

2023 PSAP
Managers Conference

Sheraton Greensboro
at Four Seasons

August 24-25, 2023





NC 911 Board PSAP Managers Meeting 2023

NHTSA's NATIONAL 911 PROGRAM

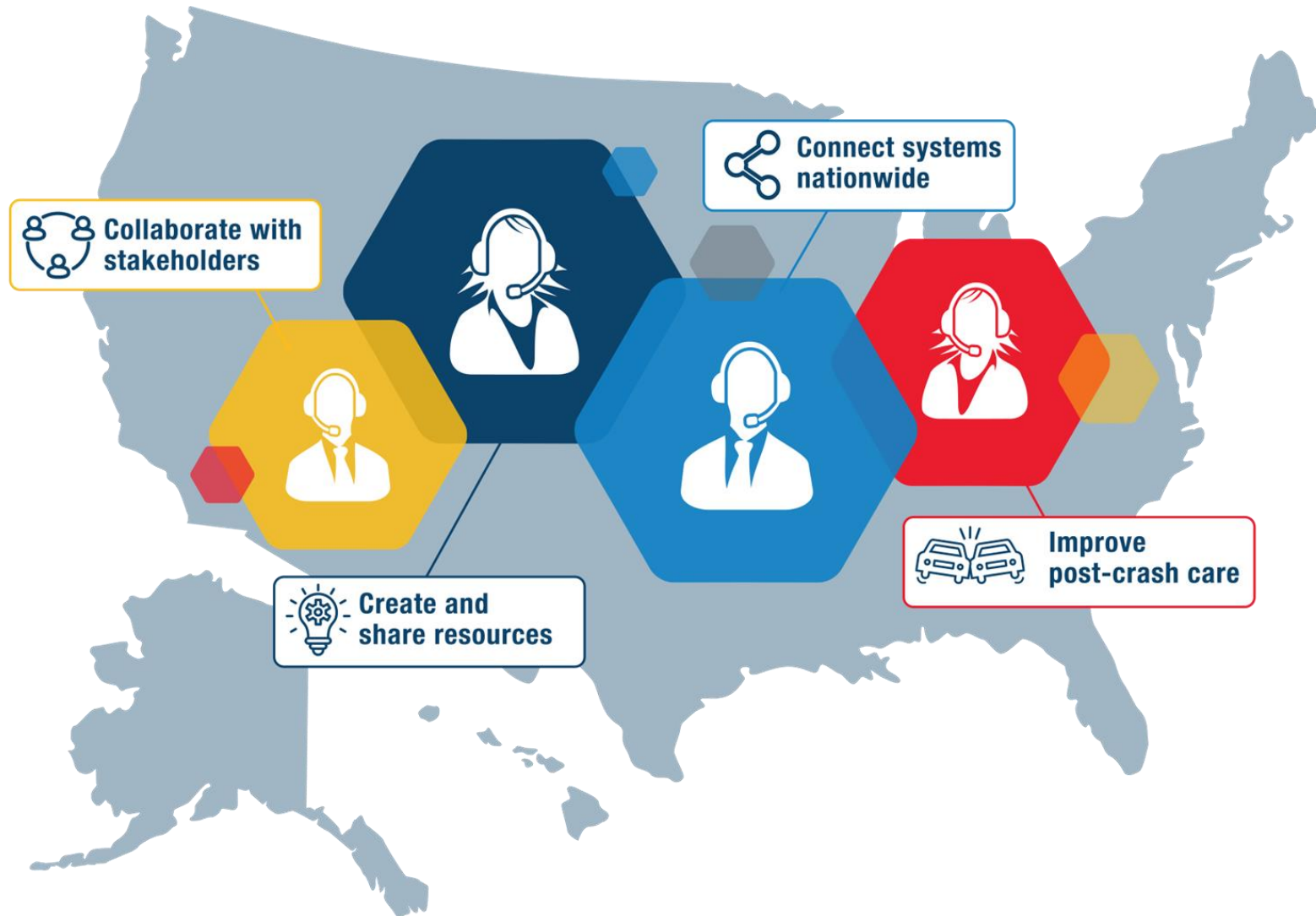
Supporting people centered 911 systems

Kate Elkins, MPH, CPH, NRP

EMS/911 Specialist, National 911 Program, Office of EMS, NHTSA



ADVANCING 911 ACROSS THE NATION



911.gov
911



National Roadway Safety Strategy

United States Department of Transportation | January 2022

*“U.S. DOT is committed to taking action within its scope and statutory responsibilities to make advances in survivability through the delivery of **equitable and impartial post-crash care, including EMS and 911**... The Department will continue to support inter-governmental efforts to **transition to next generation 911 systems across the Nation**”*



POST-CRASH CARE



**Improve
post-crash care**

- Connect 911 systems with Highway Safety programs
- Promote the use of Emergency Medical Dispatch to provide care to crash victims more quickly
- Identify methods for improving crash response and notification with GIS, AACN and other technologies



NATIONAL ROAD SAFETY STRATEGY: *The Safe System Approach*

911's Role in All Five Elements

Safer People

Risky behavior reported to 911 (DUI, reckless/distracted driving)

Safer Roads

Unsafe conditions are reported to 911 (debris, lights, hazards)



NATIONAL ROAD SAFETY STRATEGY:

The Safe System Approach

Safer Speeds

911 Center's are an integral part of the enforcement of speed and traffic laws by dispatching and recording law enforcement actions

Safer Vehicles

Advanced Automatic Collision Notifications (AACN) systems connect 911 center's and transmit critical data through telemetry

Post-Crash Care

Post-crash care begins with a call to 911. Telecommunicators must work with the caller to identify the location, nature and severity of the accident and dispatch help.





**Connect systems
nationwide**

**Create a secure, resilient,
interoperable “system of
systems”**





Mission

The task force was created to develop a governance structure, sustainable financial model, and technical requirements to stimulate the implementation of interoperable NG911 systems nationwide. Technical goals include standards development and a testing program to ensure end-to-end interoperability of NG911 systems and components.




NG911 INTERSTATE PLAYBOOKS

The National 911 Program

NEXT GENERATION 911 INTERSTATE PLAYBOOK

Chapter 3



Implementing State-to-State 911 Connectivity: Lessons Learned, Challenges, and Opportunities


Collaboration, Coordination and Partnership Guidance to Enhance Next Generation 911 Migration and Implementation
Metropolitan Washington Council of Governments regional approach to joint system planning and implementation

911.gov

The National 911 Program

NEXT GENERATION 911 INTERSTATE PLAYBOOK

Chapter 4



September 2020

Implementing State-to-State 911 Connectivity: Lessons Learned, Challenges, and Opportunities


ESInet Testing Guide, State Cost Challenges, Forest Guide 101, Integrating Military Installations into State and Local Solutions, Statute Review for NG911 Readiness

911.gov

The National 911 Program

NEXT GENERATION 911 INTERSTATE PLAYBOOK

CHAPTER 5



September 2021

Achieving State/Local 911 Military Interconnection Lessons Learned, Challenges and Opportunities

Planning and Implementing Civilian and Military 911 System Integration for Improved Interoperability, Response and Mutual Aid

911.gov



911.gov

CYBERSECURITY IN 911



Partnering with DHS
CISA on Cyber
Resilient Program
Development



Cybersecurity and
NG911 materials
are available on
CISA Websites



Sharing important
resources for 911
Centers on
Cybersecurity and
Cyber Hygiene

988 and Crisis Systems



Key Issues

- 988 offers 24/7 access to trained counselors
- Investment of unprecedented federal resources in scaling up crisis centers (answering the calls)
- Increase in the number of Lifeline calls, chats, and texts answered
- Long-term success of 988 depends heavily on collaboration between local, states, territories, tribes, and the federal government





**Collaborate with
stakeholders**

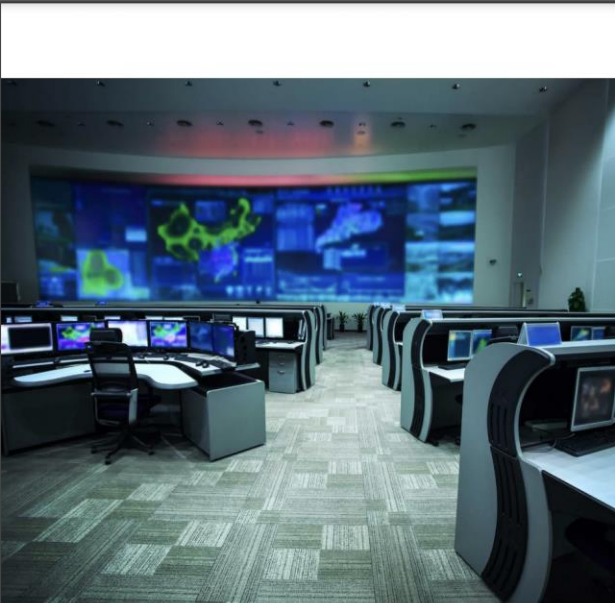
Support the development of the 911 professional



Revisiting the Recommended Minimum Training Guidelines for Telecommunicators



TELECOMMUNICATOR RECLASSIFICATION TOOLKIT



Developing a
Public Safety Telecommunicator Job Description
December 2021



Establishing or Expanding a
Public Safety Telecommunicator Training Program
December 2021



The Operational Integration of
Technology and Tools
December 2021



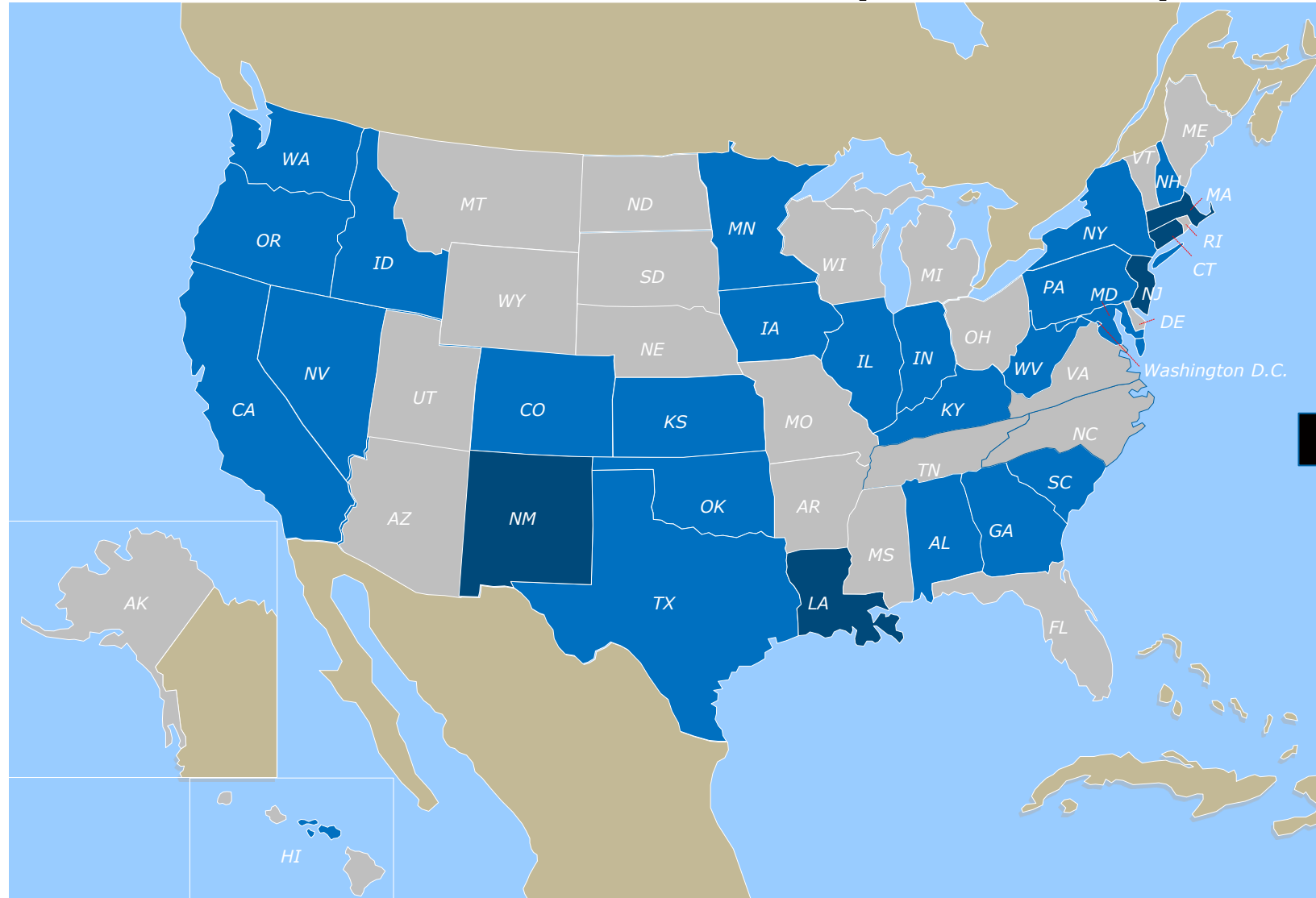
Developing an Advocacy Strategy
for Proper Classification
December 2021



DATA DRIVEN DECISION MAKING



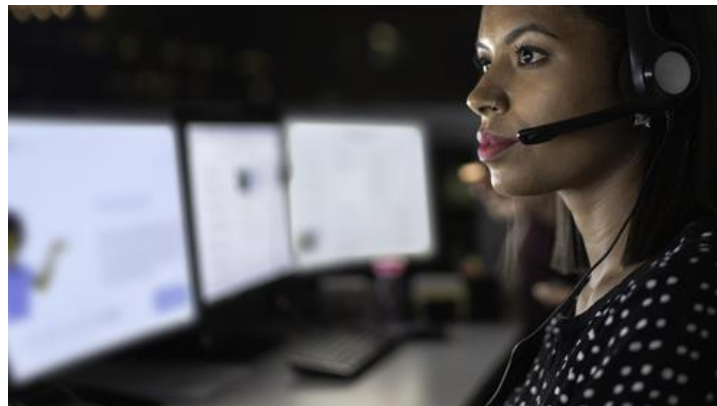
RECLASSIFICATION BY STATE (JAN 2023)



State Telecommunicators with First Responder Classification

MENTAL HEALTH FOR 911 PROFESSIONALS

- Recruitment
- Education
- Resources
- Health and Wellness
- Prevention



Planning for Suicide prevention, intervention and post-vention



Between 17% and 24% of telecommunicators have symptoms of PTSD; 24% have symptoms of depression


[An analysis of suicides among first responders – Findings from the National Violent Death Reporting System, 2015–2017 - ScienceDirect](#)



ARTICLE IN PRESS

Journal of Safety Research xxx (xxxx) xxx

Contents lists available at ScienceDirect

 **Journal of Safety Research** 
National Safety Council

journal homepage: www.elsevier.com/locate/jsr

An analysis of suicides among first responders — Findings from the National Violent Death Reporting System, 2015–2017 [☆]

Leslie M. Carson ^a, Suzanne M. Marsh ^{b,*}, Margaret M. Brown ^c, Katherine L. Elkins ^d, Hope M. Tiesman ^e

^a National Highway Traffic Safety Administration, Office of Impaired Driving and Occupant Protection, Impaired Driving Division, Washington, DC, USA
^b National Institute for Occupational Safety and Health, Division of Safety Research, Surveillance and Field Investigations Branch, Morgantown, WV, USA
^c National Center for Injury Prevention and Control, Division of Injury Prevention, Atlanta, GA, USA
^d National Highway Traffic Safety Administration, Office of Emergency Medical Services, EMS and National 911 Programs, Washington, DC, USA
^e National Institute for Occupational Safety and Health, Division of Safety Research, Analysis and Field Evaluations Branch, Morgantown, WV, USA

ARTICLE INFO	ABSTRACT
<p>Article history: Received 15 September 2022 Received in revised form 6 December 2022</p>	<p>Introduction: First responders, including law enforcement officers (LEOs), firefighters, emergency medical services (EMS) clinicians, and public safety telecommunicators, face unique occupational stressors and may be at elevated risk for suicide. This study characterized suicides among first responders and</p>



