

INdigital Update

Talk About It Tuesday 06-21-22

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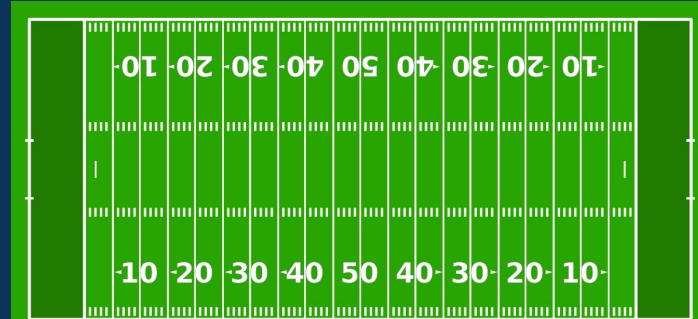
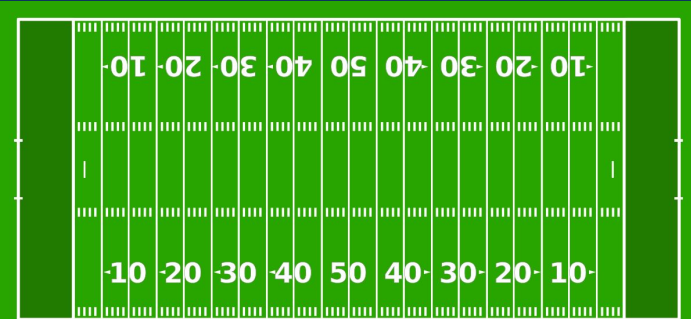
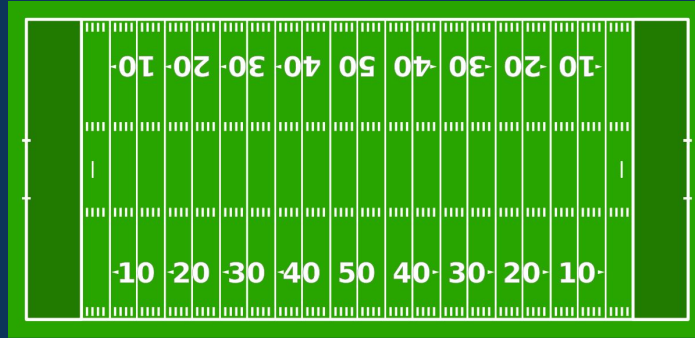
RAPIDSOS

- More than 80% of all calls are received from cell phones
- Landline phones are becoming less relevant
- More than half of the US households now only use cellphones as their primary means of communication

LOCATION ... LOCATION... LOCATION

Phase I ANI/ALI (WPH1) requires the carrier to provide the calling party's call back number, the cell tower location and the direction of the cell tower antenna

Think 300 meters or the size of three football fields....

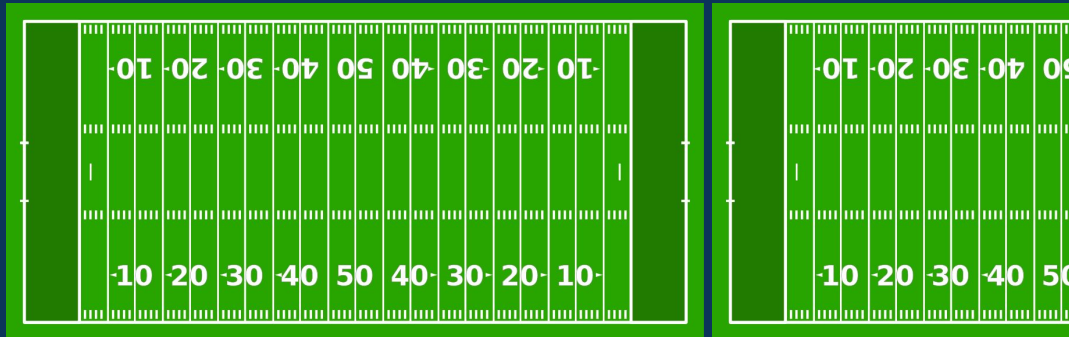


LOCATION ... LOCATION... LOCATION

Phase II ANI/ALI (WPH2) requires the carrier to provide the calling party's call back number, and more specific latitude and longitude information.

