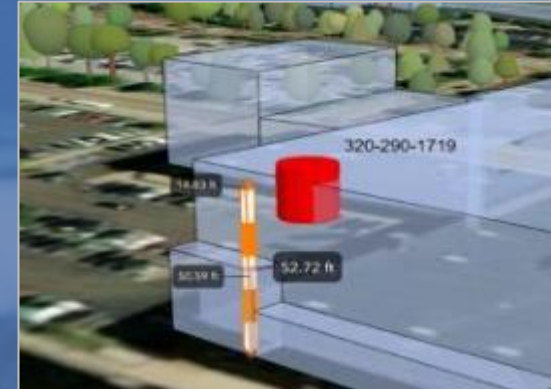




 Building detected at this location:

Address: 601 West Saint Germain Street, Saint Cloud, MN
Building: LAHR Building (3 floors)
Tenant: GEOCOMM
HAT: 104 feet above ground
Floor: caller estimated to be on floor 2
Accuracy: this is a high accuracy estimate

[ABOUT THIS SERVICE](#)



Using Z-Axis and Indoor Maps to Locate 9-1-1 Callers Faster

October 26, 2023



**601 W Saint German ST
Floor 2
Room 202
Saint Cloud
Minnesota**

**Latitude: 45.567066°
Longitude: -94.183014°
HAE: 200 m**



Translating Height Above Ellipsoid (HAE) into a Caller Location



200M HAE

18M HAT

2.5M HAT

Latitude: 45.567066°
Longitude: -94.183014°
HAE: 200 m

Definition of Dispatchable Location:

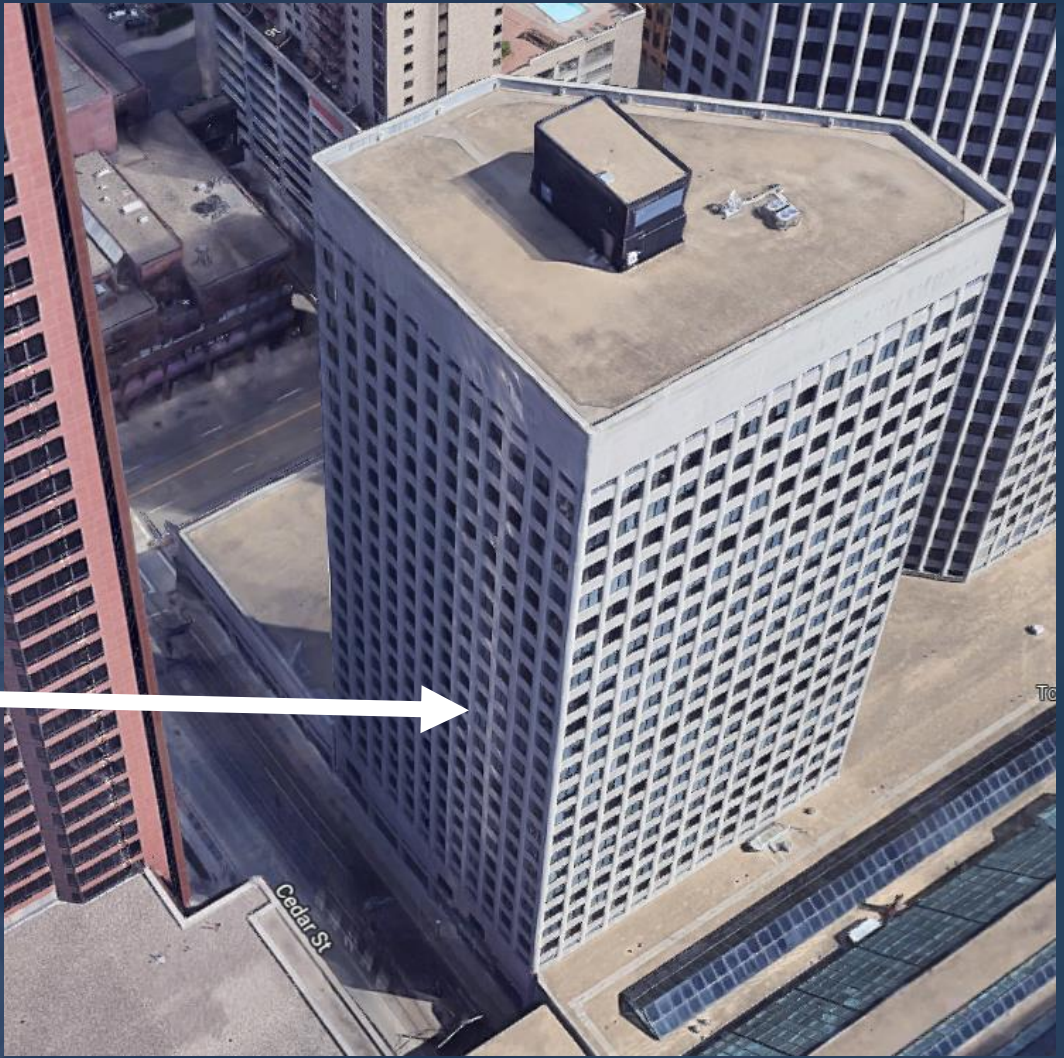
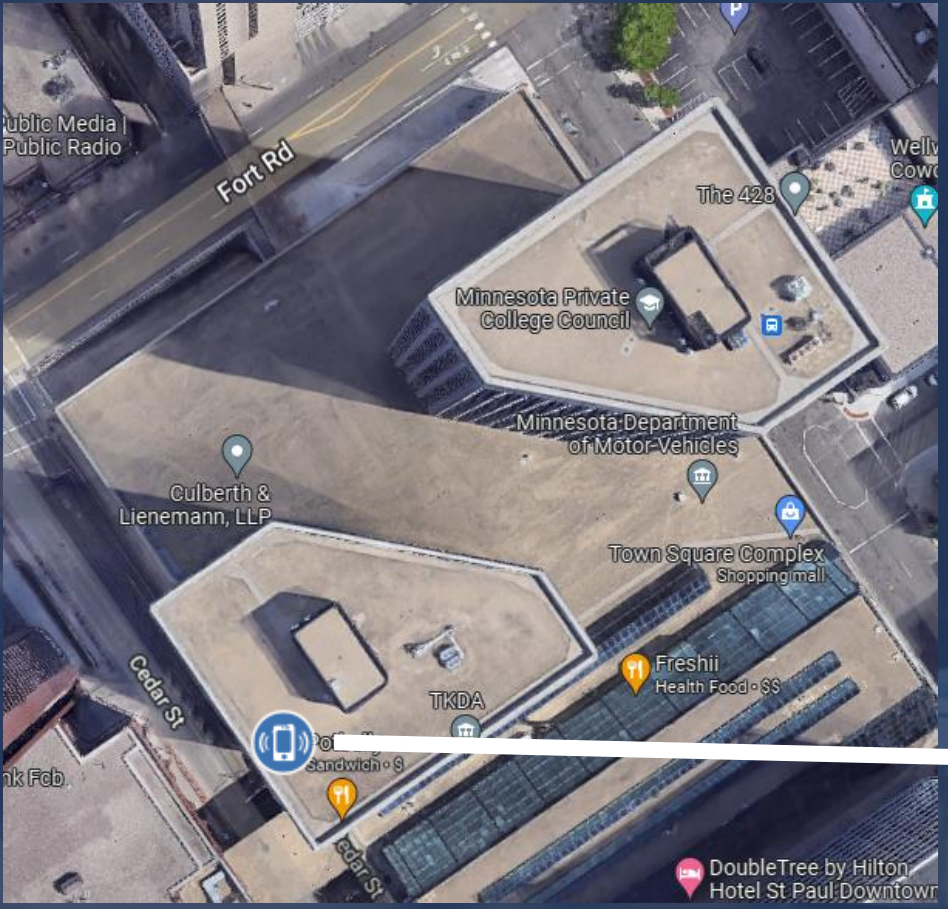
Dispatchable location is the validated street address of the 9-1-1 calling party, plus additional information such as suite, apartment, or similar information necessary to adequately identify the location of the caller.

For 9-1-1 calls placed from multi-story buildings or campus environments, dispatchable location will typically require specific floor and room information in addition to the street address.