UPCOMING WEBINARS

State of 911

Webinar Series



JUL
11

July 2023 State of 911 Webinar
@ 12:00pm ET

[Register →](#)

SEP
12

September 2023 State of 911
Webinar
@ 12:00pm ET

[Register →](#)

NOV
14

November 2023 State of 911
Webinar
@ 12:00pm ET

[Register →](#)

Register today:





**Collaborate with
stakeholders**

Promoting 911 priorities, together



COORDINATION WITH OTHER FEDERAL AGENCIES



Department of Homeland Security

- CISA
- Science and Technology Directorate
- Coast Guard

Interoperability:

FCC, DHS S&T, CISA, FirstNet, DoD, US CG, Veterans Affairs, SAMHSA

Suicide Prevention:

FBI, NIOSH, CDC, NIH, IHS, SAMHSA, White House

Department of Health & Human Services

- Center for Disease Control
- National Institute for Occupational Safety & Health
- Health Resources and Services Administration
- National Institutes of Health
- Substance Abuse & Mental Health Services Administration
- Indian Health Services

911 Telecommunicator Tree of Life

Share a Story:



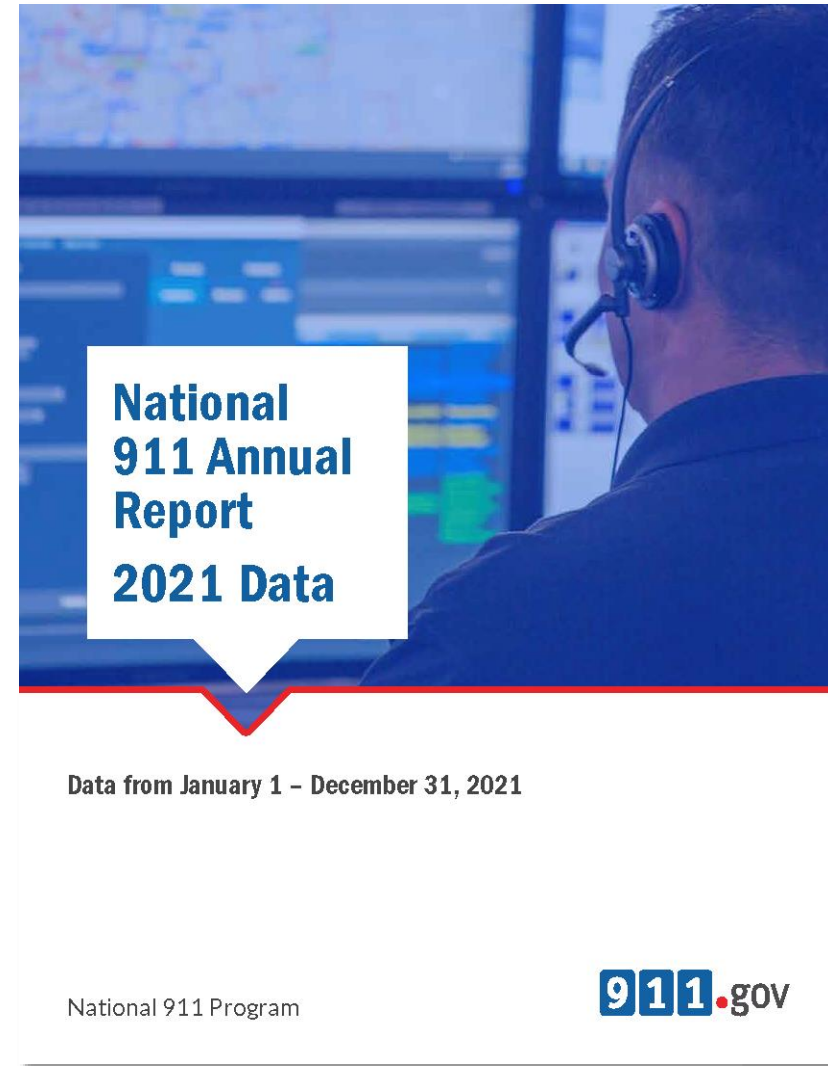


**Create and
share resources**

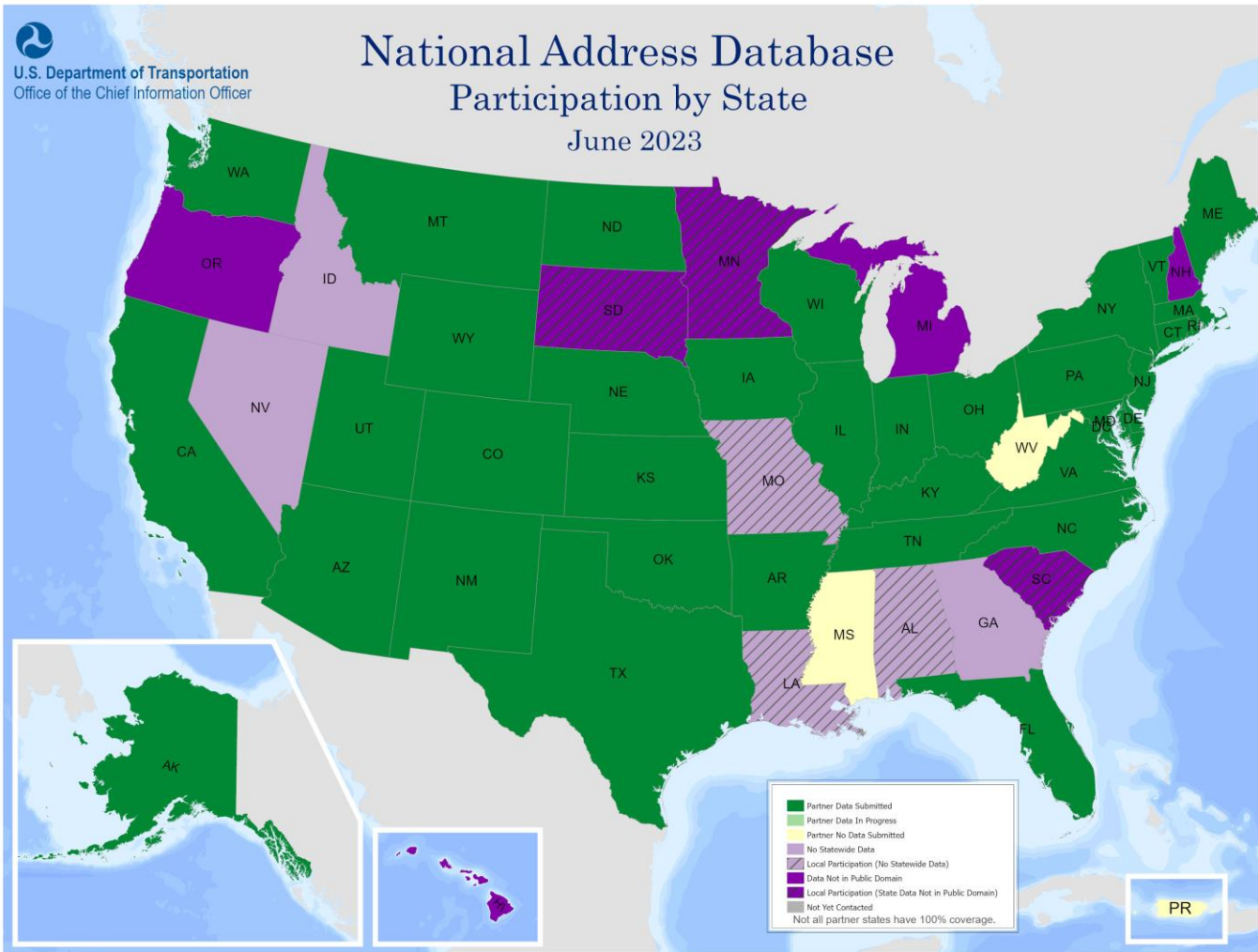
Collect and share data for informed decision-making

NATIONAL 911 PROFILE DATABASE

- Of 56 states and territories,
- 50 took the time to self-report data from 20
- Annual Report with “2021 Data” was published February 2023.
- Collection was completed for 2022 data, June 2023.



NATIONAL ADDRESS DATABASE (NAD)



Release 14 Coming July 2023:

- 75.9 million records
- Nebraska a new partner
- Data in 42 States
- 77 Individual partners submitting data
- Schema includes 23 additional fields
- Milepost values parsed and integrated into Address Number fields





**Create and
share resources**

Continue to develop and share new resources

NG911 FOR PUBLIC SAFETY LEADERS



911 LEGISLATIVE DATABASE

Report 

2022 Key Enacted 911 Legislation

Updated February 20, 2023



STATE ASSESSMENT PROGRAM

- Valuable insights from colleagues using industry developed guidelines

Reviews the following areas:

- Statutory & Regulatory
- Governance
- Functional and Operational Planning
- Standards
- Security/COOP
- Human Resources/Training
- Evaluation

Participating in the State 911 Assessment Program

STATE 911
ASSESSMENT
PROGRAM



Overview: You know your state's emergency communications system. You can see what's working well and what could use some improvements. However, making the case to achieve important improvements can sometimes be a challenge.

The State 911 Assessment Program – managed by the National 911 Program – creates a forum for state administrators to generate expert peer input on system improvement efforts. Based on a set of objective and comprehensive benchmarks established by state administrators, for state administrators, the assessment program convenes unbiased, peer feedback to inform existing 911 system operation opportunities and recommend future improvements.



Having a dedicated team of peer experts to help you move your 911 program forward is invaluable. We knew we needed additional support to fully implement NG911 for our state, and this assessment helped us identify gaps in an objective way that is specific to our state."

Blake DeRouchev
911 Program Manager, State of Iowa

State Administrators in Delaware, North Carolina and Iowa have tapped the State Assessment Program to garner addition insights to support efforts in applying for new funding and staff, developing new protocols and policies, and furthering NG911 implementation.

Consider your own goals:

What do you aim to accomplish? How can input from your colleagues provide the information, expertise, and neutral-party perspectives to help you achieve system goals? Assessments are voluntary, require fewer state resources compared to other assessment options, and are supported by the National 911 Program's team of contracted support and peer participants. The assessment process does not include a technical evaluation, but it does identify operational strengths, weaknesses, and includes actionable recommendations to help make improvements to the system.



911 DOCUMENTS & TOOLS



Categories	
All	
Governance	>
Historical Documents	
Management	>
National 911 Program	>
Operations	>
Post-Crash Care	
Standards and Best Practices	>
Technical	>

Sort By	
Title	
Publish Date	

Have a resource you'd like to share with the community? [Click here to share](#)

302 results



NSGIC Addresses for the Nation - Pathways from Restricted Data to Open Data

This white paper describes how three states—Arizona, Kansas and Kentucky—overcame policies in place that restrict data from being shared publicly to become NAD partners.

Jun 7, 2023 / Technical / GIS

/ National 911 Program / Additional Resources



What Is a Safe System Approach?

This webpage explains the principles and objectives of the U.S. Department of Transportation's Safe System Approach.

Jun 7, 2023 / Post-Crash Care

/ National 911 Program / Additional Resources



911.gov

NHTSA

ems.gov



Kate Elkins, MPH, CPH, NRP

911/EMS Specialist

(202) 366-8812

katherine.elkins@dot.gov



NowGen911 Back to Basics Part 1

Lonna Cain, Intrado

Chris White, Burke County

Tom Rogers, NG911 Network Engineer

Greg Dotson, NMAC Manager

Josh Briggs, AT&T NC NG911 Program Manager
RapidDeploy



Overview – Emergency Call Relay Center

Lonna Cain
August 2023

What *IS* the Intrado Emergency Call Relay Center (ECRC)

- **ONE OF THREE** centers in North America that provide nationwide emergency call handling services - we were the first
- Provide emergency call taking services for our customers (Wireless, VoIP, Telematics & Satellite carriers)
- We receive calls from North America including all 50 states, Canada, Puerto Rico, Guam, American Samoa, the Northern Mariana Islands and the US Virgin Islands
- We transfer emergency calls to the appropriate dispatch center after gathering basic information



A day in the ECRC



Emergency Call Triage

Calls route to the ECRC due to provisioning errors, technical issues, network overload. We transfer emergency calls to the geographically appropriate dispatch center after gathering basic information.



Satellite and Telematics

Primary answering point for Satellite and Telematics calls.

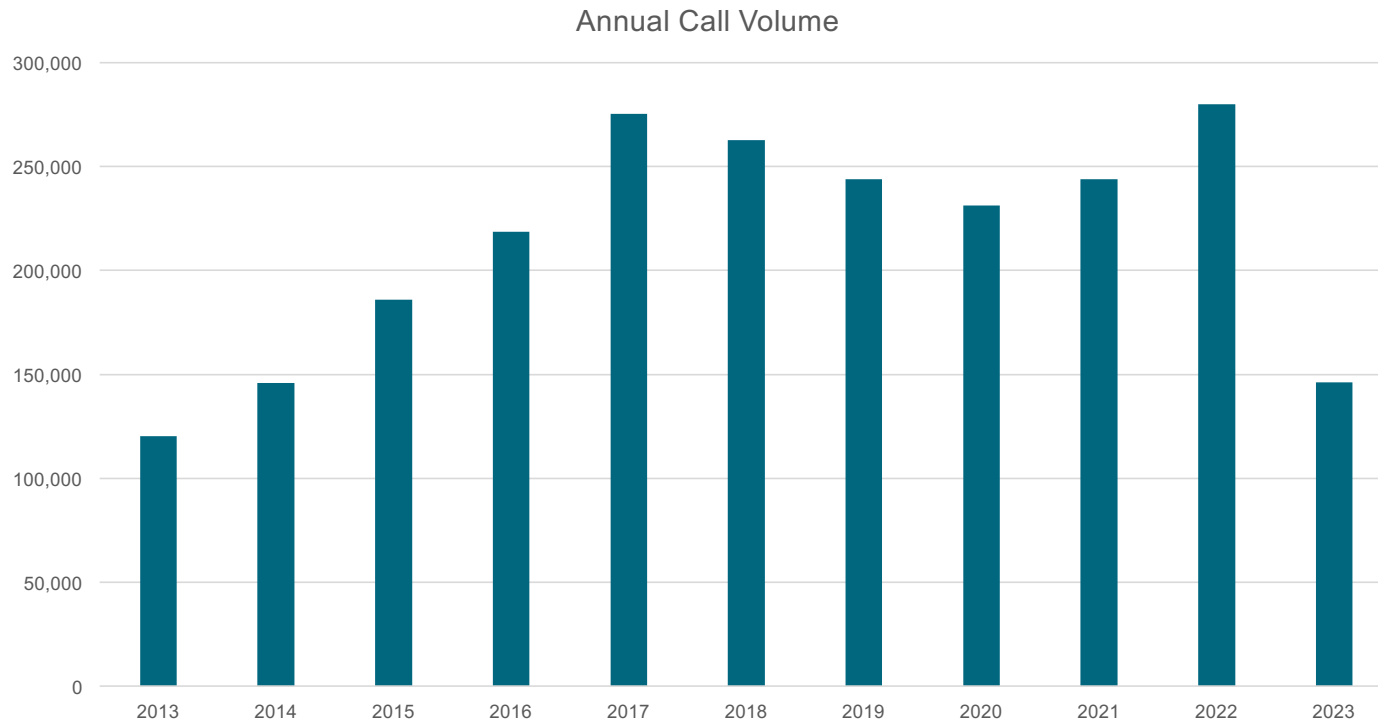


Critical Incident Assistance

We provide short-term assistance for high-volume calls due to catastrophic events to ensure 911 calls do not go unanswered.

