

# CATTARAUGUS COUNTY

# R.E.D.

## GIS SYSTEM



# Who we are:

## Paul Frey

- Cattaraugus County GIS Coordinator
  - 2010 - 2012

## Daniel Martonis

- Cattaraugus County GIS Coordinator
  - 2002-2009
- Real Property & GIS Director
  - 2009-Present

# What we have:

- GIS Coordinator
- ESRI ELA
  - \$50,000 (based on population)
  - Unlimited installs of GIS software
- Small County
  - Intimate working relationship throughout all Departments
  - No toe-stepping

# What you need:

- Centralized GIS Database

- Example

- Emergency

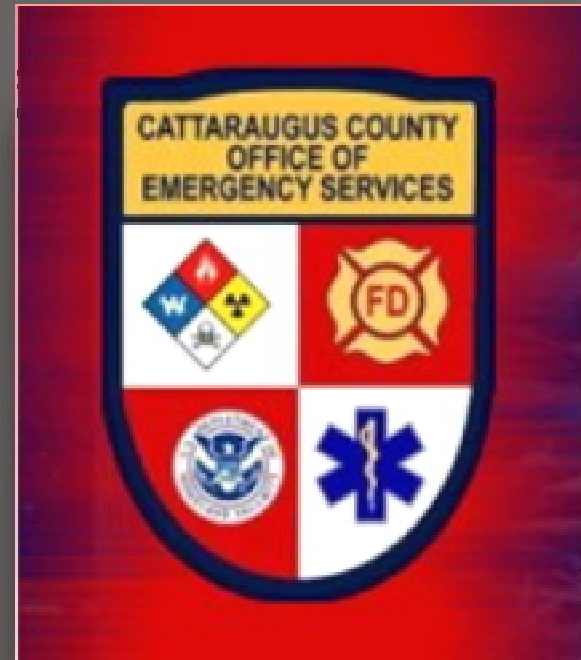
- Ambulance and Fire Districts
      - Fire Station locations
      - Helicopter Landing locations within ASP
      - Flood data

- RED GIS can be achieved using existing infrastructure

- If none exists, not hard to obtain

# RED GIS

- **R** – Real-time
- **E** – Emergency
- **D** – Deployment
  
- **G** – Geographic
- **I** – Information
- **S** – Systems



# Advantages

- Functional, yet never done adapting
- Forced organization
- Forced communication
- Simple: pick up and go
- Secure
- Made with existing GIS/IT infrastructure
  - Eliminating many private company costs

**EMS Operators**  
iOS + Android devices  
in the field



## RED-GIS Response System

**SDE Server  
in Little Valley  
Stores all data**



View  
Edit

View  
Edit

View

**EOC Operators**  
ArcMap + ArcGIS.com  
Stationary



**Dispatch & EOC Phone Operators**  
Flex Website  
Any location



HEAD IN “THE CLOUD”



EMS Operators  
iOS + Android devices  
in the field



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# UNITS IN THE FIELD

EMS Operators  
iOS + Android devices  
in the field

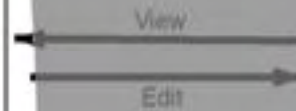
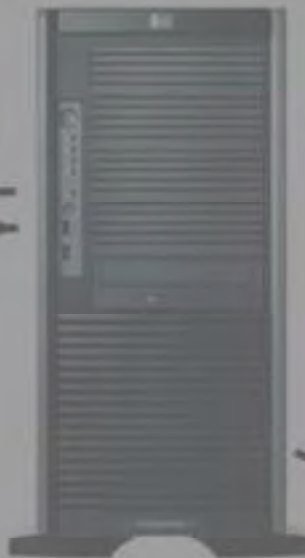