Why is a dispatchable location important- 2D Example



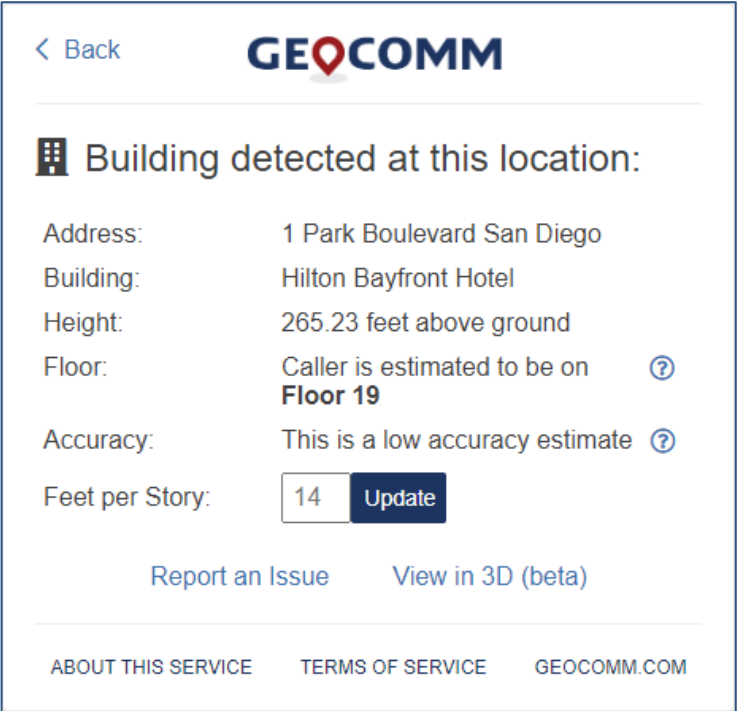
Why is a dispatchable location important- 3D Example



Delivering a Dispatchable Location

Vertical Location Services converts latitude, longitude, and height above ellipsoid or orthometric height into dispatchable locations comprising height above ground, estimated street address, building name, and floor level, along with 3D building and 9-1-1 caller location visualization:

Open a web interface via URL parameters:

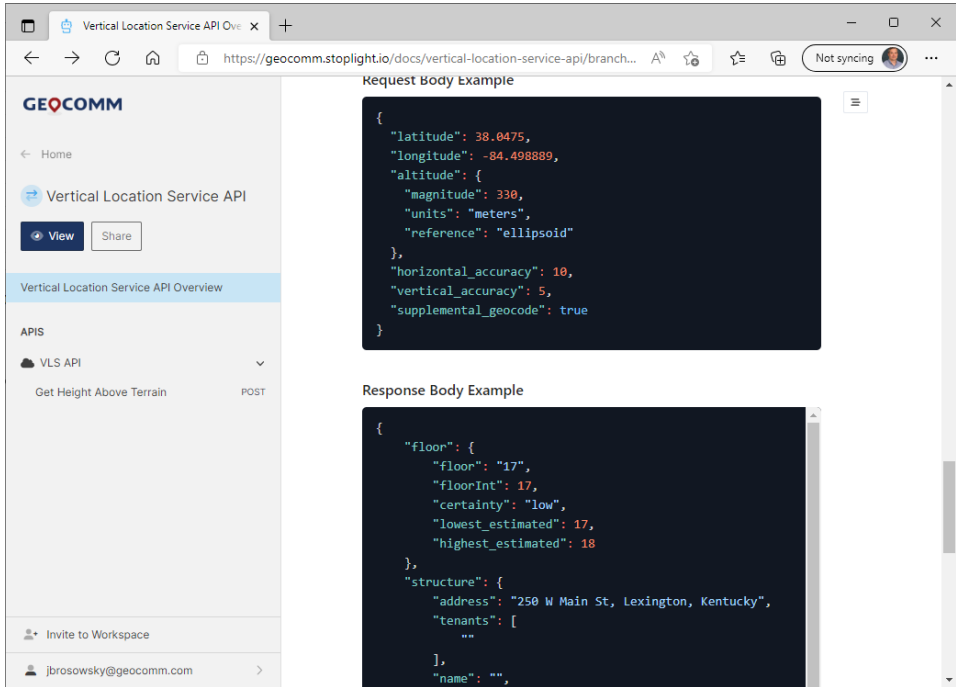


The screenshot shows a web interface for GeoComm. At the top, there is a 'Back' button and the GeoComm logo. Below the logo, a heading reads 'Building detected at this location:'. The main content area displays the following information:

- Address: 1 Park Boulevard San Diego
- Building: Hilton Bayfront Hotel
- Height: 265.23 feet above ground
- Floor: Caller is estimated to be on **Floor 19** (with a help icon)
- Accuracy: This is a low accuracy estimate (with a help icon)
- Feet per Story: 14 (with an 'Update' button)

At the bottom of the main content area, there are two buttons: 'Report an Issue' and 'View in 3D (beta)'. The footer contains links for 'ABOUT THIS SERVICE', 'TERMS OF SERVICE', and 'GEOCOMM.COM'.