- Hurricane Harvey, Hurricane Ida
- Superstorm Sandy
- Hawaii Missile Scare
- Nashville and Boston Marathon bombings

ECRC call volume



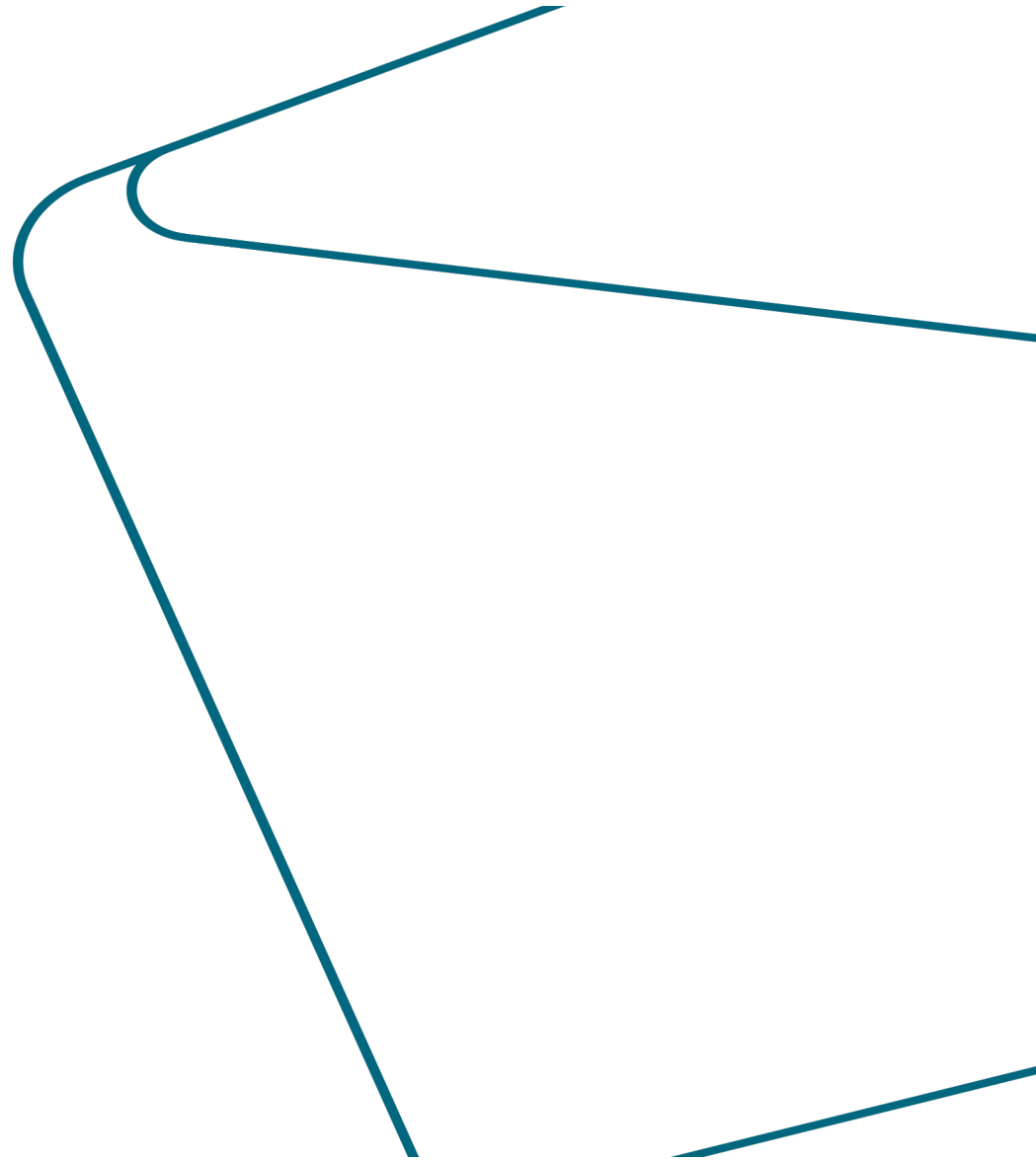
Our team

- The ECRC team is based in Longmont, Colorado
 - We do have several remote Telecommunicators around the country
- Our Telecommunicators are APCO certified and have prior PSAP experience
 - 57% of the team has worked in more than 1 PSAP
 - 21% of the team have been first responders
 - Over 200 years of combined 911 experience
- We exceed the NENA call standard of answering 90% of calls within 10 seconds
- Staffed with 26 Telecommunicators (includes 4 Sr. Telecommunicators), 4 Supervisors & Manager





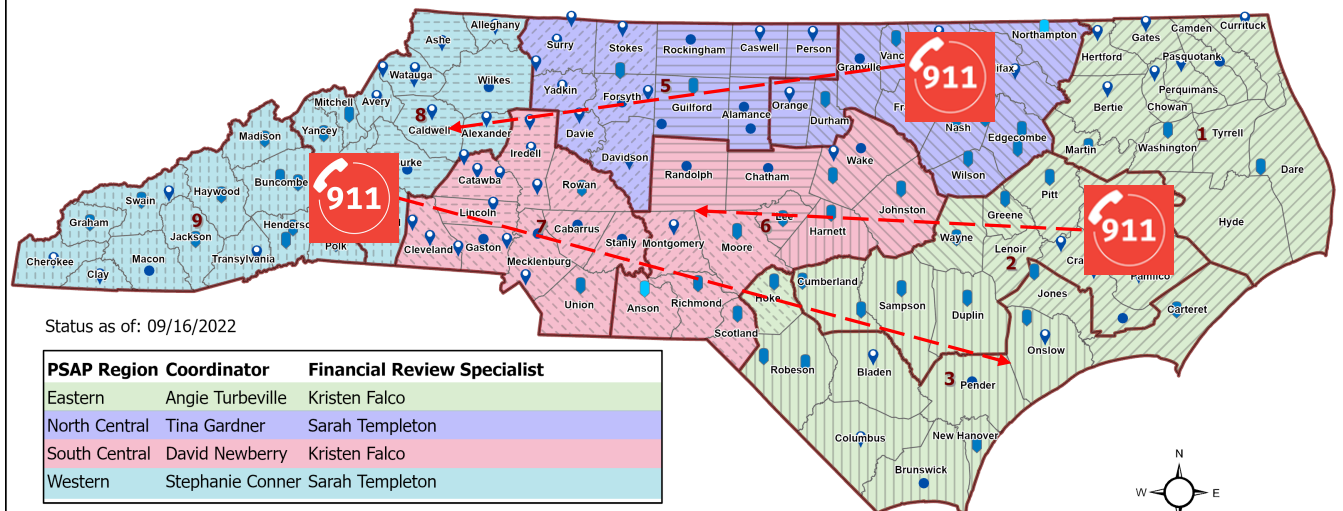
[intrado.com](https://www.intrado.com)



Importance of Transfers

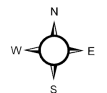
Chris White,
Assistant 911
Director of
Burke County

North Carolina 911 PSAP Regions PSAP Deployment Types



Service Request - Migration Status State Highway Patrol Troop

- ESInet Only - Active Projects
- ESInet Only - Live on ESInet
- Hosted Vesta - Active Projects
- Hosted Vesta - Live on ESInet
- Hosted Viper - Active Projects
- Hosted Viper - Live on ESInet
- NCEM Domestic Preparedness Regions
- ▨ TROOP A: GREENVILLE
- ▨ TROOP B: FAYETTEVILLE
- ▨ TROOP C: RALEIGH
- ▨ TROOP D: GREENSBORO
- ▨ TROOP E: SALISBURY
- ▨ TROOP F: NEWTON
- ▨ TROOP G: ASHEVILLE
- ▨ TROOP H: MONROE



NENA Enhanced PSAP Registry and Census (EPRC)

Greg Dotson
NMAC Manager
N.C. 911 Board

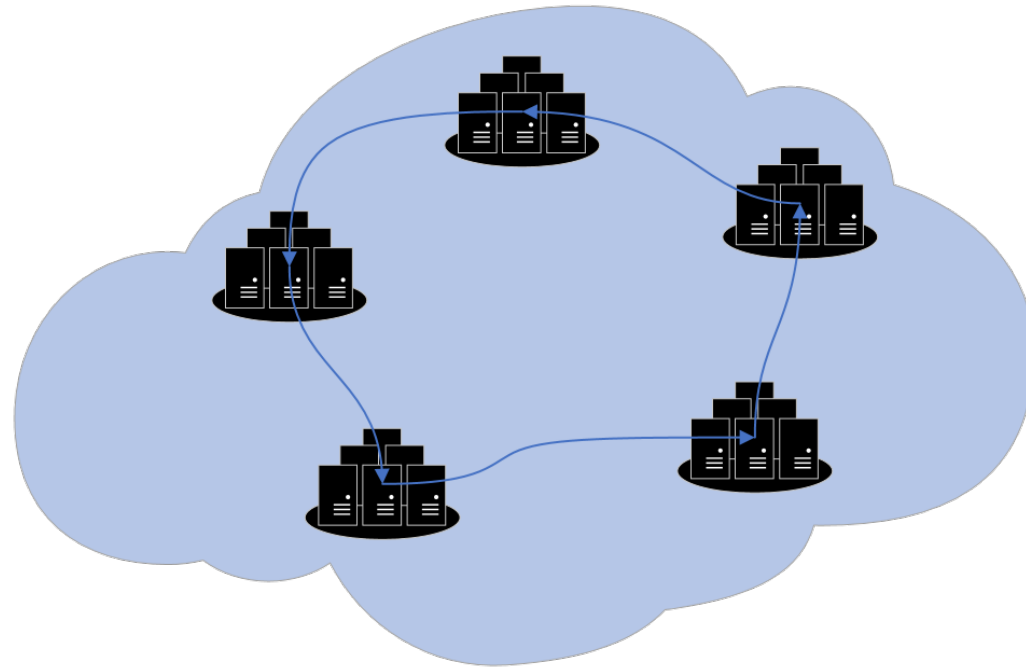
ESInet – Back to Basics

Tom Rogers, NG911 Network Engineer

Greg Dotson, NMAC Manager

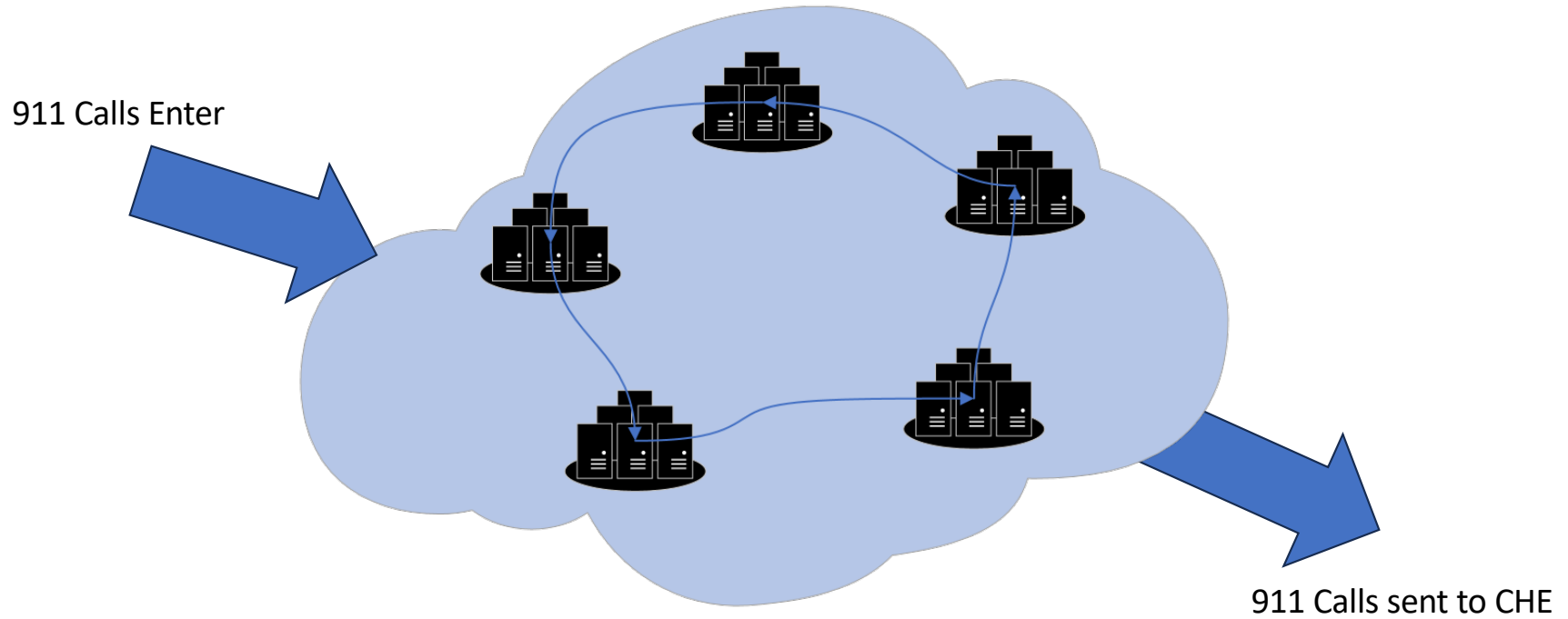
Josh Briggs, AT&T NC NG911 Program Manager

ESInet



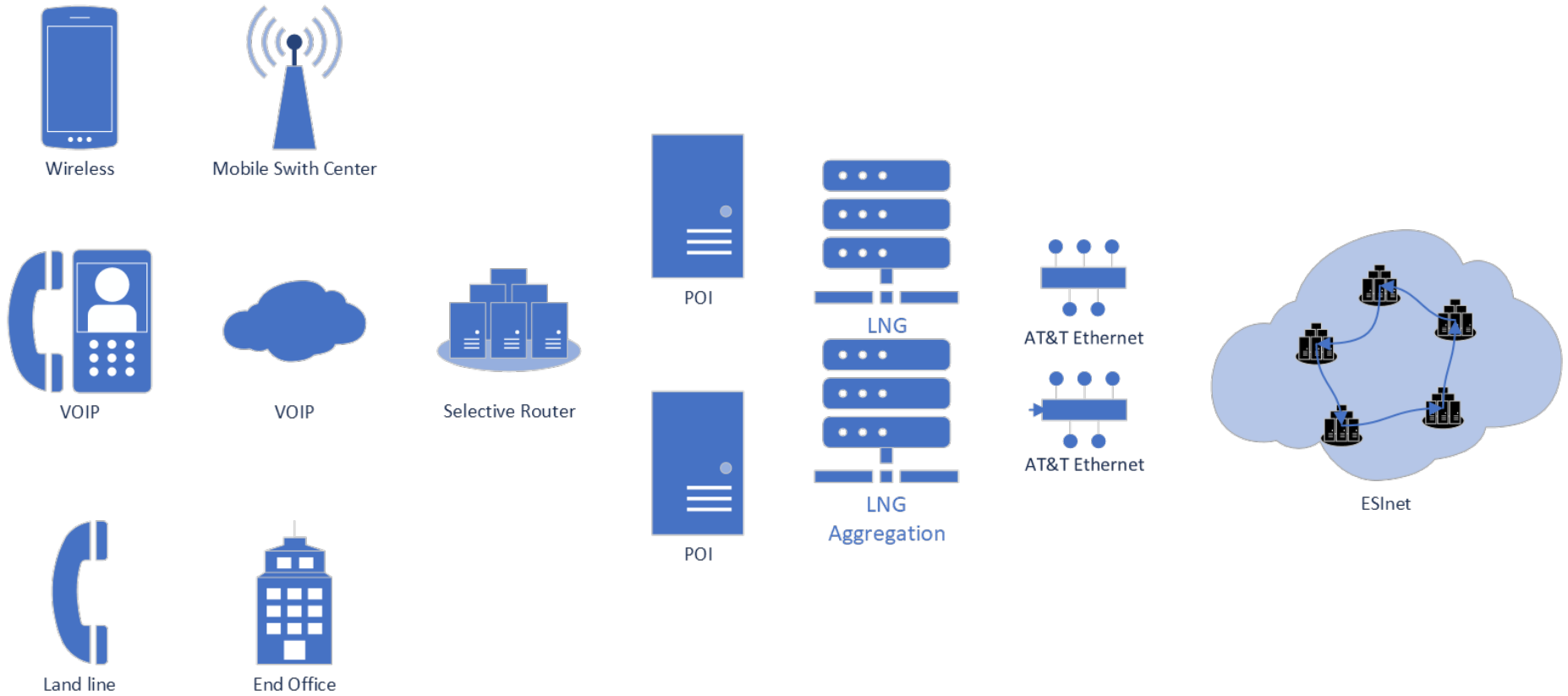
ESInet (Emergency Services Internet Protocol Network owned and operated by AT&T

