

Wireless Calls with Confidence and Uncertainty Values

Wireless carriers provide three types of information with every 9-1-1 call.

1) Estimated Location of the Caller

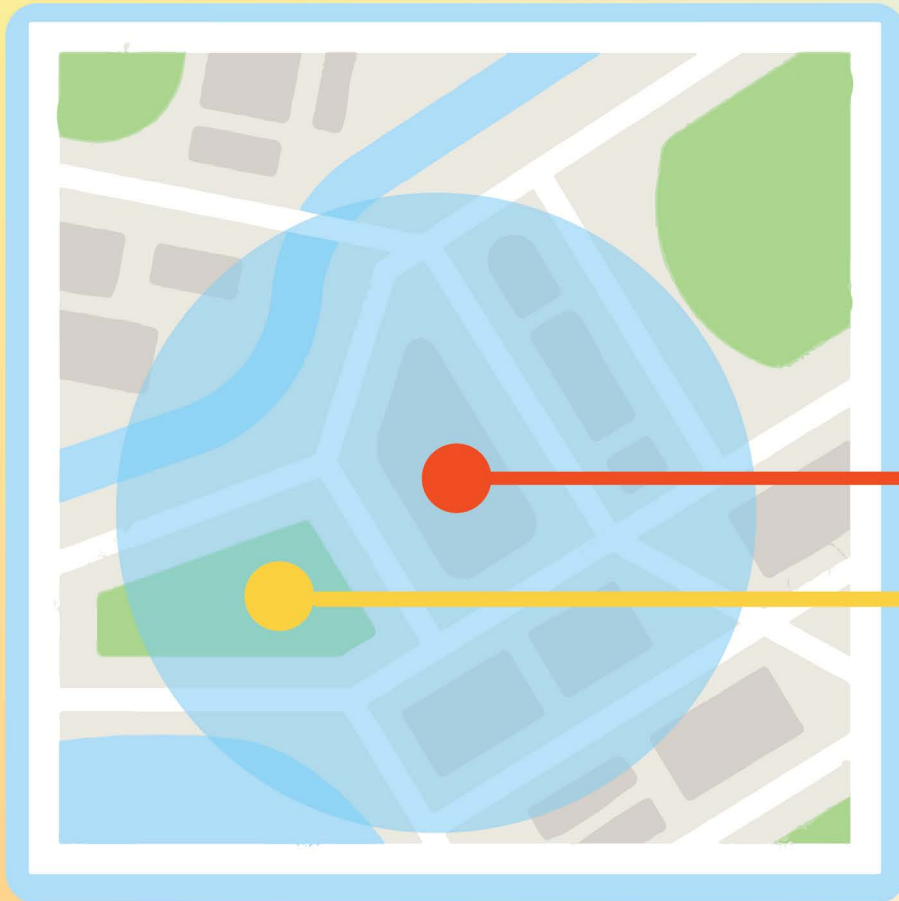
2) Confidence Level

The FCC requires wireless carriers to provide location information to PSAPs with a radius of uncertainty with a confidence level of 90%.

3) Uncertainty Value

Uncertainty values range from 50 meters to 300 meters.

Different types of location accuracy:



Traditional Location Accuracy

Traditional location accuracy focuses on 9-1-1 calls made from outdoor locations and uses wireless and satellite networks like GPS to locate callers.

Supplemental Location Accuracy

As wireless calls increase, new solutions were developed to focus on indoor callers. This includes Device-Based Hybrid Location (DHL), which uses a mix of technologies to identify callers such as:

- Wi-fi
- GPS
- Bluetooth beacons

How does supplemental location accuracy affect confidence and uncertainty values?

Confidence and uncertainty values from supplemental location data may be different.

When comparing 9-1-1 location information provided by different sources, PSAPs must take into account the confidence levels and uncertainty values provided by each but always continue to rely on their training and their ability to question the caller regarding his/her location.