An application can call the GeoComm VLS API directly:



The screenshot shows a web browser displaying the GeoComm VLS API documentation. The browser's address bar shows the URL: <https://geocomm.stoptlight.io/docs/vertical-location-service-api/branch...>. The page content includes the GeoComm logo, a 'Home' button, and a 'Vertical Location Service API' section with 'View' and 'Share' buttons. Below this is a 'Vertical Location Service API Overview' section, followed by an 'APIS' section listing 'VLS API' and 'Get Height Above Terrain' (POST). The right side of the page shows a 'Request Body Example' and a 'Response Body Example' with JSON code blocks.

```
Request Body Example
```

```
{
  "latitude": 38.0475,
  "longitude": -84.498889,
  "altitude": {
    "magnitude": 330,
    "units": "meters",
    "reference": "ellipsoid"
  },
  "horizontal_accuracy": 10,
  "vertical_accuracy": 5,
  "supplemental_geocode": true
}
```

```
Response Body Example
```

```
{
  "floor": {
    "floor": "17",
    "floorInt": 17,
    "certainty": "low",
    "lowest_estimated": 17,
    "highest_estimated": 18
  },
  "structure": {
    "address": "250 W Main St, Lexington, Kentucky",
    "tenants": [
      ""
    ],
    "name": ""
  }
}
```

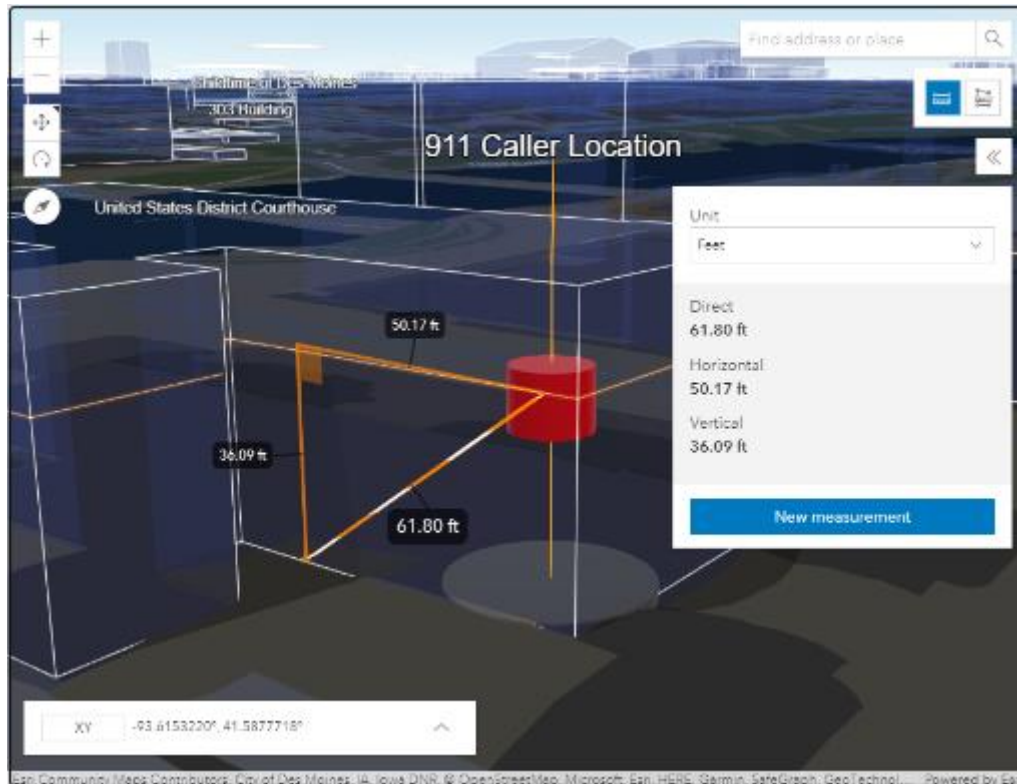
3D Mapping of 911 Call Data

Tactical 9-1-1 caller visualization and mapping. Can run stand-alone or integrated into existing 9-1-1, CAD, and responder solutions.



3D Tactical Tools


3D tactical mapping and visualization of 9-1-1 caller location including 3D measuring tools and interactive line of sight calculation.



Local 3D WebScenes

Include locally created Esri 3D Webscenes into 3D View from your local LiDAR flights, feature tags, and 3D Mesh data.

< Back **GEOCOMM**

 Building detected at this location:

Showing results near 40.7409, -73.9897 ↔ 82 feet ?

Building: Flatiron Building

Address: **175 5th Avenue New York
Floor 17**

Height: 229.13 feet above ground ↑ 20 feet ?