What the ESInet IS



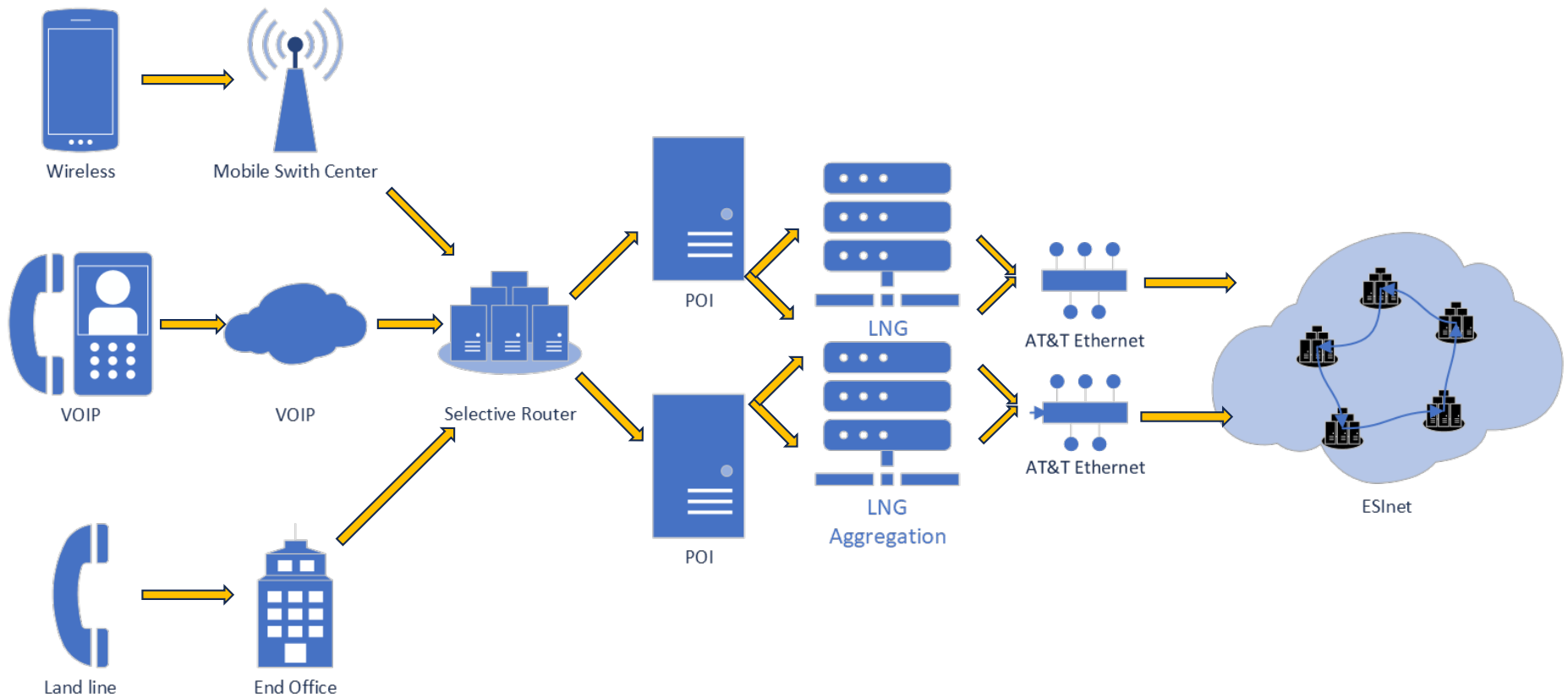
ESInet (Emergency Services Internet Protocol Network) owned and operated by AT&T

NOT what happens before ingress



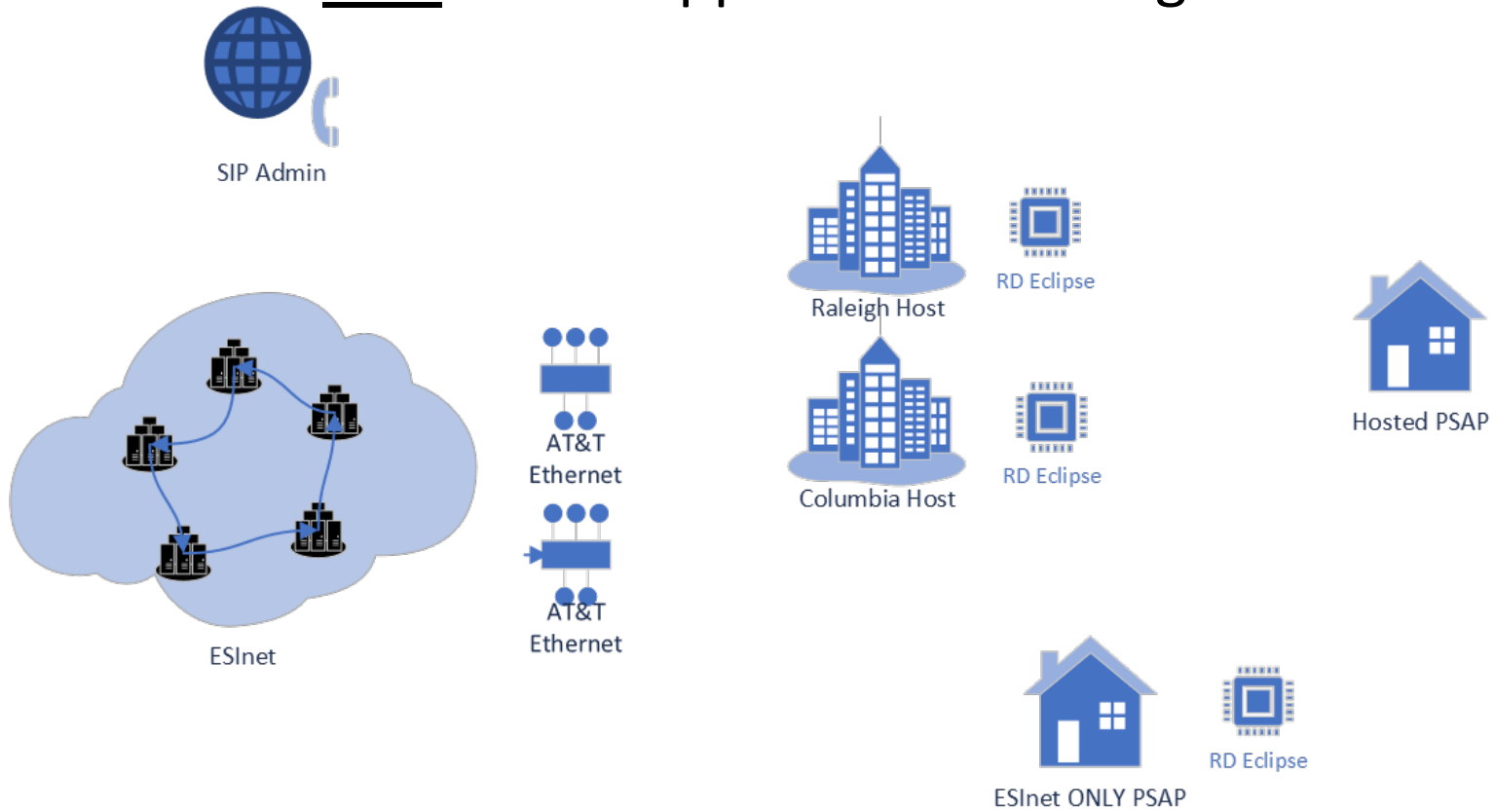
ESInet (Emergency Services Internet Protocol Network) owned and operated by AT&T

NOT what happens before ingress



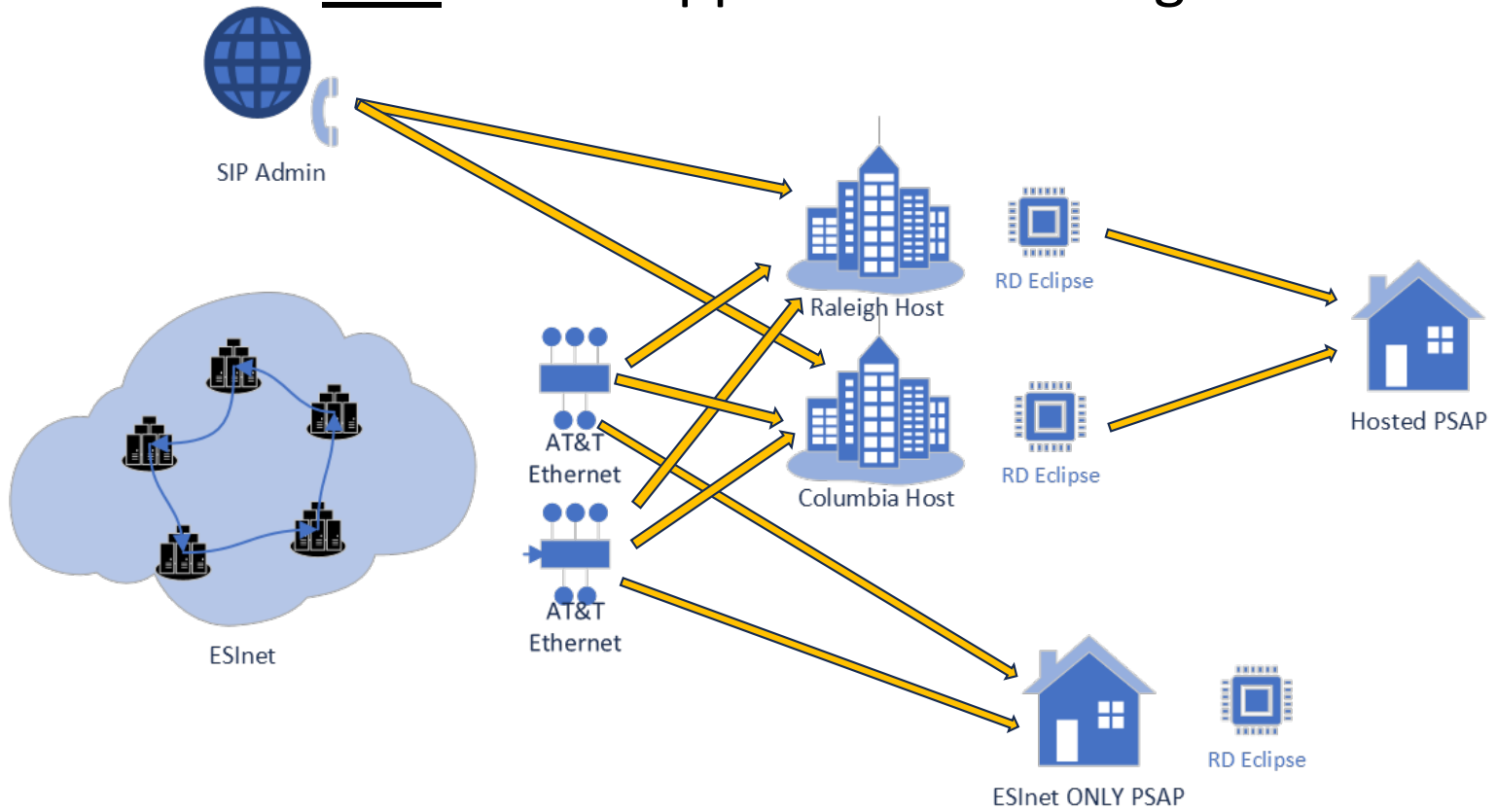
ESInet (Emergency Services Internet Protocol Network) owned and operated by AT&T

NOT what happens after exiting



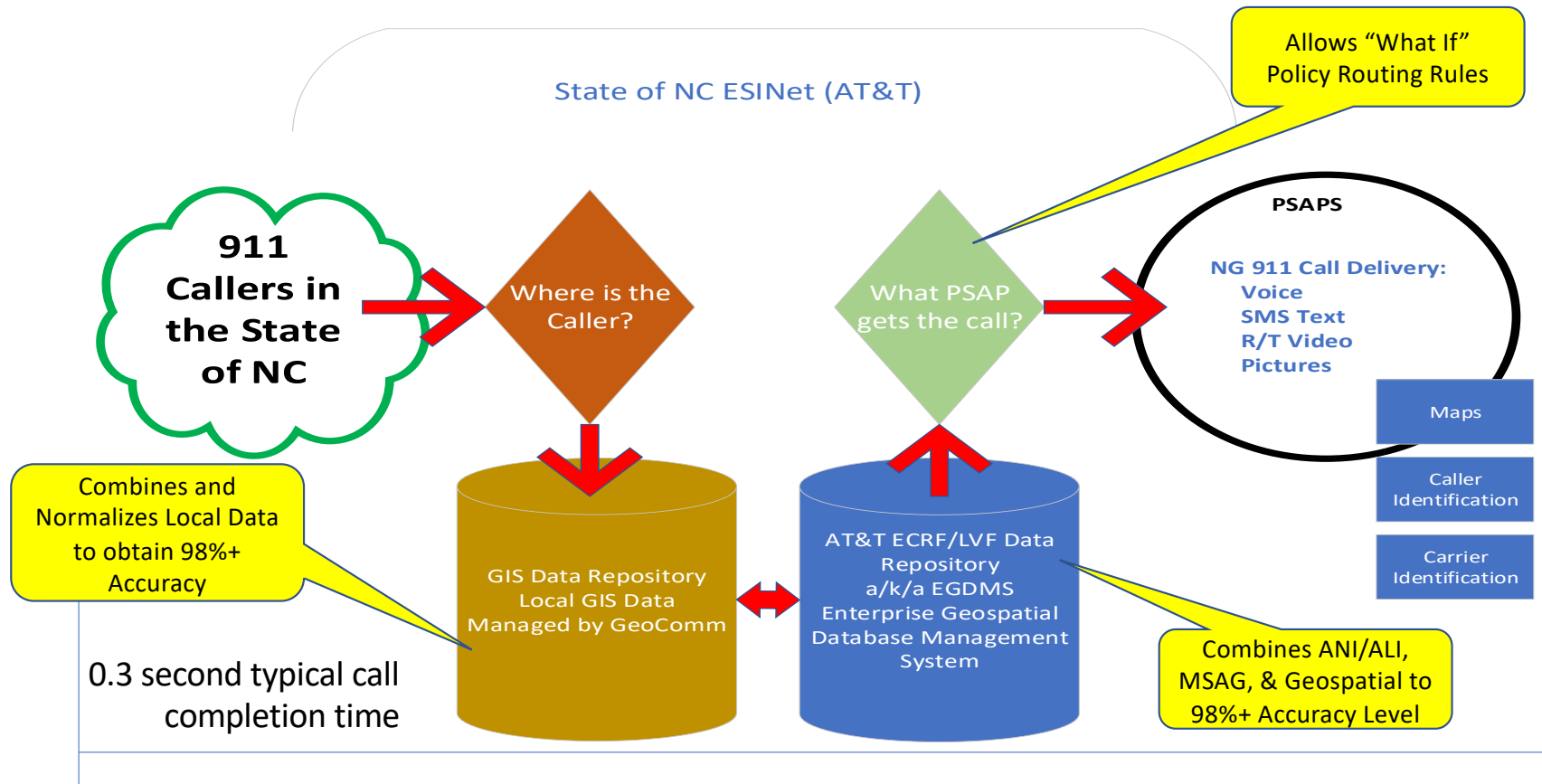
ESInet (Emergency Services Internet Protocol Network) owned and operated by AT&T