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# GIS ANALYSTS IN EOC

EMS Operators  
iOS + Android devices  
in the field



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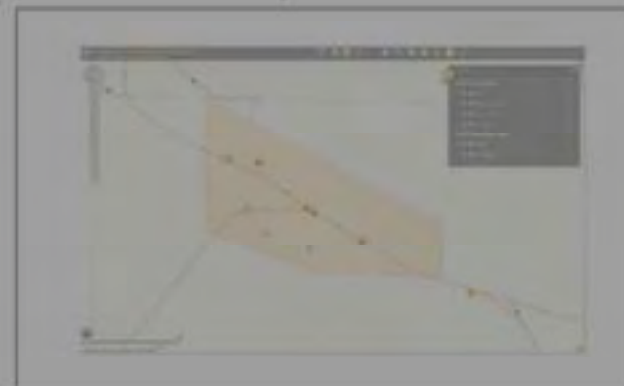
View  
Edit

View  
Edit



Dispatch & EOC Phone Operators  
Flex Website  
Any location

View



# DISPATCHERS & PHONE OPERATOR “VIEWER”

EMS Operators  
iOS + Android devices  
in the field



## RED-GIS Response System

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View

Edit

View

Edit

View

Dispatch & EOC Phone Operators  
Flex Website  
Any location





# Primary Role

- ◉ In Cattaraugus County:
  - Damage Assessments
- ◉ In Your Jurisdiction:
  - ??????



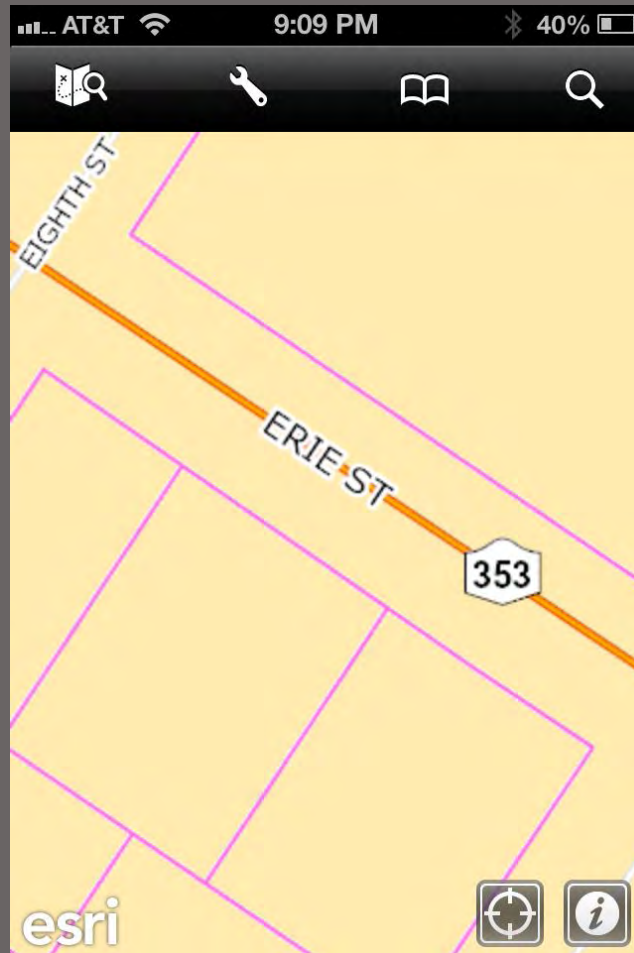
# To Serve Damage Assessments:

## ● “Cloud” Services:

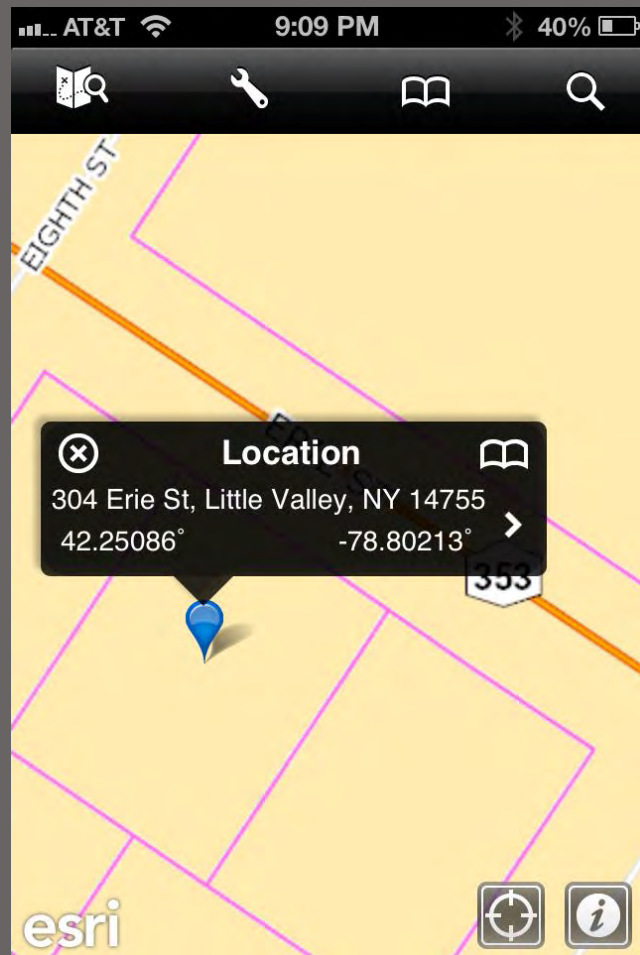
- Damage Assessments
  - Mild
  - Moderate
  - Severe
- Road Status
  - Clear
  - Caution
  - Closed

# DAMAGE ASSESSMENTS

# Locate Yourself in Field



# Tap Parcel



# Parcel Information

AT&T 9:10 PM 40%

Map

**Parcels**

**Tax Map Number**  
54.071-2-19

**Owner**  
lovino, Albert

**Total Assessment**  
50,000

**More Info**  
<http://maps.cattco.org/lmate/propdetail.aspx?cty=04&SWIS=045401&PRINTKEY=05407100020190000000>

# Collect Damage Assessment

The screenshot shows an iPhone screen with a status bar at the top displaying 'AT&T', signal strength, Wi-Fi, the time '9:10 PM', Bluetooth, and a 39% battery level. The app interface has a black header bar with a 'Cancel' button. Below this is a white section titled 'Damage Assessments'. It contains four form fields, each with a blue arrow button to its right: 'Date', 'Status' (with 'Severe' entered), 'Comments', and 'Estimated Amount'. At the bottom of the screen is a black bar with two icons: a square with a plus sign and a paperclip.