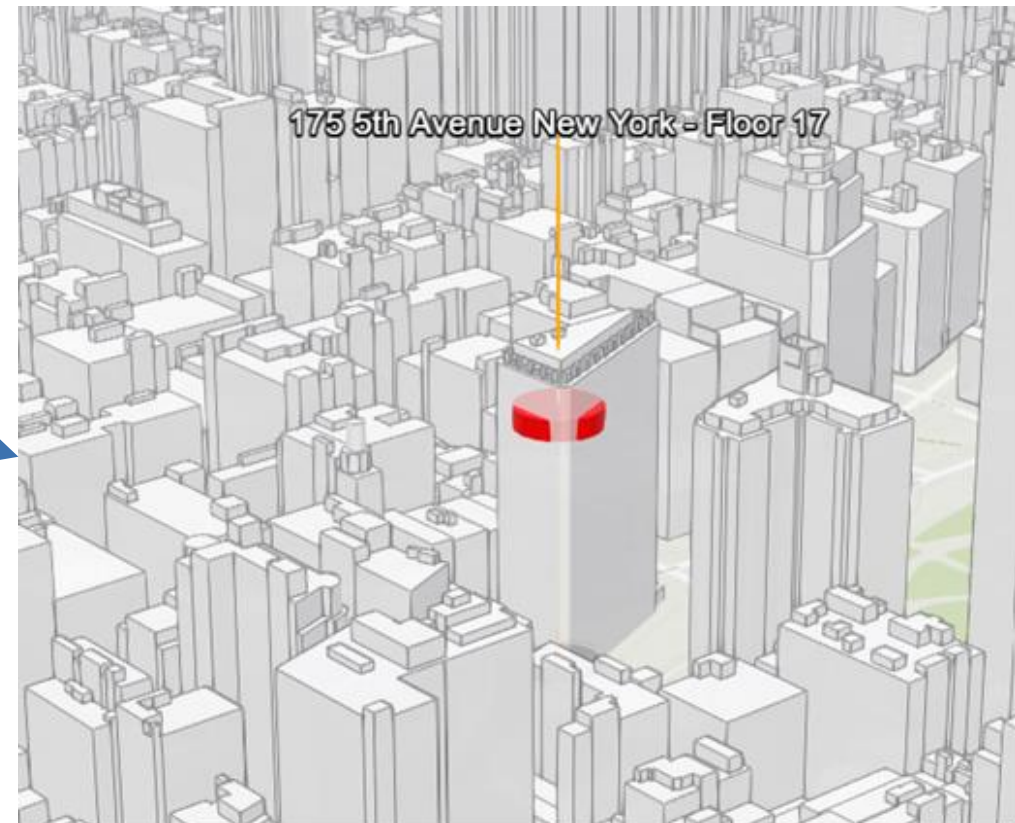
Floor: Caller is estimated to be on **Floor 17** (Likely range: Floor 16 - 17) ?

Accuracy: This is a low accuracy estimate ?

Feet per Story: [Update](#)

[View in 3D \(beta\)](#) [View Indoor Map](#) [Provide Feedback](#)

[ABOUT THIS SERVICE](#) [TERMS OF SERVICE](#) [GEOCOMM.COM](#)



Z-Axis and Indoor Maps

Integrate with Locally Authoritative Data, including GeoComm Indoor Maps, to improve accuracy of the translation, along with important contextual information.

[Back](#) **GEOCOMM**

Building detected at this location:

Address: 4101 WEST DIVISION STREET ST CLOUD MN 1F1 ↔ 82 feet ?

Building: CROSSROADS CENTER MALL

Height: 4.9 feet above ground ↓ 20 feet ?

Floor: Caller is estimated to be on **Floor 1** (Likely range: Floor LL 1 - 2) ?

Accuracy: This is a low accuracy estimate ?