This narrows down the location to 50 meters for 70% of the calls and 150 meters for 95% of the calls

Now we have narrowed down our location to one and a half of a football field or even smaller.



Hybrid LOI - Location Information

Cellphone LOI technology communications through a digital handshake that occurs in the background -

This information includes dips into third party services and apps including GPS locations, WIFI hotspots, Cell phone towers, altitude, speed etc. This information is stored in a Data Clearinghouse then shared with 911 PSAPS in addition to the Phase II location.

LOI cannot be turned off for 911 calls

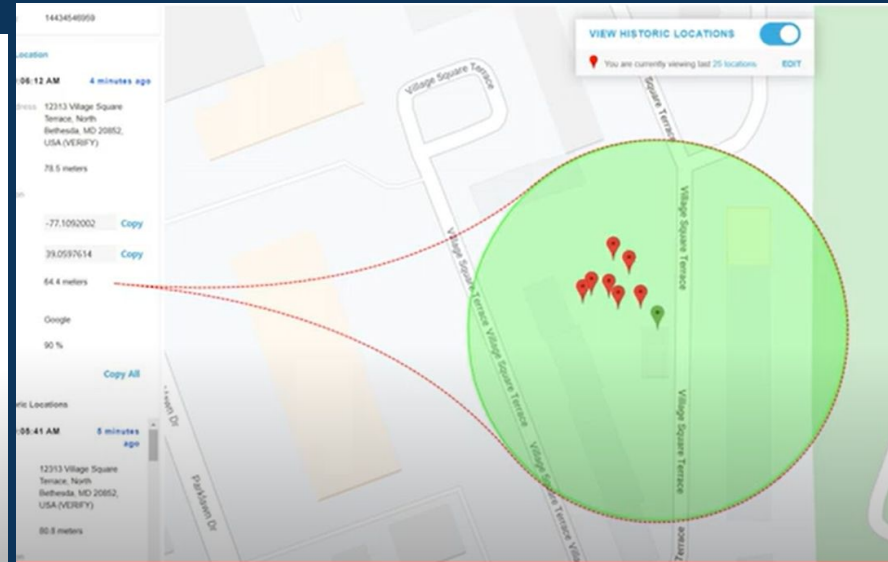


Rebid

The rebid asks RapidSOS to send a new data packet from the clearinghouse.

Each time RapidSOS sends a new data packet the ring around the caller gets smaller and smaller and leaves a breadcrumb trail of movement.

Location has now updated to potentially 5 meters or about 20 feet.



How much does it cost?

RapidSOS is a free service to PSAPs that allow secure access to NG911 Clearinghouse.

How do we set up our users?

RapidSOS allows agencies to set up their own users, permissions and logins.

We don't use RAPIDSOS, how can we get access to it?

INdigital is a partner of RAPIDSOS - to set up a user's portal for your agency, contact:
Jennifer Poole jpoole@rapidsos.com 407-314-3534

What if I have a silent call and the locations are different?

If there is a large discrepancy between RAPIDSOS location and WPH2 the agency should create a call to both locations.



Texty Integration



INdigital partnering with RAPIDSOS and integrating with Texty gives call takers automatic access to RAPIDSOS location information.

What if my RAPIDSOS portal populates but no call has come through, via voice or text?

Because voice calls are routed using a different mapping system it is possible the voice call may have gone to a different agency. Many times these calls are near your PSAP border. These calls should be followed up on just as you would a 911 hangup call, via a voice call and/or Texty message. Should the call have needed to route to your agency a trouble ticket can be issued for investigation by emailing support@indigital.net

Call Routing Limitations

Your PSAP can receive a RapidSOS hit even if the call is delivered somewhere else.

This is because call routing and RapidSOS are two disparate systems currently.

With the exception of Jefferson County, calls are routed based on tower location, not caller's location.