Cancel

## Damage Assessments

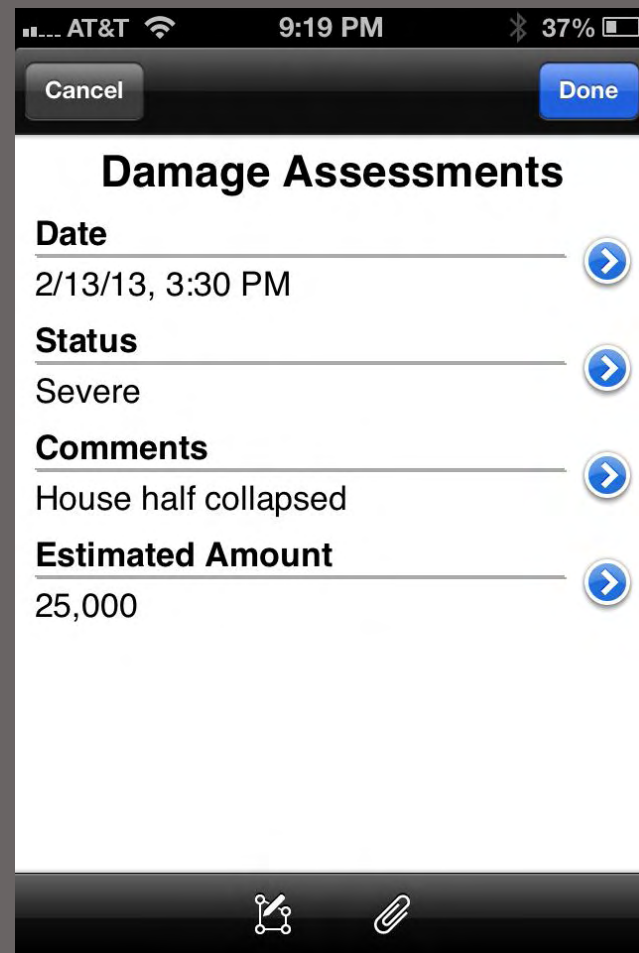
**Date**

**Status**  
Severe

**Comments**

**Estimated Amount**

# Enter Attributes

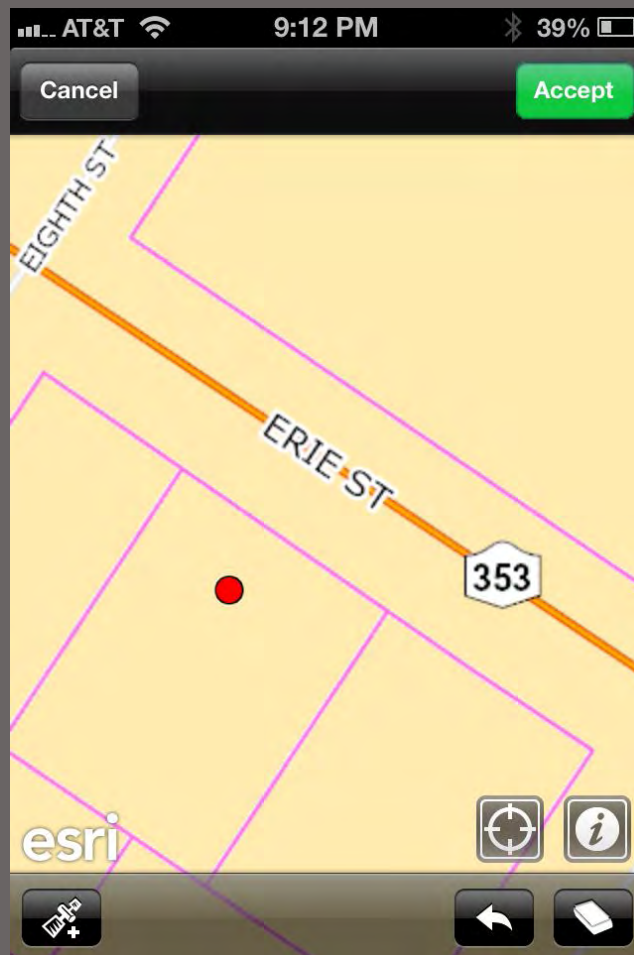


The screenshot shows an iPhone screen with a status bar at the top displaying 'AT&T', signal strength, time '9:19 PM', and battery level '37%'. Below the status bar is a navigation bar with 'Cancel' and 'Done' buttons. The main content area is titled 'Damage Assessments' and contains four form fields, each with a blue arrow button to its right:

- Date**: 2/13/13, 3:30 PM
- Status**: Severe
- Comments**: House half collapsed
- Estimated Amount**: 25,000

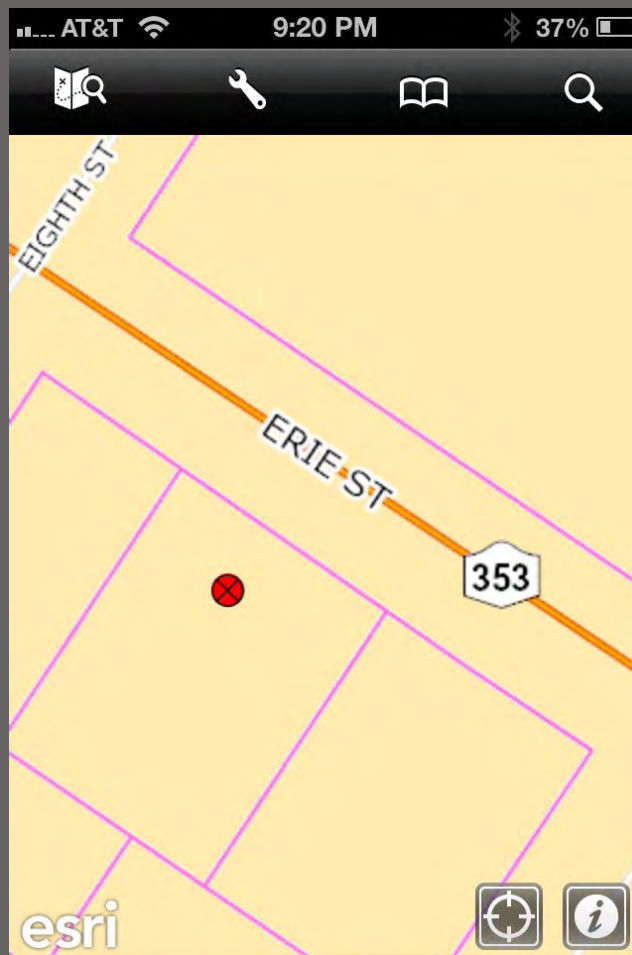
At the bottom of the screen is a dock with two icons: a pencil and a paperclip.