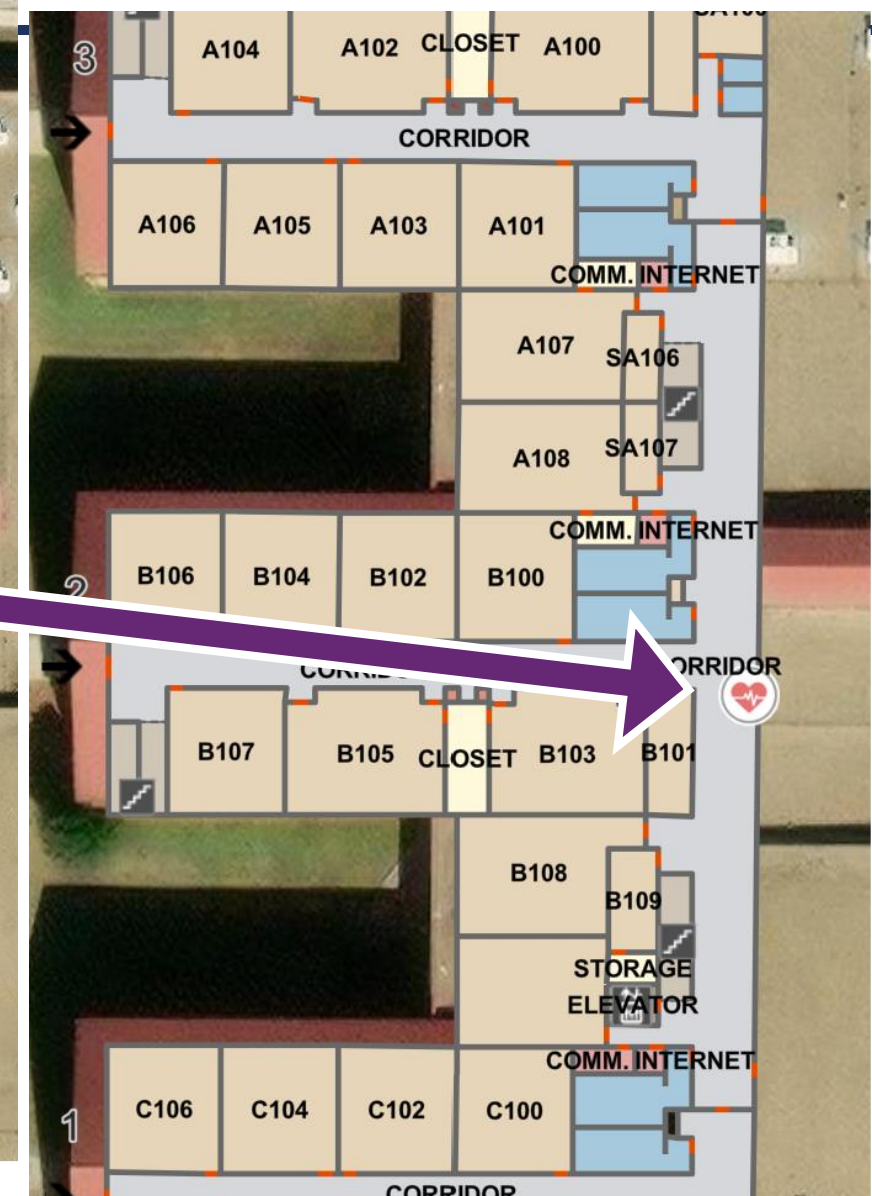
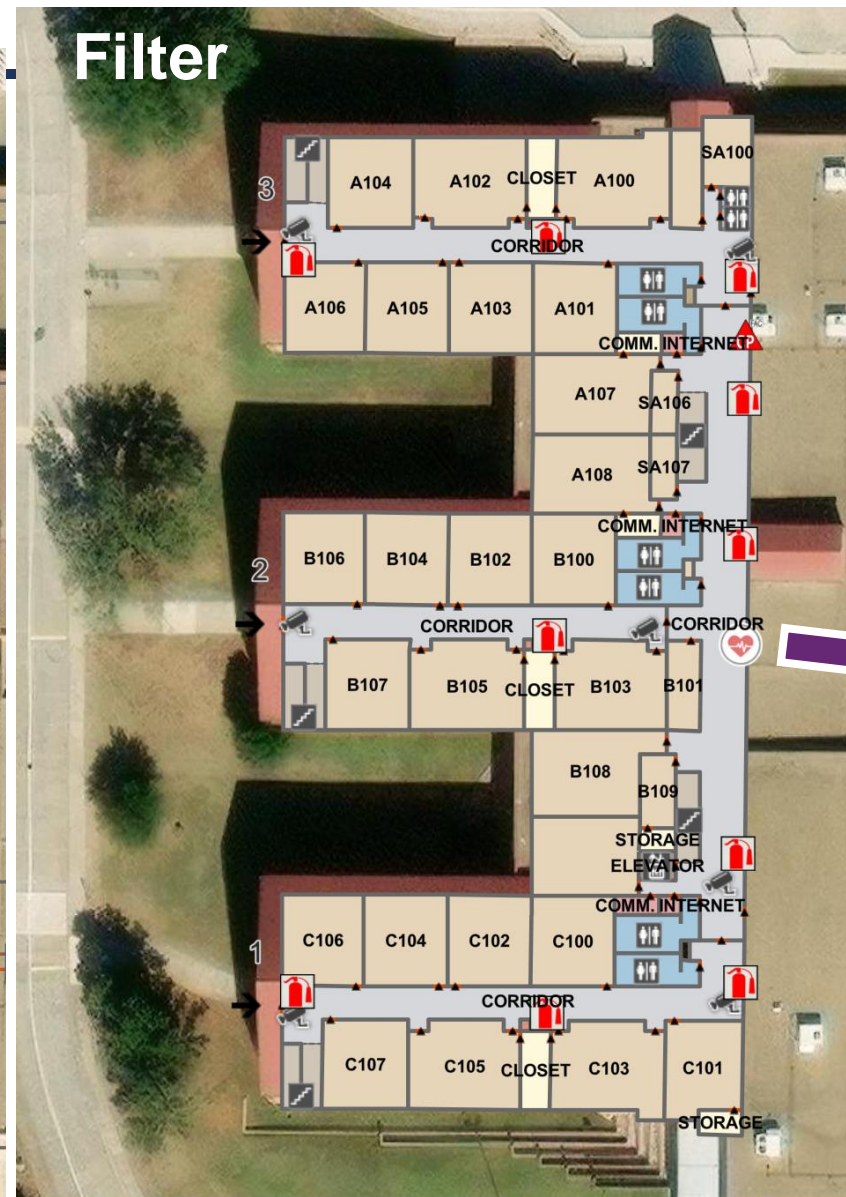