NOT what happens after exiting



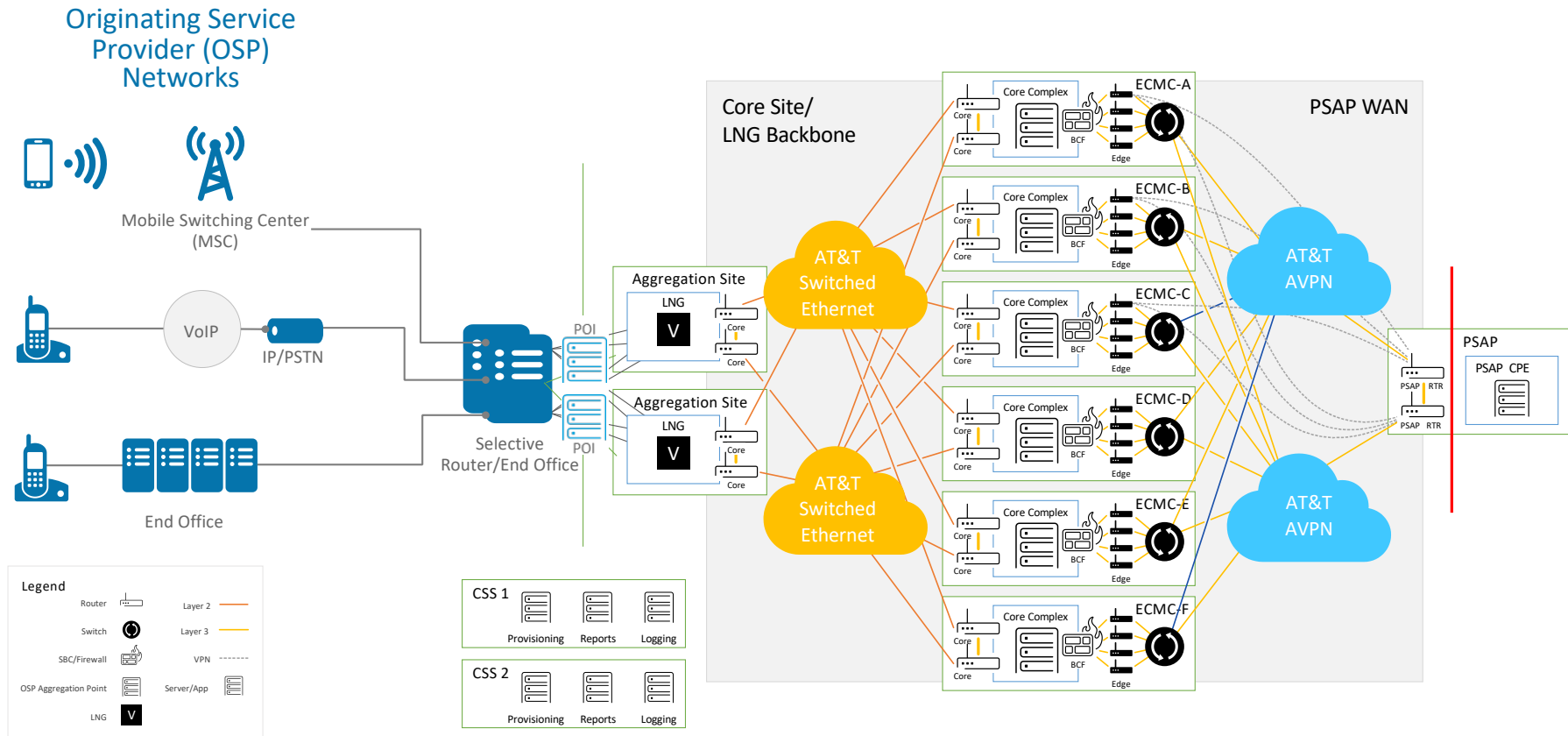
ESnet (Emergency Services Internet Protocol Network) owned and operated by AT&T

North Carolina NG 911



Solution Architecture

AT&T ESInet™ Service



Next Generation 9-1-1
AT&T ESInet™ Service

© 2023 AT&T Intellectual Property. AT&T, and Globe logo, are registered trademarks and service marks of AT&T Intellectual Property and/or AT&T affiliated companies. All other marks are the property of their respective owners.



RapidDeploy Eclipse Questions

RapidDeploy Team



AUGUST 24, 2023

GIS for Next Generation 9-1-1

27 Presented by Matt McLamb, CGIA Assistant Director and Jessica Beierman, GeoComm GIS Project Manager

Agenda

Dashboard Overview

How does your PSAP's GIS data feed into the ESINet?

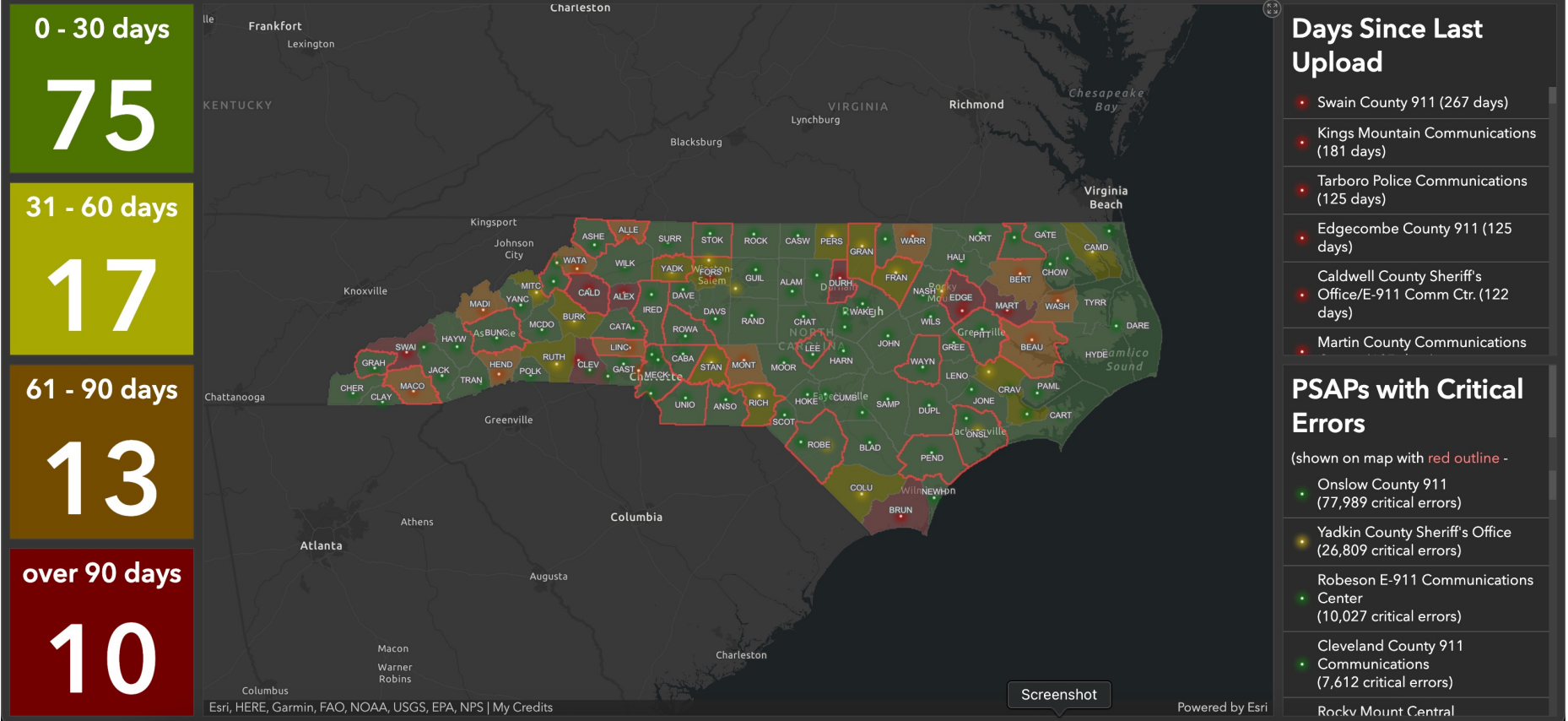
GIS Data Hub version 2 – what's coming

Orthoimagery update

Time for questions

Dashboard Overview

North Carolina Next Generation 911 Days Since Last Upload by PSAP and County



<https://nconemap.maps.arcgis.com/apps/dashboards/47592879688f49c39ade923066691b69>





How does your PSAP's GIS data feed into the ESINet?

Confidential Business Information

GEQCOMM

Preserve local schema – ETL process

(Extract, Transform, Load)

Local Schema



Local Schema



Local Schema



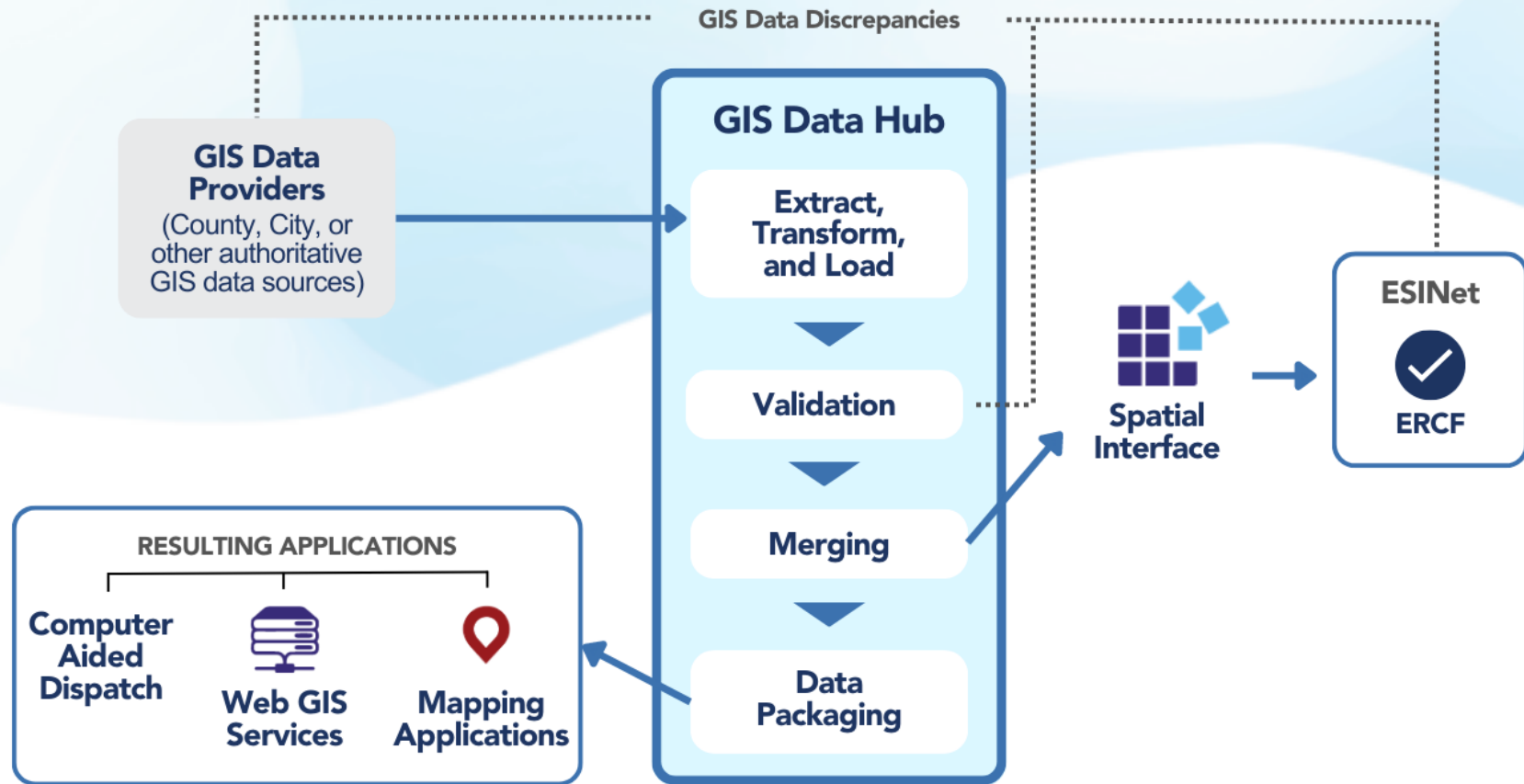
Field Mapping and Conversion (ETL)



NG9-1-1 Schema



GIS Data Management Workflow



Resources

- NG911 Website
 - Links to dashboards
 - NG911 project overview
 - NG911 GIS resources
 - GIS Data Hub User Guide
 - Live on i3 Help Guide
 - FAQ
 - Contact Information

<https://it.nc.gov/about/boards-commissions/nc-911-board/next-generation-911>



A screenshot of the Next Generation 911 website dashboard. At the top left, a blue box displays the number "126". To its right is a map of North Carolina with various counties highlighted in blue and purple. Below the map is a dark blue box with the title "Next Generation 911" and a paragraph of text: "NCDIT and the N.C. 911 Board are working to bring NG911 to North Carolina. It sends emergency responders directly to a 911 caller's exact location, even if the person is calling or texting with a cell phone." Below this text is a "Learn More" button. The dashboard is organized into sections: "Project Updates" with three boxes for "NG911 Project Progress", "Emergency Services IP Network (ESINet) Status Map", and "Connecting to NG911 GIS Services"; "NG911 GIS Status Map" and "NG911 Days Since Last Upload Dashboard"; and "Contacts & Training" with two boxes for "Regional Coordinators" and "GIS in the i3 Environment Training".





GIS Data Hub version 2 – what's coming



GIS Data Hub

Email address



Password



[Forgot password?](#)

Continue

Don't have an account? [Sign up](#)



Navigation Bar


- Submit New Data
- Data Targets
- Analytics
- Data Packages
- Available Packages

Submit New Data

Upload your complete map data files for processing.

Upload and Submit

Work Area



Drop your file here or click to browse.


Supports a single zip file up to 5 GB.

- Submit New Data
- Data Targets**
- Analytics
- Account Settings ▼
- Data Packages ▼
- Dashboard

Data Targets

Enable the targets that will run on each data submission.

NENA Data Model v2
Status: ⚠ Field and Layer Mapping Required

 Layer and Field Mapping ▶
9 of 22 Layers Complete

Enable NENA Data Model v2
Last Run Date: 06/08/2023 11:38:40 am

0 Enabled

[Run Data](#)

[← Back to Data Targets](#)

NENA Data Model v2

Layer and Field Mapping ^

All Layers

County Or Equivalent Boundary

Emergency Medical Services Boundary

Fire Boundary

Incorporated Municipality Boundary

Law Enforcement Boundary

Provisioning Boundary

PSAP Boundary

Railroad Centerlines

Road Centerlines

Site Structure Address Points

State Or Equivalent Boundary

Railroad Crossing

ALI Database

Data Target: NENA Data Model v2 / Layers

Layer

9 of 13 Layers Complete

Status	Target Layer Name	Required Fields	Source Layer Name	Mapping
	County Or Equivalent Boundary			Map Layer
✔	Emergency Medical Services Boundary	7 of 7	📄 EMSStation	View Fields
✔	Fire Boundary	7 of 7	📄 FireStation	View Fields
✔	Incorporated Municipality Boundary	7 of 7	📄 Municipalities	View Fields
✔	Law Enforcement Boundary	7 of 7	📄 LawAgency	View Fields
✔	Provisioning Boundary	3 of 3	📄 ProvisioningBoundary	View Fields
✔	PSAP Boundary	7 of 7	📄 PSAPBoundary	View Fields
	Railroad Centerlines			Map Layer
✔	Road Centerlines	17 of 17	📄 Centerlines	View Fields
✔	Site Structure Address Points	9 of 9	📄 Address	View Fields
	State Or Equivalent Boundary			Map Layer
	Railroad Crossing			Map Layer

All layers have been saved. Ready to run your data.

[Done](#)

- Submit New Data
- Data Targets
- Analytics**
- Account Settings
- Data Packages
- Dashboard

Analytics

View summaries and download detailed fallout reports from your latest data runs.