# Place the Point





# Done.



# Damage Assessments Cont.

	A	B	C	D
1	Date	Status	Comments	Est. Amount
2	2/4/12 8:31 AM	Severe	House half gone	40,000.00
3	2/4/12 8:33 AM	Mild	Roof shingles blown off	1,000.00
4	2/4/12 8:40 AM	Moderate	Porch detached from house	2,000.00
5	2/4/12 8:43 AM	Moderate	Barn in back has collapsed roof	4,500.00
6	2/4/12 8:46 AM	Severe	House burned down, total loss	132,000.00
7				

# Damage Assessments Cont.

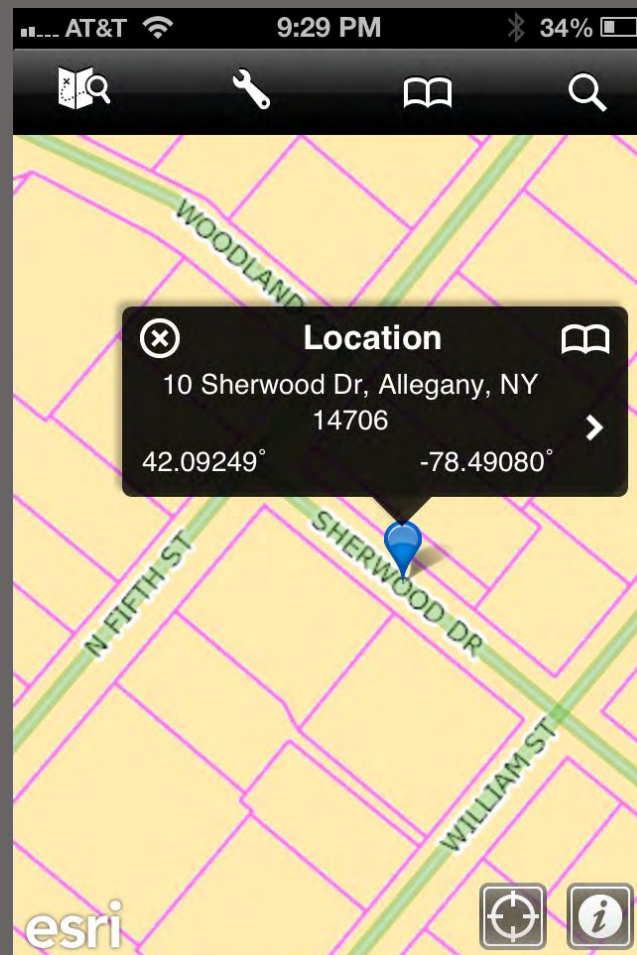
	A	B	C	D
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6	2/4/12 8:46 AM	Severe	House burned down, total loss	132,000.00
7				
8				
9			Total	179,500.00
10				