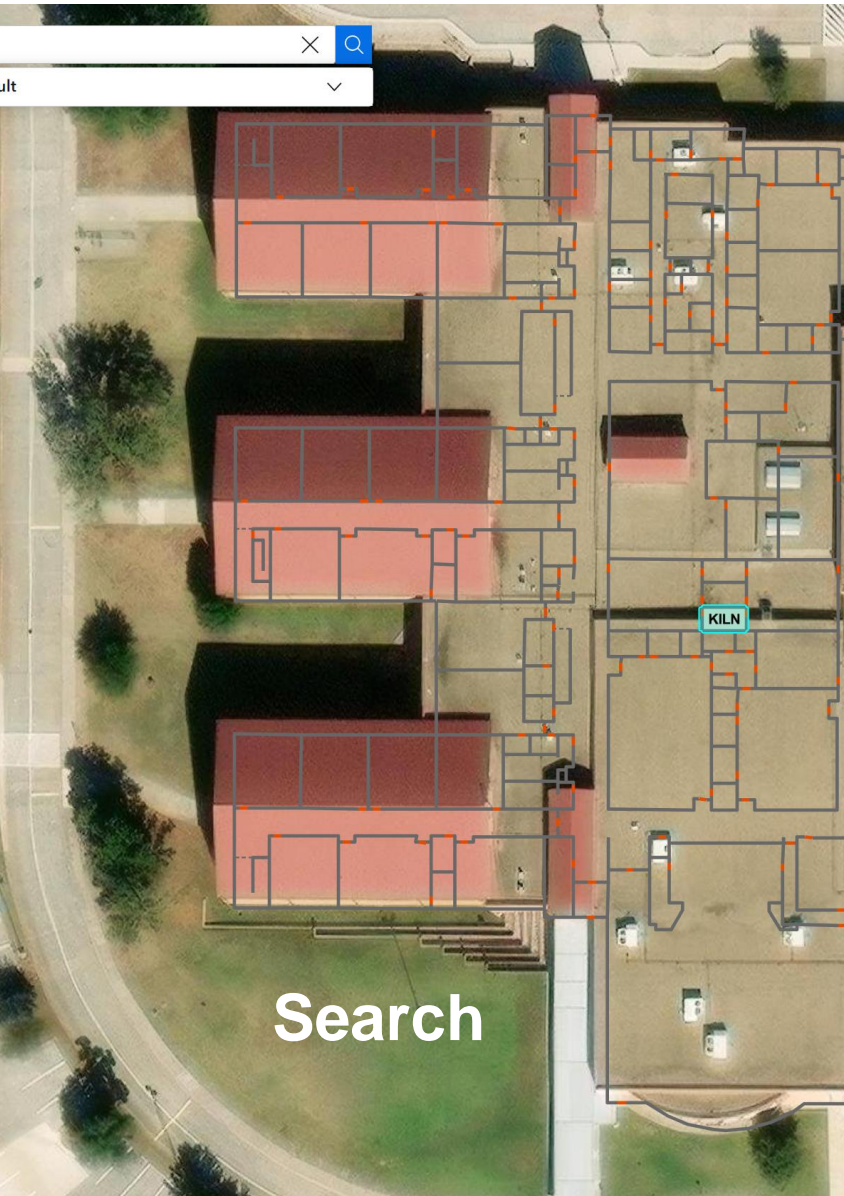
Feet per Story: [Update](#)