NENA Data Model v2

Filter

<p>NENA Data Model v2 Run Id: 8706c142-4c18-4254-aaa1-5376436130af</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/08/2023 11:33:39 am</p>	<p>NENA Data Model v2 Run Id: 2beb4cf4-a670-4feb-8fd4-003539605bc6</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/02/2023 03:29:55 pm</p>	<p>NENA Data Model v2 Run Id: cc8f449b-5ba1-4c65-b31f-aff099c278c2</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/02/2023 03:22:05 pm</p>	<p>NENA Data Model v2 Run Id: bf06e0a9-082f-482a-bc1a-62e1c982852b</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/02/2023 12:55:55 pm</p>
<p>NENA Data Model v2 Run Id: 6f13d374-c23e-4e29-a30d-a76b5b1b291e</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 05/16/2023 08:18:59 am</p>			

Primary Account Report
Summary Report for your Primary Account

[View and Download](#)

< Back to Analytics

Analytics / GIS Data Summary Report: 8706c142-4c18-4254-aaa1-5376436130af

Job Reports

GIS Data Summary Report

GIS Data Summary Report

Search

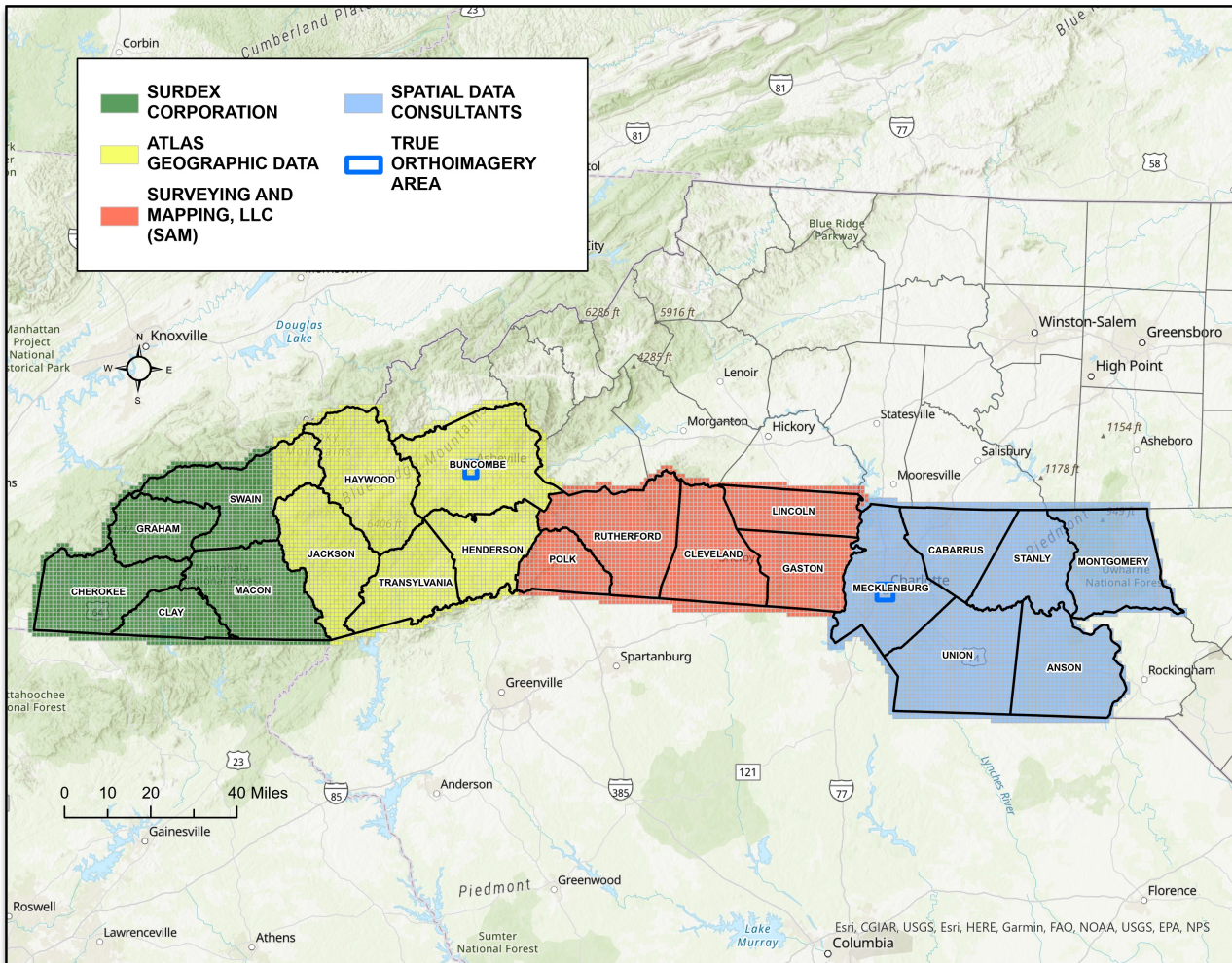
Layer Name	QC Name	Elapsed Time (s)	Fallout Count	Features Analyzed	Sync Percent	QC Severity Level
ALIDatabase	ALI to RCL Synchronization	3.88	9,321	37,281	75%	critical
SSAP	Duplicate Values	0.99	250	90,934	100%	critical
RCL	Address Range Overlaps	3.818	15	11,583	100%	critical
Address	Empty Geometry	0.357	1	90,935	100%	critical
Centerlines	Empty Geometry	0.277	0	11,583	100%	critical
EMSStation	Empty Geometry	0.27	0	5	100%	critical
ESB_EMS	Null Value in Field	0.281	0	5	100%	critical
ESB_EMS	Null Value in Field	0.32	0	5	100%	critical
ESB_EMS	Null Value in Field	0.162	0	5	100%	critical
ESB_EMS	Acceptable Values	0.268	0	5	100%	critical
ESB_EMS	Acceptable Values	0.491	0	5	100%	critical
ESB_EMS	Acceptable Values	0.274	0	5	100%	critical
ESB_EMS	Polygon overlap check	0.418	0	5	100%	critical
ESB_EMS	Polygon Compare (Overhangs)	0.581	0	5	100%	critical
ESB_EMS	Polygon Compare (Gaps)	0.603	0	5	100%	critical
ESB_EMS	Duplicate Values	0.227	0	5	100%	critical
ESB_EMS	Null Value in Field	0.311	0	5	100%	critical
ESB_EMS, ESB_FIRE, INC_MUNI, ESB_LAW, PROV_BNDY, PSAP, SSAP	Globally Unique ID	0.822	0	91,208	100%	critical
ESB_FIRE	Acceptable Values	0.419	0	83	100%	critical
ESB_FIRE	Acceptable Values	0.469	0	83	100%	critical

Orthoimagery Update

Confidential Business Information

GEQCOMM

2023 Southern Piedmont & Mountains

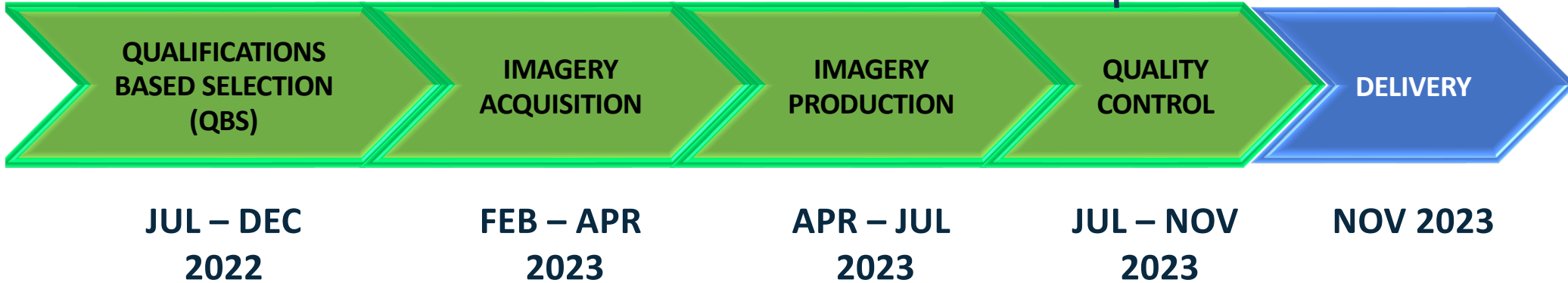


- 21 counties
- 10,397 square miles
- 50% of Project Area considered 'Mountain Acquisition'
- True Orthoimagery for Asheville & Charlotte
- 4-Band Ortho Products continuing to be developed for this phase to complete entire state of CIR

2023 Southern Piedmont & Mountains

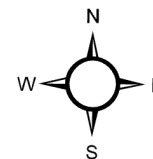
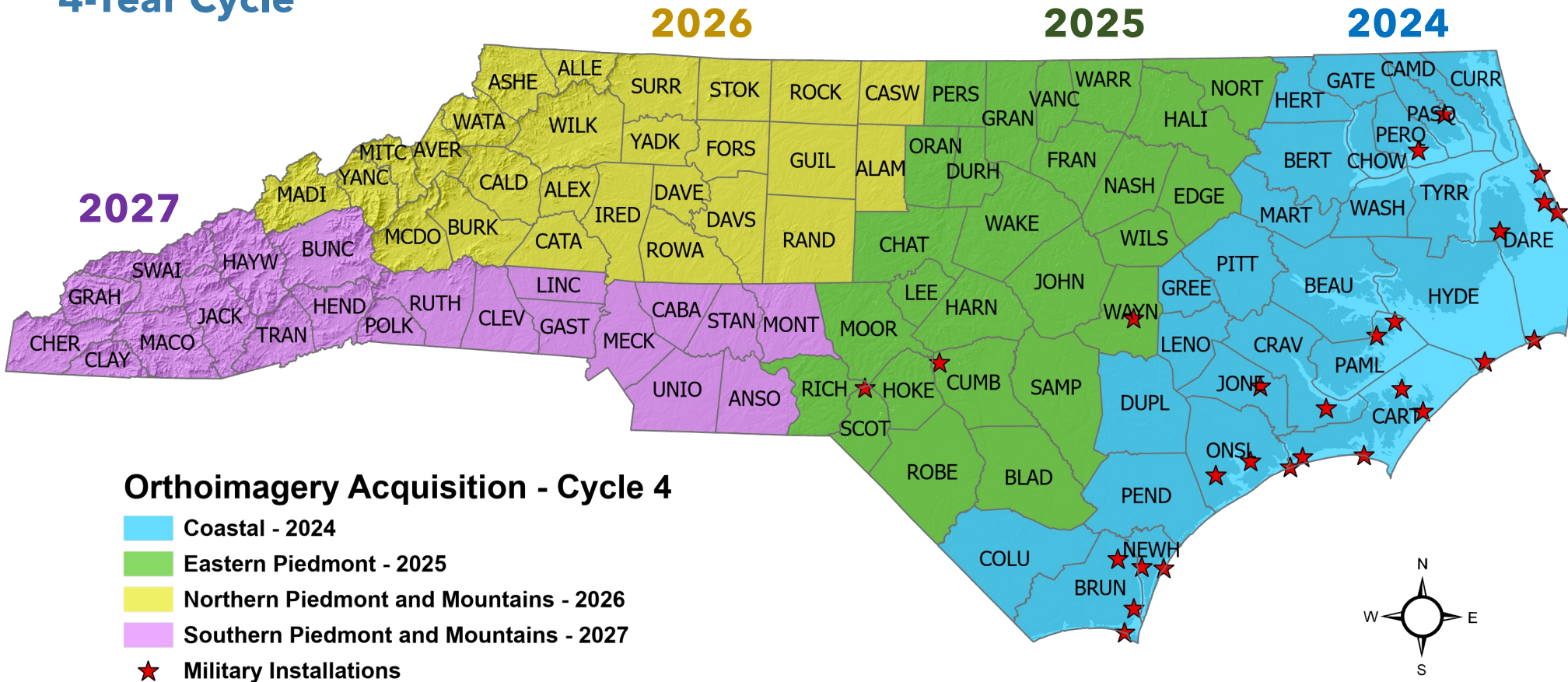
Timeline

QC Training
Webinar July 18
First Counties Begin
Review on July 24



Proposed Orthoimagery Program Cycle

4-Year Cycle



Questions



Contact Information
Jessica Beierman
jbeierman@geocomm.com
ncteam@geocomm.com



AUGUST 24, 2023

GIS for Next Generation 9-1-1

1 Presented by Matt McLamb, CGIA Assistant Director and Jessica Beierman, GeoComm GIS Project Manager

Agenda

Dashboard Overview

How does your PSAP's GIS data feed into the ESINet?

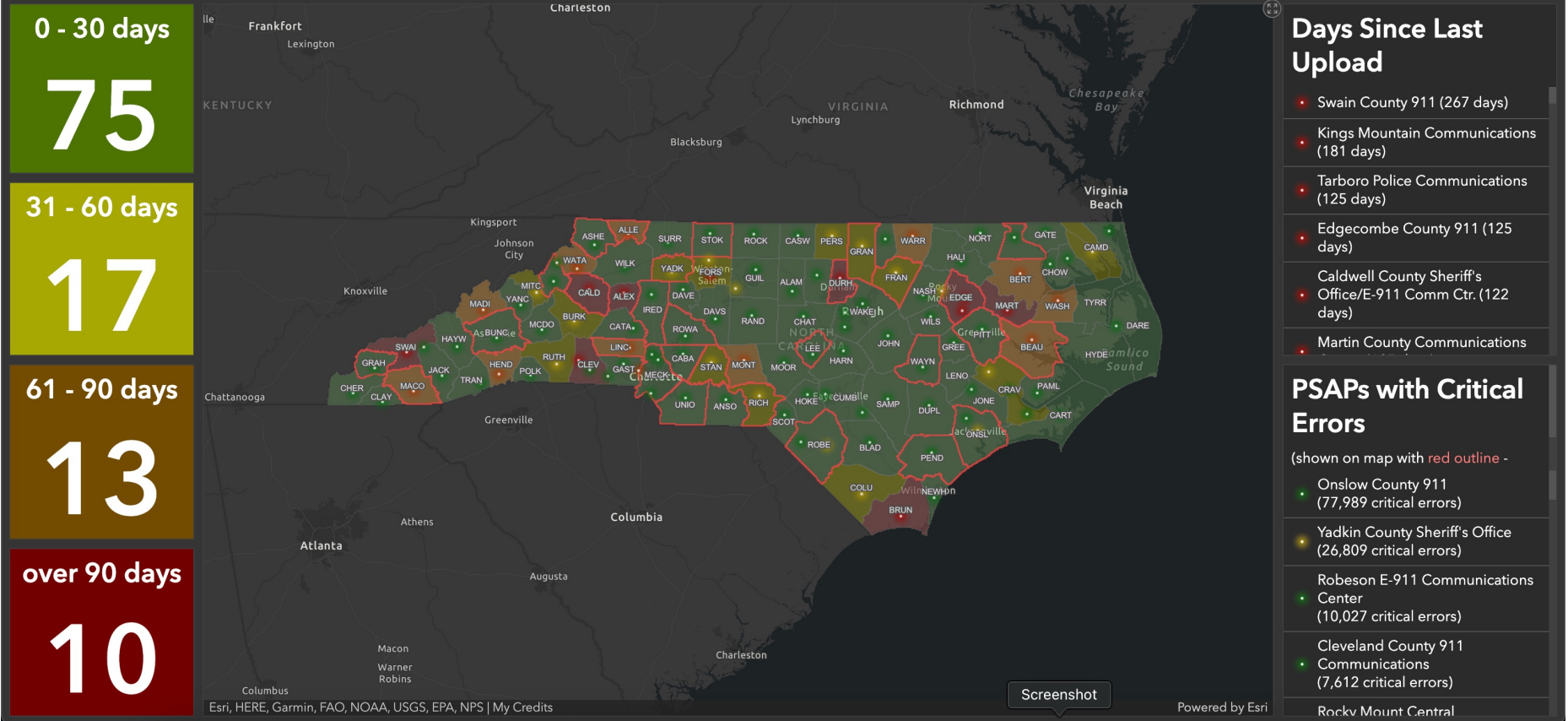
GIS Data Hub version 2 – what's coming

Orthoimagery update

Time for questions

Dashboard Overview

North Carolina Next Generation 911 Days Since Last Upload by PSAP and County



<https://nconemap.maps.arcgis.com/apps/dashboards/47592879688f49c39ade923066691b69>





How does your PSAP's GIS data feed into the ESINet?