# ROAD STATUS

# Locate Yourself in Field



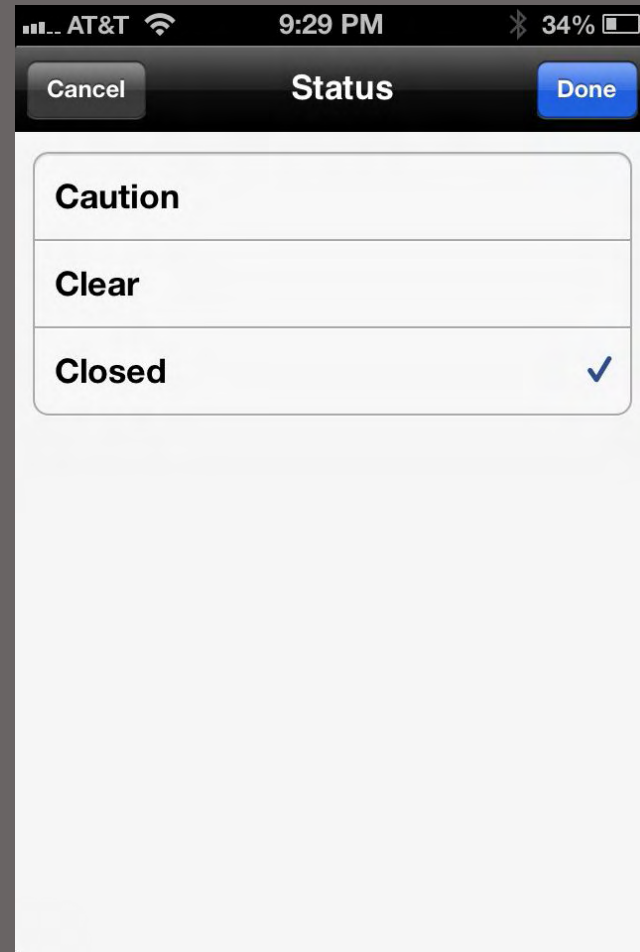
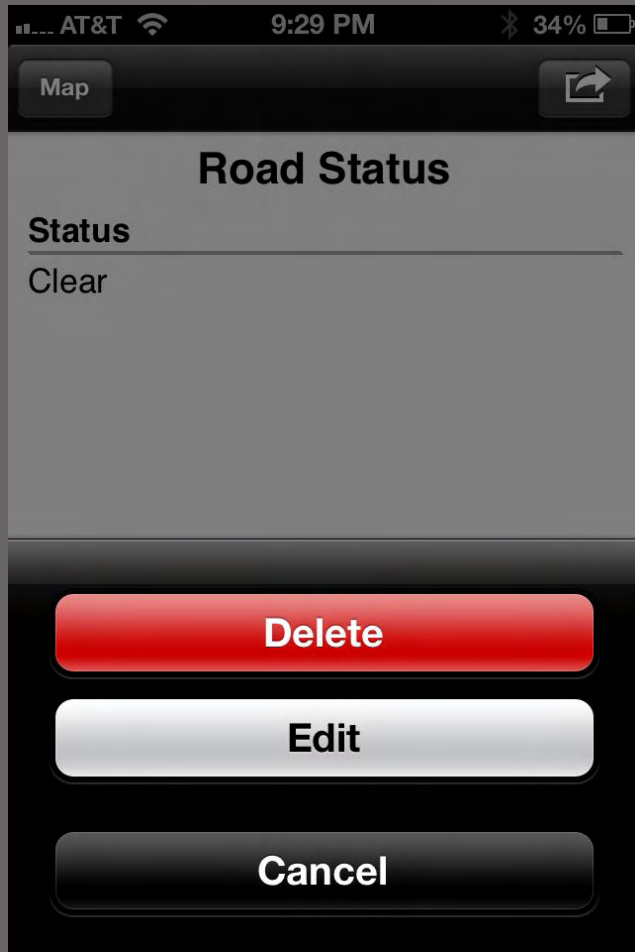
# Tap Road