The screenshot displays the RAPIDSOS PORTAL for San Francisco. The interface is divided into a left sidebar and a main content area. The sidebar shows a list of calls for the phone number 1-650-555-2399, with the most recent call on 01/23/19 at 4:06 PM MT. The main content area shows details for this call, including the estimated address (89 Mission Street, San Francisco, CA 94110), longitude (25.249234), latitude (52.249234), and an uncertainty radius of 5m. A map of San Francisco is displayed on the right, showing the location of the call with a red pin and several other green pins indicating other locations. The map includes labels for various neighborhoods like Noe Valley, Glen Park, and Bernal Heights.

Charleston Case Study

AT&T experienced a Selective Router outage in May 2021.


Many PSAPs in South Carolina were without 9-1-1 service for hours.

Even though calls could not be delivered, telecommunicators could see who had attempted to call 9-1-1 on Rapid Portal.

Callbacks were initiated by telecommunicators based on the info in Rapid Portal.



Base Map Limitations

RAPIDSOS  PORTAL San Francisco Data Admin Info Log Out

Search phone number

View: **LOCATION** ADDITIONAL INFO

All calls
San Francisco

1-650-555-2399
1/23/19 at 4:07pm

1-650-555-2399
1/23/19 at 4:07pm

1-650-555-2399
1/23/19 at 4:07pm

1-650-555-2399
1/23/19 at 4:07pm

1-650-555-2399
1/23/19 at 4:07pm

1-650-555-2399
1/23/19 at 4:07pm

1-650-555-2399
1/23/19 at 4:07pm

Caller ID: 16505552399

Most Recent Location
01/23/19 | 4:06PM MT Now

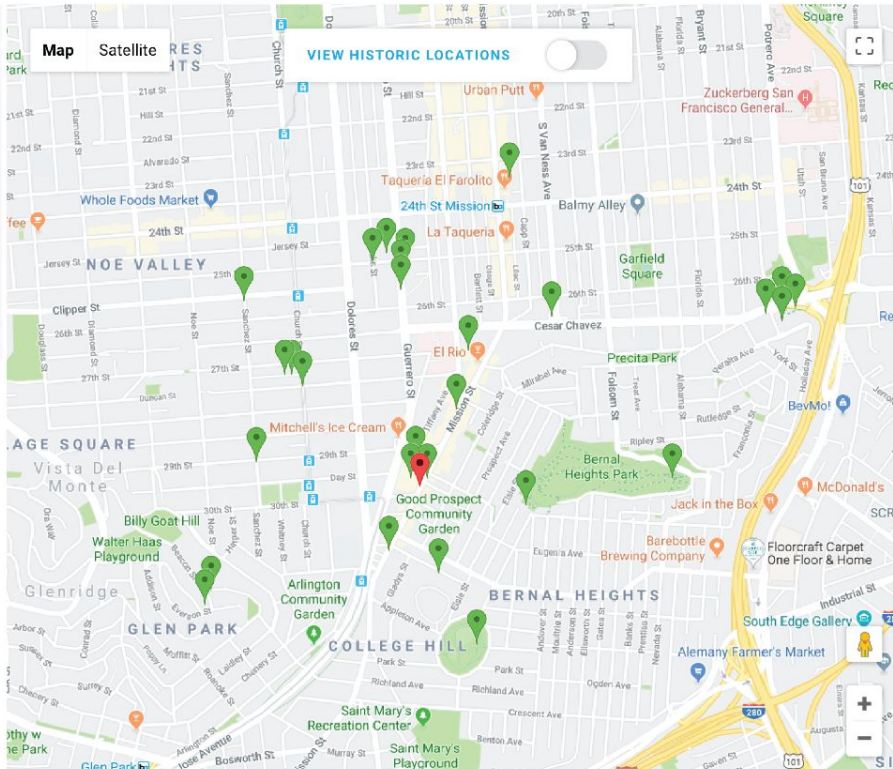
Estimated Address: 89 Mission Street, San Francisco, CA 94110

Longitude: 25.249234 Copy


Latitude: 52.249234 Copy

Uncertainty Radius: 5m Copy All

[View Historic Locations](#)



Map Satellite **REST** VIEW HISTORIC LOCATIONS



Base Map Limitations

This is only an approximate location based on Google Maps as the base layer

Most Recent Location

01/23/19 | 4:06PM MT **Now**

Estimated Address 89 Mission Street, San Francisco, CA 94110

Longitude 25.249234 [Copy](#)

Latitude 52.249234 [Copy](#)

Uncertainty Radius 5m

[Copy All](#)

Birmingham Case Study

A domestic violence call was dispatched by Birmingham 9-1-1 in November of 2020.