Preserve local schema – ETL process

(Extract, Transform, Load)

Local Schema



Local Schema



Local Schema



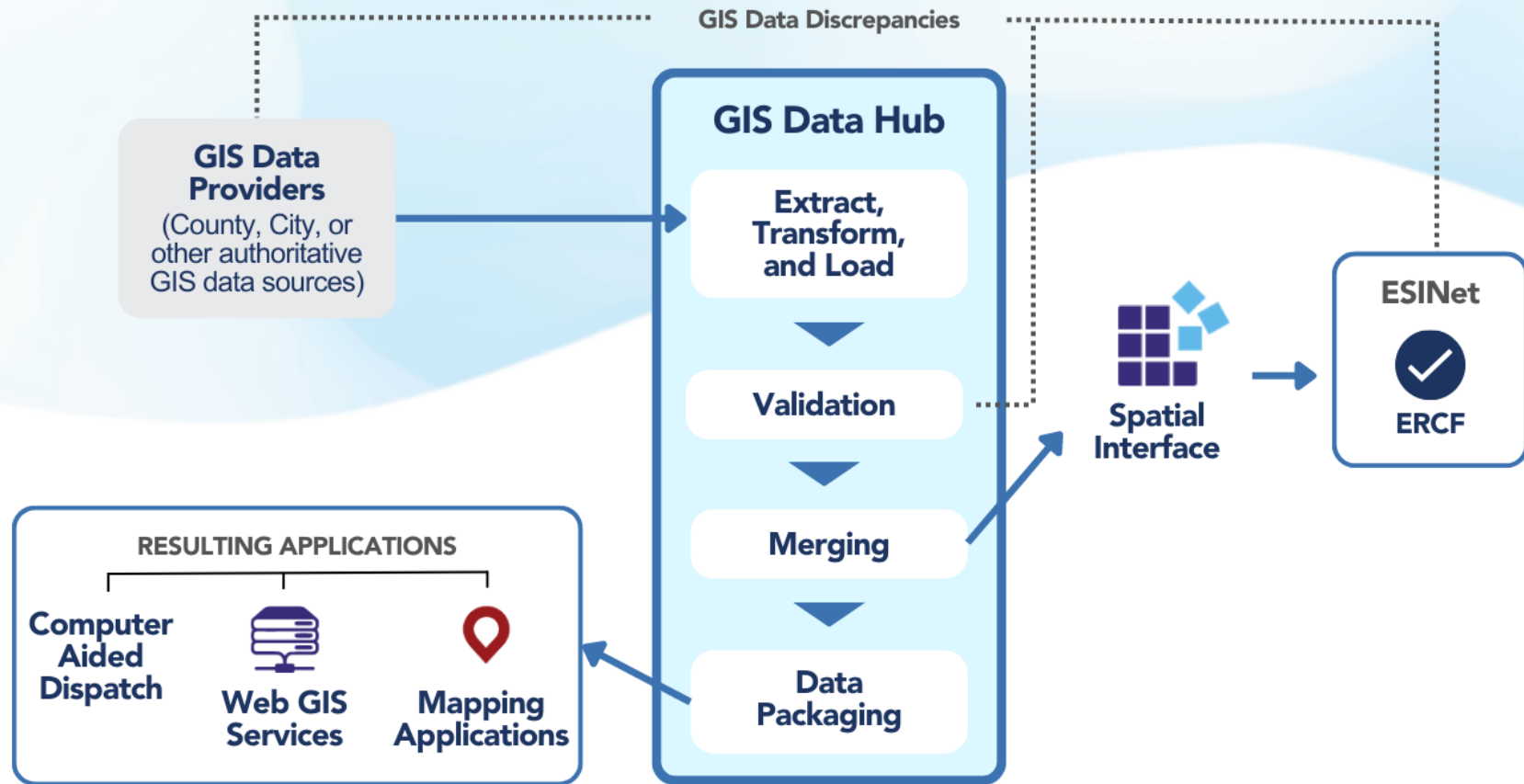
Field Mapping and Conversion (ETL)



NG9-1-1 Schema



GIS Data Management Workflow



Resources

- NG911 Website
 - Links to dashboards
 - NG911 project overview
 - NG911 GIS resources
 - GIS Data Hub User Guide
 - Live on i3 Help Guide
 - FAQ
 - Contact Information

<https://it.nc.gov/about/boards-commissions/nc-911-board/next-generation-911>



A screenshot of the Next Generation 911 website dashboard. At the top left, a blue box displays the number "126". To its right is a map of North Carolina with various counties highlighted in blue and purple. Below the map is a dark blue box with the text "Next Generation 911" and a brief description: "NCDIT and the N.C. 911 Board are working to bring NG911 to North Carolina. It sends emergency responders directly to a 911 caller's exact location, even if the person is calling or texting with a cell phone." Below this text is a "Learn More" button. The dashboard is organized into sections: "Project Updates" containing three boxes for "NG911 Project Progress", "Emergency Services IP Network (ESINet) Status Map", and "Connecting to NG911 GIS Services"; "NG911 GIS Status Map" and "NG911 Days Since Last Upload Dashboard"; and "Contacts & Training" containing "Regional Coordinators" and "GIS in the i3 Environment Training".





GIS Data Hub version 2 – what's coming



GIS Data Hub

Email address



Password



[Forgot password?](#)

Continue

Don't have an account? [Sign up](#)



Navigation Bar

- Submit New Data
- Data Targets
- Analytics
- Data Packages
- Available Packages

Submit New Data

Upload your complete map data files for processing.



Upload and Submit

Work Area




Drop your file here or click to browse.



Supports a single zip file up to 5 GB.

- Submit New Data
- Data Targets**
- Analytics
- Account Settings 
- Data Packages 
- Dashboard

Data Targets

Enable the targets that will run on each data submission.

NENA Data Model v2
Status:  Field and Layer Mapping Required

 Layer and Field Mapping
9 of 22 Layers Complete 

Enable NENA Data Model v2
Last Run Date: 06/08/2023 11:38:40 am

0 Enabled

Run Data

[← Back to Data Targets](#)

NENA Data Model v2

Layer and Field Mapping ^

All Layers

County Or Equivalent Boundary

Emergency Medical Services Boundary

Fire Boundary

Incorporated Municipality Boundary

Law Enforcement Boundary

Provisioning Boundary

PSAP Boundary

Railroad Centerlines

Road Centerlines

Site Structure Address Points

State Or Equivalent Boundary

Railroad Crossing

ALI Database

Data Target: NENA Data Model v2 / Layers

Layer

9 of 13 Layers Complete

Status	Target Layer Name	Required Fields	Source Layer Name	Mapping
	County Or Equivalent Boundary			Map Layer
✔	Emergency Medical Services Boundary	7 of 7	📄 EMSStation	View Fields
✔	Fire Boundary	7 of 7	📄 FireStation	View Fields
✔	Incorporated Municipality Boundary	7 of 7	📄 Municipalities	View Fields
✔	Law Enforcement Boundary	7 of 7	📄 LawAgency	View Fields
✔	Provisioning Boundary	3 of 3	📄 ProvisioningBoundary	View Fields
✔	PSAP Boundary	7 of 7	📄 PSAPBoundary	View Fields
	Railroad Centerlines			Map Layer
✔	Road Centerlines	17 of 17	📄 Centerlines	View Fields
✔	Site Structure Address Points	9 of 9	📄 Address	View Fields
	State Or Equivalent Boundary			Map Layer
	Railroad Crossing			Map Layer

All layers have been saved. Ready to run your data.

[Done](#)

- Submit New Data
- Data Targets
- Analytics**
- Account Settings
- Data Packages
- Dashboard

Analytics

View summaries and download detailed fallout reports from your latest data runs.

NENA Data Model v2

Filter

<p>NENA Data Model v2 Run Id: 8706c142-4c18-4254-aaa1-5376436130af</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/08/2023 11:33:39 am</p>	<p>NENA Data Model v2 Run Id: 2beb4cf4-a670-4feb-8fd4-003539605bc6</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/02/2023 03:29:55 pm</p>	<p>NENA Data Model v2 Run Id: cc8f449b-5ba1-4c65-b31f-aff099c278c2</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/02/2023 03:22:05 pm</p>	<p>NENA Data Model v2 Run Id: bf06e0a9-082f-482a-bc1a-62e1c982852b</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 06/02/2023 12:55:55 pm</p>
<p>NENA Data Model v2 Run Id: 6f13d374-c23e-4e29-a30d-a76b5b1b291e</p> <p> GIS Data Summary Report Overview of your GIS Data Run</p> <p> GIS Fallout Report</p> <p>Run Date: 05/16/2023 08:18:59 am</p>			

Primary Account Report
Summary Report for your Primary Account

[View and Download](#)

< Back to Analytics

Analytics / GIS Data Summary Report: 8706c142-4c18-4254-aaa1-5376436130af

Job Reports

GIS Data Summary Report

GIS Data Summary Report

Search

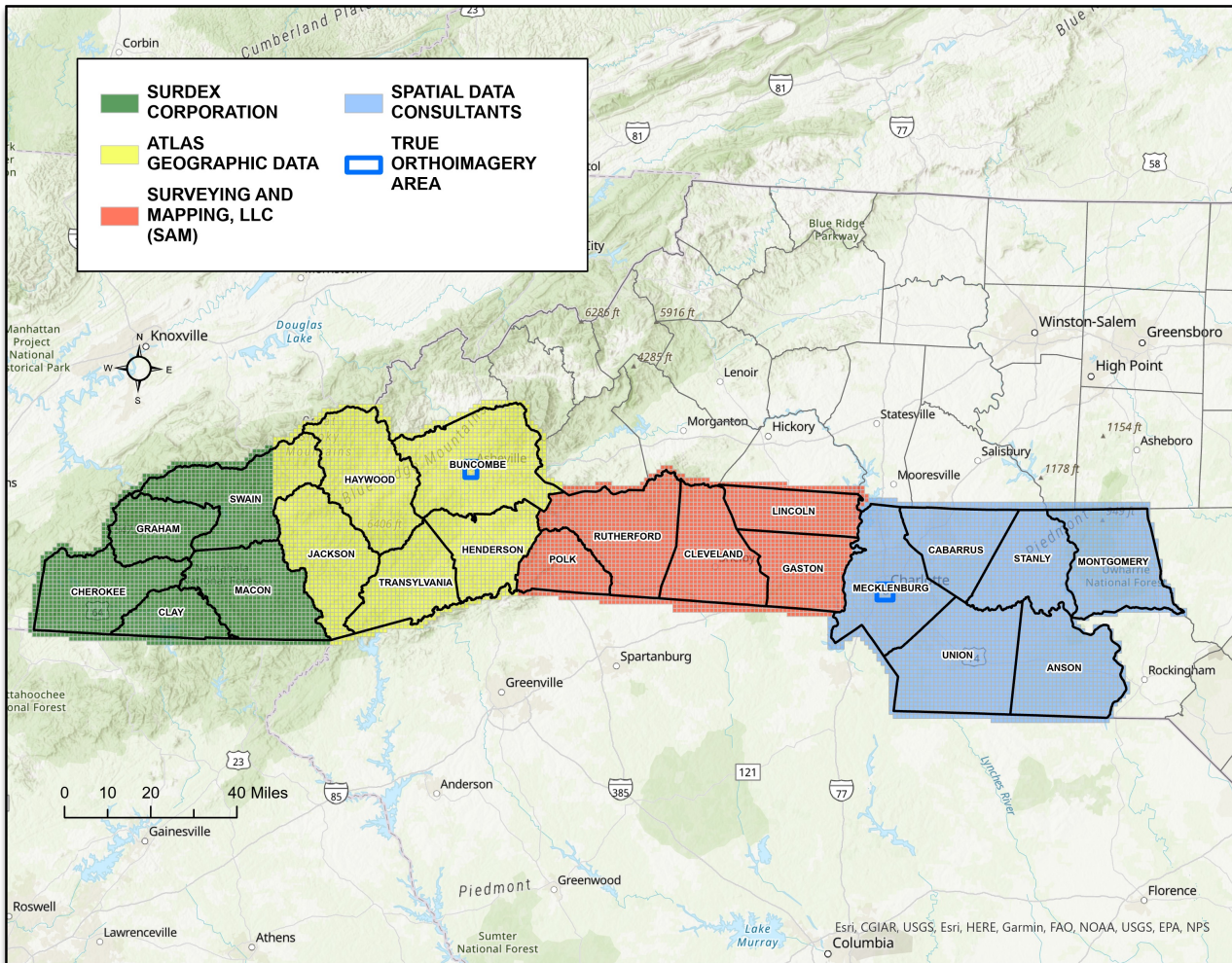
Layer Name	QC Name	Elapsed Time (s)	Fallout Count	Features Analyzed	Sync Percent	QC Severity Level
ALIDatabase	ALI to RCL Synchronization	3.88	9,321	37,281	75%	critical
SSAP	Duplicate Values	0.99	250	90,934	100%	critical
RCL	Address Range Overlaps	3.818	15	11,583	100%	critical
Address	Empty Geometry	0.357	1	90,935	100%	critical
Centerlines	Empty Geometry	0.277	0	11,583	100%	critical
EMSStation	Empty Geometry	0.27	0	5	100%	critical
ESB_EMS	Null Value in Field	0.281	0	5	100%	critical
ESB_EMS	Null Value in Field	0.32	0	5	100%	critical
ESB_EMS	Null Value in Field	0.162	0	5	100%	critical
ESB_EMS	Acceptable Values	0.268	0	5	100%	critical
ESB_EMS	Acceptable Values	0.491	0	5	100%	critical
ESB_EMS	Acceptable Values	0.274	0	5	100%	critical
ESB_EMS	Polygon overlap check	0.418	0	5	100%	critical
ESB_EMS	Polygon Compare (Overhangs)	0.581	0	5	100%	critical
ESB_EMS	Polygon Compare (Gaps)	0.603	0	5	100%	critical
ESB_EMS	Duplicate Values	0.227	0	5	100%	critical
ESB_EMS	Null Value in Field	0.311	0	5	100%	critical
ESB_EMS, ESB_FIRE, INC_MUNI, ESB_LAW, PROV_BNDY, PSAP, SSAP	Globally Unique ID	0.822	0	91,208	100%	critical
ESB_FIRE	Acceptable Values	0.419	0	83	100%	critical
ESB_FIRE	Acceptable Values	0.469	0	83	100%	critical

Orthoimagery Update

Confidential Business Information

GEQCOMM

2023 Southern Piedmont & Mountains

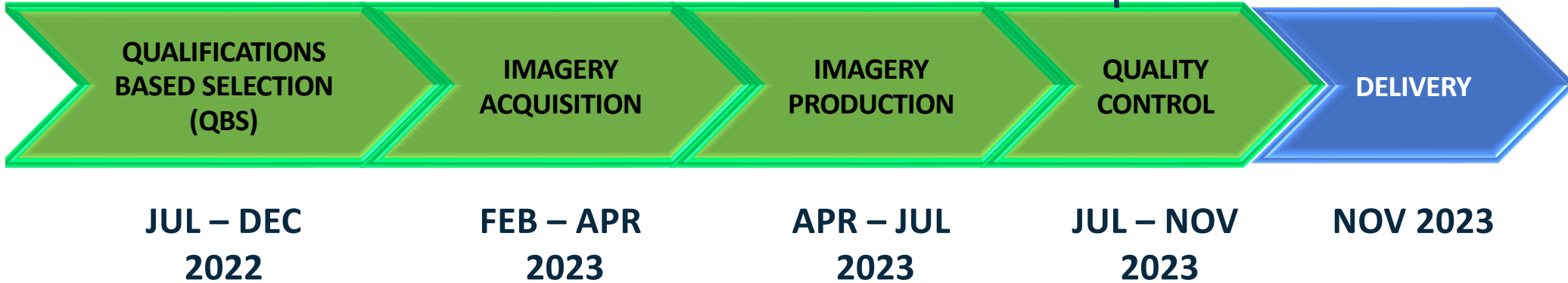


- 21 counties
- 10,397 square miles
- 50% of Project Area considered 'Mountain Acquisition'
- True Orthoimagery for Asheville & Charlotte
- 4-Band Ortho Products continuing to be developed for this phase to complete entire state of CIR