# Status of the Road

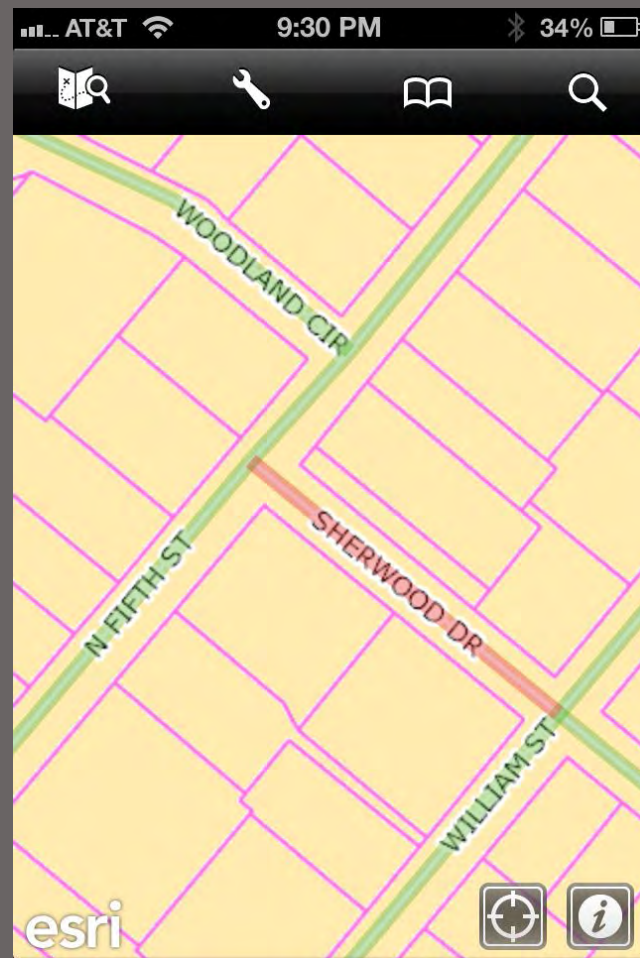


# Edit to Change Status





# Done.



# Deployable Services:

- Health Department Patient Points (Local)
  - Level 1 – Critical: cannot miss services
  - Level 2 – Moderate: Can miss a day of services
  - Level 3 – Missing services not life threatening
- NOAA
  - Live Radar Feeds
- AHPS River Gauges – Forecasted/Observed
  - Normal Stage
  - Action Stage
  - Flood Stage

# Health Department Patient Points

- Ask department for data

- “Not a priority”
- “It’s private information”

