

FCC Update

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Location Accuracy Timeline



Horizontal Accuracy Benchmarks
50 meters or DL

40%
of
calls

50%
of
calls

70%
of
calls

80%
of
calls

Vertical Accuracy
Benchmarks

Z Axis or
DL in Top
25 CMAs

Z Axis or
DL in Top
50 CMAs

E911
Location
Order

We
Are
Here



2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025



Z-Axis Accuracy Standard



- 2015 Wireless E911 Location Accuracy Order -- Required carriers to conduct Z-axis testing and submit a proposed metric to the Commission for approval
- Stage Z Testing (2017-2018)
 - Testing conducted in Atlanta, San Francisco, and Chicago
 - Two vendors (NextNav and Polaris) participated
 - Additional testing (Stage Za) scheduled for later this year
- August 2018: CTIA proposed Z-axis metric of +/-5 meters
- March 2019: FCC adopted NPRM (FCC 19-20) proposing Z-axis metric of +/-3 meters
 - 3-meter standard more likely to yield floor-level accuracy
 - Proposed rules require testing to validate technologies that can deliver 3-meter accuracy for 80 percent of indoor calls
 - NPRM comments due May 20; replies due June 18

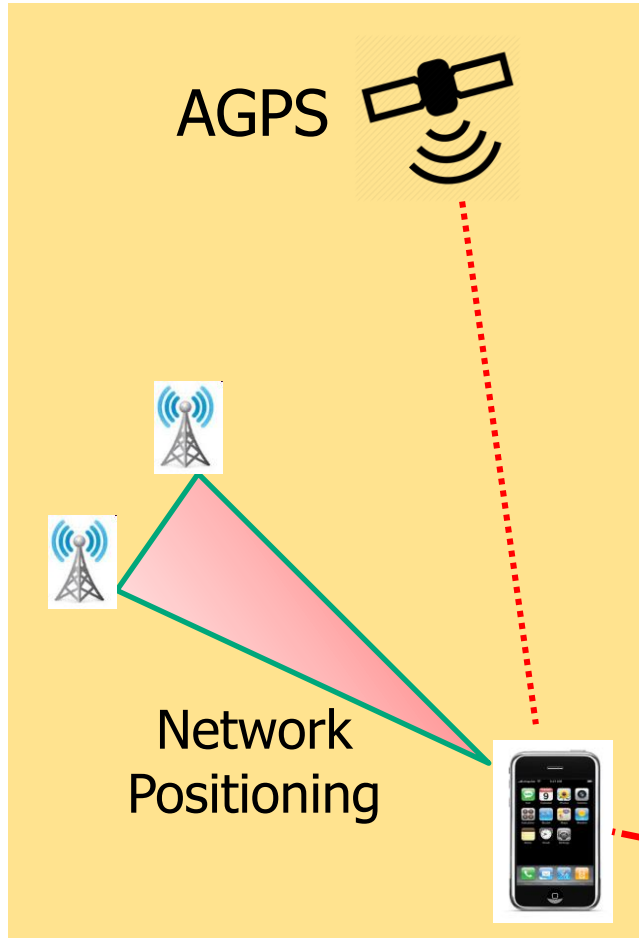


Improvements in Wireless Location Technology

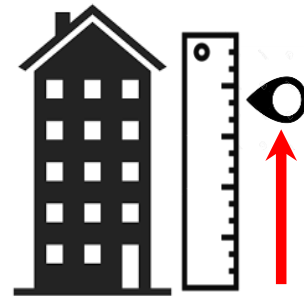


Legacy: Outdoor-focused

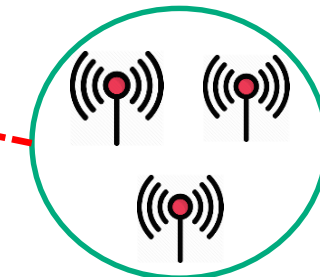
New: Indoor-focused



National
Emergency
Address
Database (NEAD)



Vertical
Location (Z-
Axis)



Device-Based
Hybrid (DBH)
Location



Aggregate 911 Calls by Positioning Method