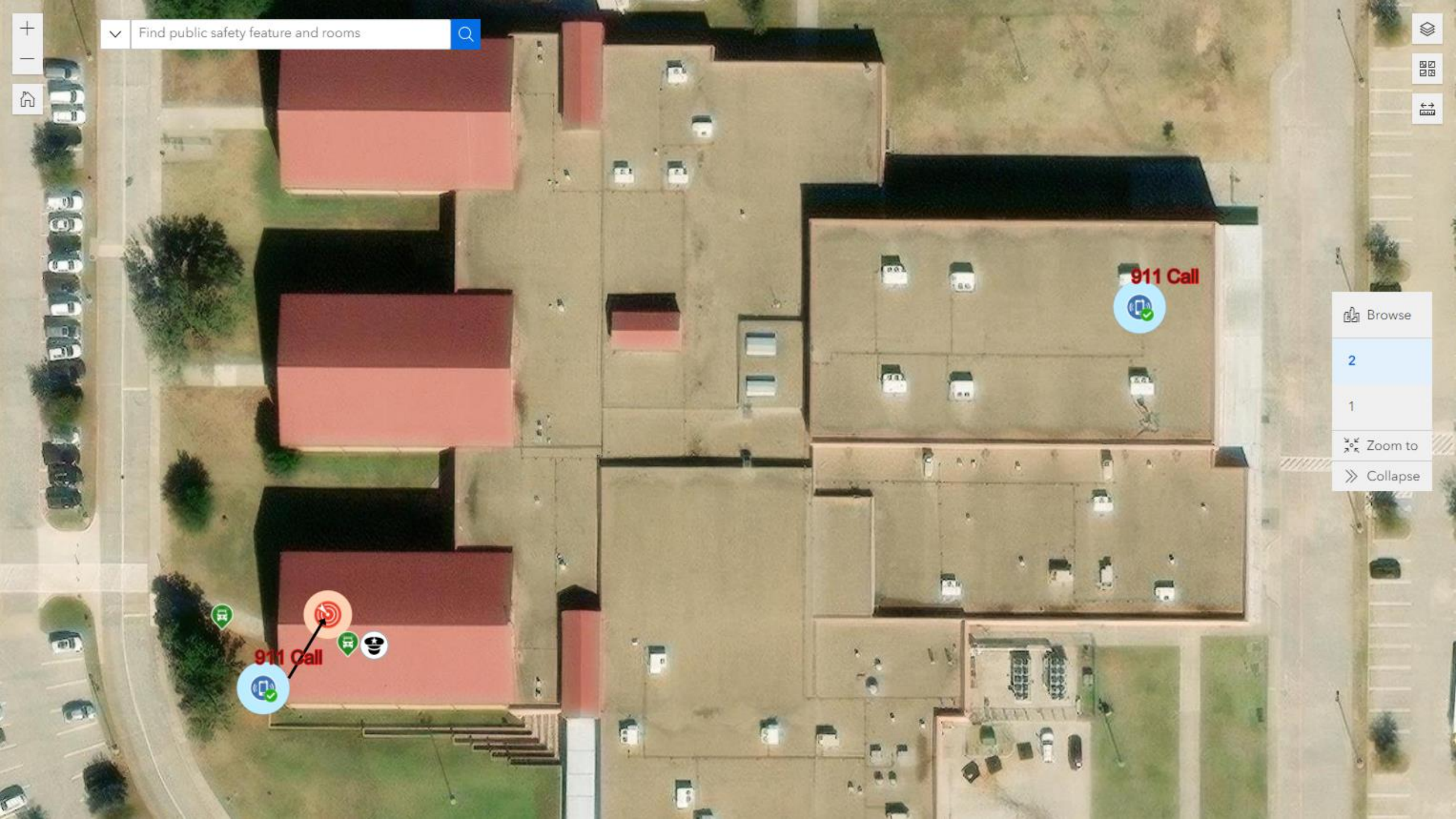
[View in 3D \(beta\)](#) [View Indoor Map](#) [Provide Feedback](#)

[ABOUT THIS SERVICE](#) [TERMS OF SERVICE](#) [GEOCOMM.COM](#)



Why Build Indoors Maps in GIS?





Find public safety feature and rooms



911 Call

911 Call

-  Browse
- 2
- 1
-  Zoom to
-  Collapse



Browse

2

1

Zoom to

Collapse





- Browse
- 2
- 1
- Zoom to
- Collapse

911 Call

Grid Upon Request

Fire Law Medical

Next Steps

Learn More about GeoComm Vertical
Location Services at
<https://www.geocomm.com/vertical-location-services/>