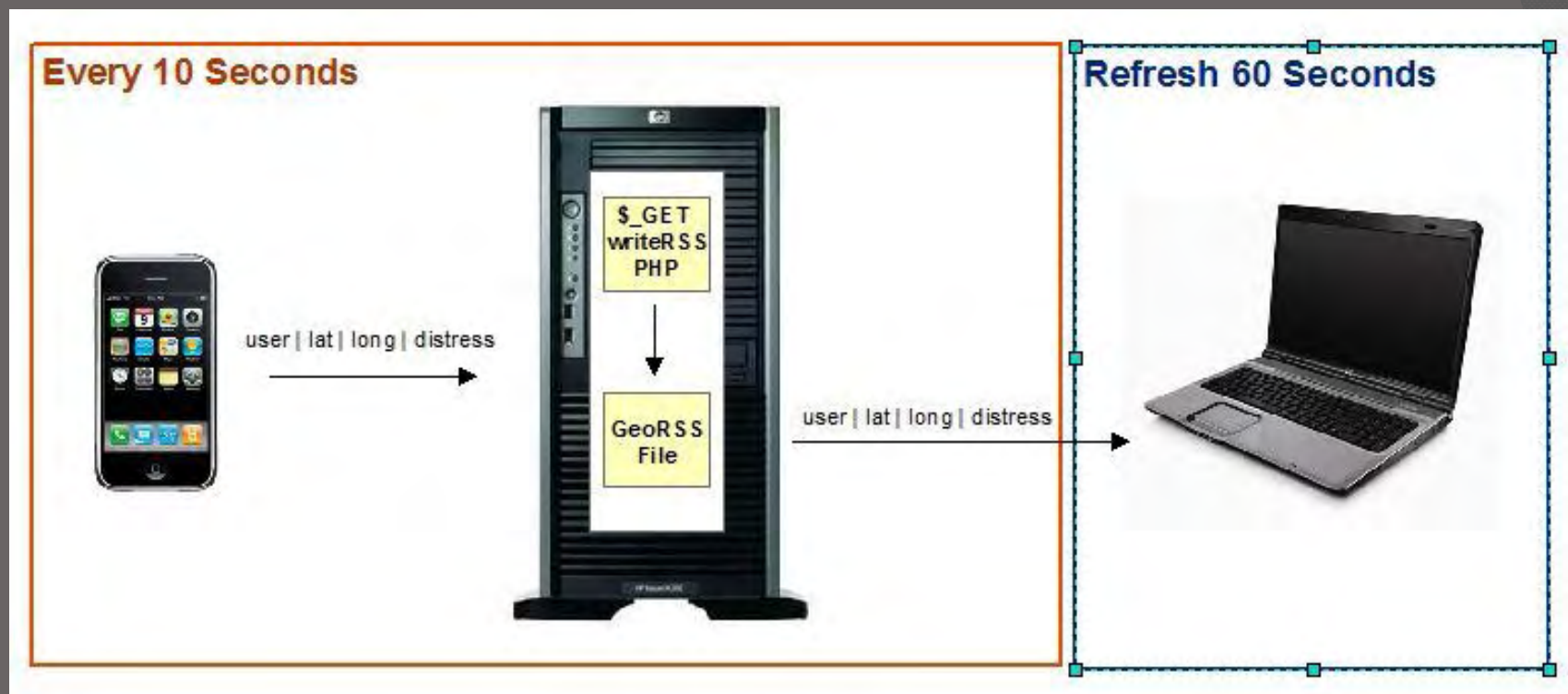
- Danger Imminent

- Hurricane Sandy – 2012
- Gave us data....

...hours before landfall

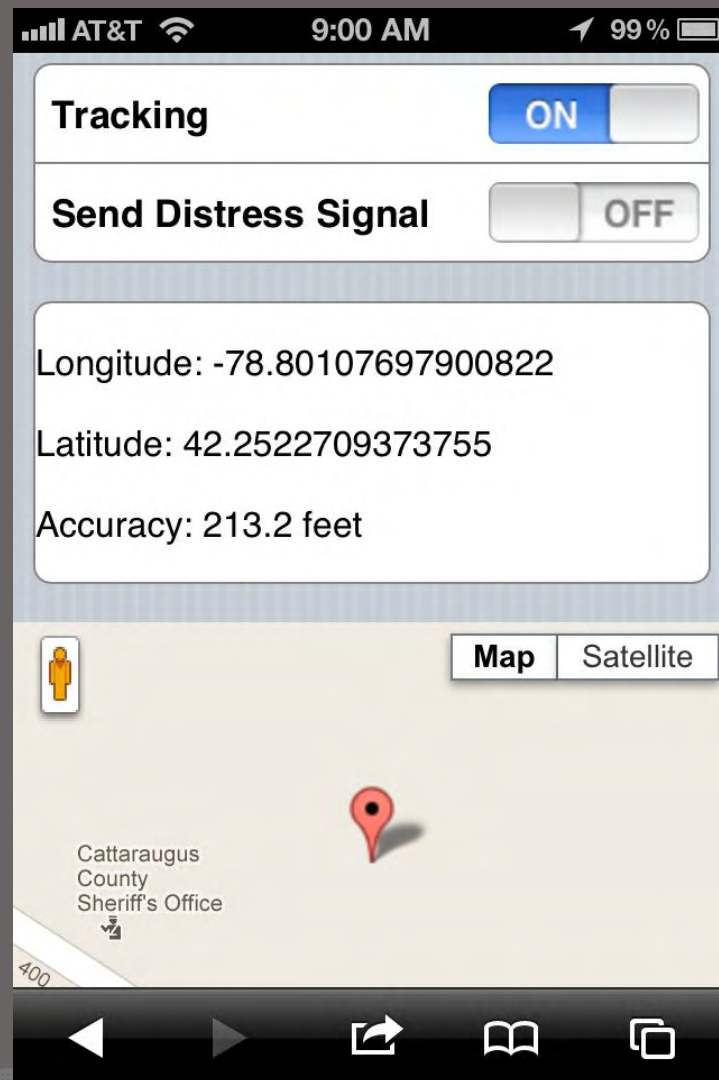


# GeoRSS Unit Tracking



# GeoRSS Unit Tracking

\*False Accuracy





# Back in the EOC



# Contact Information

**Paul Frey:**

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dtmartonis@cattco.org