Due to the caller's location being determined by RapidSOS using Google maps, the location of the incident was a block off.

The telecommunicator correctly identified this as an approximately location, and a positive outcome was had rather than police trying to enter the wrong location.



RapidSOS Integration

Using the Enhanced Location Button will allow the Telecommunicator to rebid the location of the texter to obtain a better location. Once the button is clicked (L) on the bottom toolbar, Texty will query from the RapidSOS NG9-1-1 Clearinghouse.

The screenshot displays the Texty interface for a 9-1-1 call. On the left, there are statistics for '0 Inbound Calls' and '9-1-1' text. The main area shows a call log for '(646) 717-4069' with the text 'I need help'. The log includes two location events:

Field	Value
Location Type	Enhanced EE
Latitude	41.1193525
Longitude	-85.1639685
Radius	24.087 meters

The map shows two location circles: a larger, lighter one and a smaller, darker one. The log entry for the darker circle shows:

Latitude: 41.1192278	Longitude: -85.16349000000002	Radius: 1500 meters
Approximate location at center: 1426 Directors Row, Fort Wayne, IN 46808, USA		

The log entry for the lighter circle shows:

Latitude: 41.1193525	Longitude: -85.16396850000003	Radius: 24.087 meters
Approximate location at center: 1631 Production Rd, Fort Wayne, IN 46808, USA		

A red arrow points to the 'Enhanced Location' button (marked with 'L') in the bottom toolbar.

If a location is available it will automatically display on the active session map. At this time you will see two location circles; the darker of the two will display the caller's precise location.

The zoom functions on the right side of the map allow you to display both the initial location and the location after rebid. The small red dot inside the larger circle will identify the precise “Enhanced Location” of the caller. A new latitude, longitude and radius is then provided.

Teity™
0 Inbound Calls

9-1-1

My DIALOGS

INBOUND 1 OUTBOUND 0

(646) 717-4069

Carrier: AT&T Wireless
Elapsed Time: 00:02:01
Auto-close in: 17:59
Conferenced: No
Barged: No

End Dialog

CONTROLS

Field	Value
Location Type	Enhanced
Latitude	41.1193525
Longitude	-85.1639605
Radius	24.087 meters

Map Dark Map Hybrid

Google

You are now in a dialog with (646) 717-4069 11:25:16

(646) 717-4069
I need help 11:25:16

Location Event Received - [View marker on map](#) 11:25:16

Latitude: 41.1192278 | Longitude: -85.16349000000002 | Radius: 1500 meters
Approximate location at center: 1426 Directors Row, Fort Wayne, IN 46808, USA

Enhanced location query was successful - Showing new location on map 11:26:13

Location Event Received - [View marker on map](#) 11:26:14

Latitude: 41.1193525 | Longitude: -85.16396050000003 | Radius: 24.087 meters
Approximate location at center: 1031 Production Rd, Fort Wayne, IN 46808, USA

911: Type here, use enter to send text. 1019

Push to CAD Transfer/Conference Rebid Network Location Enhanced Location Hide Map

INdigital Regional Training



- ~~June 7 - Cullman~~
- ~~June 8 - Tuscaloosa~~
- August 16 - Tallapoosa
- August 17 - Troy
- September 13 - Mobile
- September 29 - Homewood

Register at <https://www.al911board.com/professionals/training>



QUESTIONS??

Contact Us



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Fort Wayne, IN 46808



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hpeacock@indigital.net
mcarpenter@indigital.net
amurphree@indigital.net