2023 Southern Piedmont & Mountains

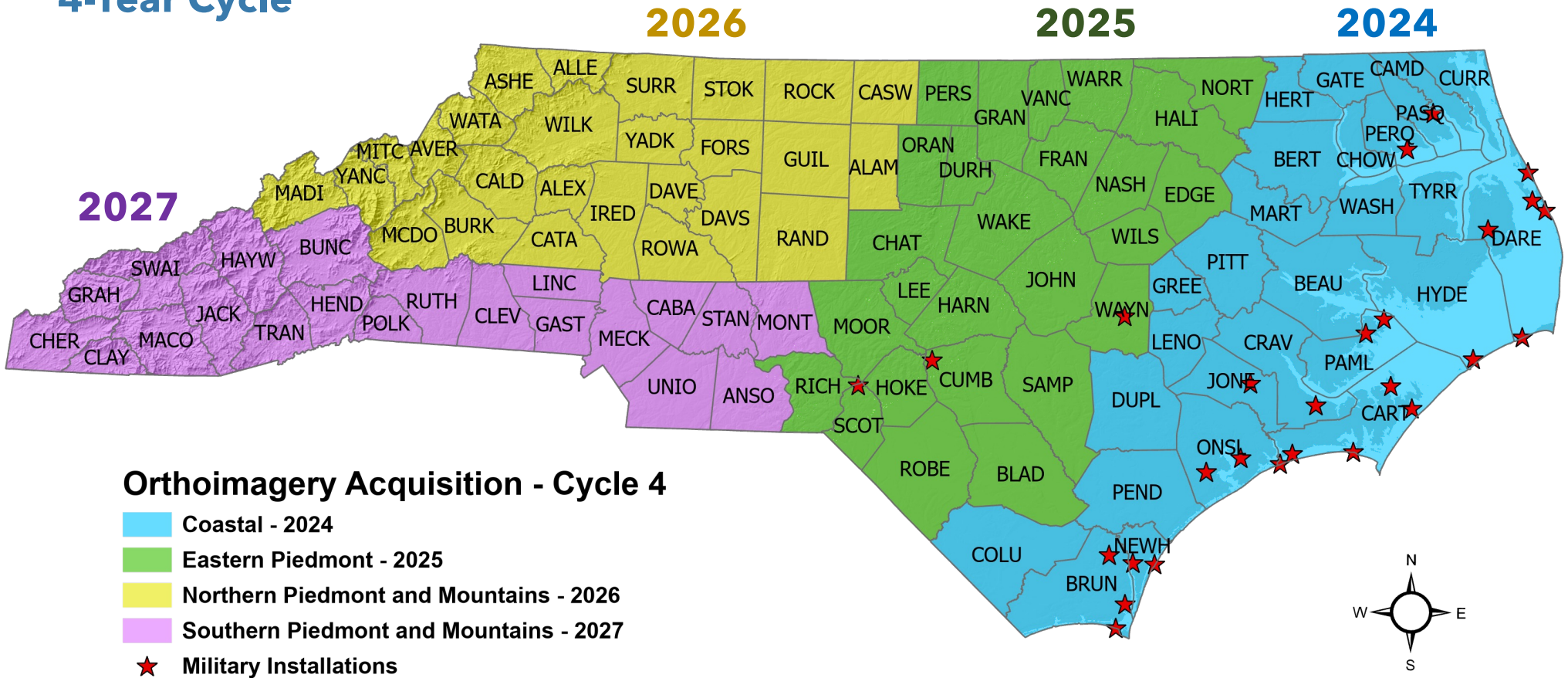
Timeline

QC Training
Webinar July 18
First Counties Begin
Review on July 24



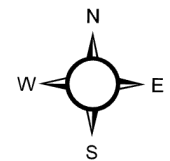
Proposed Orthoimagery Program Cycle

4-Year Cycle



Orthoimagery Acquisition - Cycle 4

- Coastal - 2024
- Eastern Piedmont - 2025
- Northern Piedmont and Mountains - 2026
- Southern Piedmont and Mountains - 2027
- ★ Military Installations



Questions



Contact Information
Jessica Beierman
jbeierman@geocomm.com
ncteam@geocomm.com

AT&T NG9-1-1 PSAP Solutions

State of North Carolina – Roadmap Update

August 24, 2023



© 2022 AT&T Intellectual Property. All rights reserved. FirstNet, and FirstNet logo are registered trademarks and service marks of the First Responder Network Authority. All other marks are the property of their respective owners.

AT&T NG9-1-1 PSAP Solutions – High-Level Roadmap

NG911 CPE Solutions

- Continued support for Motorola VESTA and Intrado VIPER
 - VESTA 9-1-1 R8.x
 - VIPER 7.x
- Ongoing NENA i3 standards compliancy content
- Key feature content including robustness and security enhancements

NG911 CPE/Cloud Hybrid

- Cloud-based services attached to 911 CPE
 - Motorola – Command Central Apps w/VESTA
 - Intrado – Spatial Command & Control w/VIPER
 - RapidDeploy RapidOne

NG911 Cloud Solutions

- Active AT&T project
- AT&T ESInet™ ↔ Cloud 911 Call Handling architecture
- Intent for AT&T maintained Cloud Call Handling/Mapping solutions
 - Motorola Command Central
 - Intrado “Cobra”
 - RapidDeploy RapidOne

AT&T ESInet Enhancements

- Nuisance Callers - Block/Drop or Route Known Callers to Call Queues
 - NMAC Users can add, edit, or delete TNs from an existing Nuisance TN call routing policy. RFAI and i3 PSAPs can add telephone numbers that have been identified as frequent callers to the PSAP for non-emergency reasons. Once a TN is identified, it can be added to an existing call queue specifically created to ensure that the caller is not disconnected but put in a call queue and answered when PSAP resources are available. Note, that before a TN can be added, a Nuisance TN call queue must exist in the system for that PSAP. The Nuisance TNs screen will list available PSAP call queues. Contact customer support to have a Nuisance TN call queue provisioned via MP for access in CMP.
- TDOS Incident Mitigation
 - AT&T Administrative CMP User IDs with the correct permissions can add/remove or expire TDoS threat TNs to/from list to shut down calling from that TN immediately (TNs added can be auto released / expire at preset date & time) . Additionally, they can view TDOS CDRs via the Logging tab by selecting TDOS within the Disposition pulldown menu using the Optional Search Criteria of Group 3 - ECMC PSAP.
- TDOS Call Threat Interrogation
 - For limited TDOS determined automated threat calls only, (Not every call), the calling party will be asked to press a key to validate the legitimacy of the calling party, and when appropriate key is pressed, validated call is routed appropriately. (This is to provide validation to ensure calls that may have MDNs previously tagged as TDOS threats can be validated as non-threats for normal routing to PSAPs.)
- PSAP Queuing - Aligning Call Queues w/CPE Queues
 - A call queue allows a PSAP to give different priorities to the calls they receive from various sources; for example, alternate routing, test, and training. Based on the call queue, the PSAP can decide how to best handle the call.

AT&T NG9-1-1 PSAP Solutions – Motorola Roadmap

- **VESTA 9-1-1:**
 - Release 8.0 HF1 – AFU against AT&T ESInet™ as of 8/19/23
 - VESTA Data Publisher, Z-Axis / Uncertainty Support, Redundancy/security enhancements, new OS
 - Release 8.1 – now in AT&T Lab testing, ETA for FCA Ready in 9/23
 - EIDO enhancements, common code for Public Safety and Federal VESTA software
 - VESTA 9-1-1 Release 8.2 – forecast 4Q23
 - RTT P2P Support
 - VESTA 9-1-1 Release 8.x – continued CPE roadmap 2024
 - RTT Conference / Transfer Support

AT&T NG9-1-1 PSAP Solutions – Motorola Roadmap

SMART TRANSCRIPTION

U.S. Patent 10,868,910



CommandCentral Smart Transcription with VESTA 9-1-1



WHAT IS SMART TRANSCRIPTION?

A cloud-based service that integrates with the VESTA 9-1-1 platform providing real-time voice audio and transcription into a searchable text transcript.



WHAT DOES IT OFFER?

An easy, yet comprehensive way to verify caller information, monitor calls in real-time and store transcripts for post-call analysis.

Motorola Solutions Confidential—Do Not Redistribute—AT&T Channel Partner Use Only

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2021 Motorola Solutions, Inc. All rights reserved 4-2021



AT&T NG9-1-1 PSAP Solutions – Motorola Roadmap



COMMANDCENTRAL CALL HANDLING

WHY USE CLOUD FOR 9-1-1?



IMPROVED INFORMATION FLOW ACHIEVED FASTER

- Streamlined access to **online services** for more data available to the PSAP
- Cloud solutions are **accessible from anywhere**, increasing mobile usage options
- Secured connectivity so **citizens can contribute** when needed
- New features are **quickly** connected, deployed and trained



IT SIMPLIFICATION

- Provides a **standard IT platform** and skill sharing across PSAPs that are not consolidated
- Backups, replication, HA are **vastly simplified** compared to on-premise 9-1-1, reducing ongoing IT costs
- Eases IT consolidations by **reducing PSAP IT complexity** while **increasing reliability**
- PSAP IT **footprints are much smaller** with cloud than on-premise solutions, which saves IT floor and rack space



COST EFFECTIVE AND FLEXIBLE

- Available as a **subscription model (OPEX)**, easing up front purchases and year-to-year budgeting
- Deploy and update **rapidly and reliably**
- Grows easily with the PSAP - **always right sized**

Motorola Solutions Confidential—Do Not Redistribute—AT&T Channel Partner Use Only

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2021 Motorola Solutions, Inc. All rights reserved 4-2021

AT&T NG9-1-1 PSAP Solutions – Intrado Roadmap

- **VIPER 7.0:**

- Architectural enhancements for improved scaling and redundancy
- Quarterly patch (KB) updates for VIPER 7.0 and Power911 7.0, R7.0 SP1 forecast for 4Q23
- Power911 Web – in AT&T lab testing, issues being investigated, PWEB 1.9 embedded in R7.0 SP1 – no desktop upgrades
- TXT29-1-1 Language Translation support in Power911
- VIPER supports all applicable NENA standards, including the display of all available lines on the user interface. By default, all incoming calls are accompanied by visual and audible indications that depict:
 - Normal – the first attempt to route the call was successful.
 - Overflow – the first route was busy or congested.
 - Alternate – the first route attempt failed, and another route was attempted.
 - Transfer – the call was transferred.
 - Not Available – no routing status was received.

- **“Cobra”:**

- NEWLY architected as a cloud-based NG911 Call Handling/Mapping solution (not VIPER reinvented)
- Forecast for delivery to AT&T labs for testing in 4Q23

AT&T NG9-1-1 PSAP Solutions – Intrado Roadmap

VIPER and Power 911 Key Feature comparison

Feature	Release 7.0	Release 5.1
Scalability	1,000 positions 96 satellites	150 positions 24 satellites
Centralized Configuration and SW management	PSAP Management gateway Silent Install of Power 911 Rollback Feature	Separate VIPER and POWER configurations
Skillset assignments	Improved Agent Management	-
Multiple default workstation configurations	Improved PSAP management	Single configuration
Basic i3 core services support	PIDF-LO and ADR i3 version 2 logging	PIDF-LO and ADR i3 version 2 logging
Enhanced i3 core services	Multiple LoST regions, Call history i3 version 3 logs, Referred-by header Location Validation Function Emergency Incident Data Object (EIDO) Service and Element state notifications NGCS abandoned call notifications NENA i3 confidence and uncertainty	-
Text based calls	MSRP and Real-time Text Automatic text back of abandoned calls	MSRP
CAD out over IP	Supported	Serial only
GUI interface	Desktop and web browser based	Desktop only



Confidential and Proprietary

2

AT&T NG9-1-1 PSAP Solutions – Intrado Roadmap

VIPER and Power 911 Key Feature comparison

Feature	Release 7.0	Release 5.1
PowerOps 2.0	Supported	Supported
Supervision Activity	Extended CDR format	-
CDR out over IP	Supported	Serial only
Enhanced Agent Roaming	PSAP selection on logon	Requires different user IDs per PSAP
Transfer/conferencing	Blind Transfer, Add to conference, Patch to conference, Remove from conference	Blind Transfer, Add to conference, Patch to conference, Remove from conference
Basic call features	Call hold, unhold, park, barge in, release Nohold conference, Tandem transfer Hookflash, call patch	Call hold, unhold, park, barge in, release Nohold conference, Tandem transfer Hookflash, call patch
Enhanced Call features	Exclusive hold, Dynamic conferencing Call pickup, Call supervisor Enhanced call patching (between nodes)	-
Basic Call processing	ACD logon, logoff, ready, not ready Dynamic ACD logon/logoff Next ACD call	ACD logon, logoff, ready, not ready Dynamic ACD logon/logoff Next ACD call
Enhanced Call processing features	Skillset based forced ACD connect ACD call out of order Dynamic role change Route based ring group	-
Security Enhancements	Default password change, Password encryption Intuitus MDR Service (Network Surveillance)	-

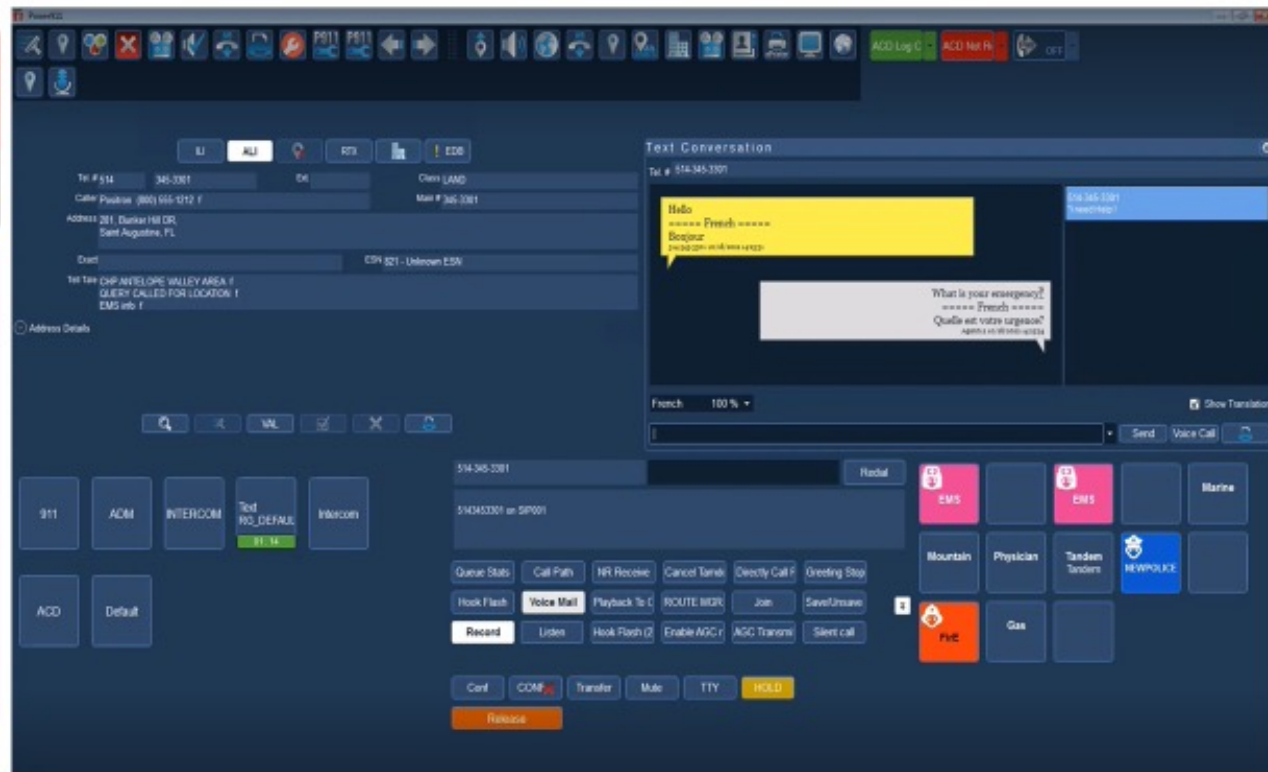
AT&T NG9-1-1 PSAP Solutions – Intrado Roadmap

Text to 911 Language Translation



Provide translation of text messages for a wide variety of languages;

The capability to detect the language of an incoming text message and, if different than the call taker's defined language, it will proceed with the translation of that message.



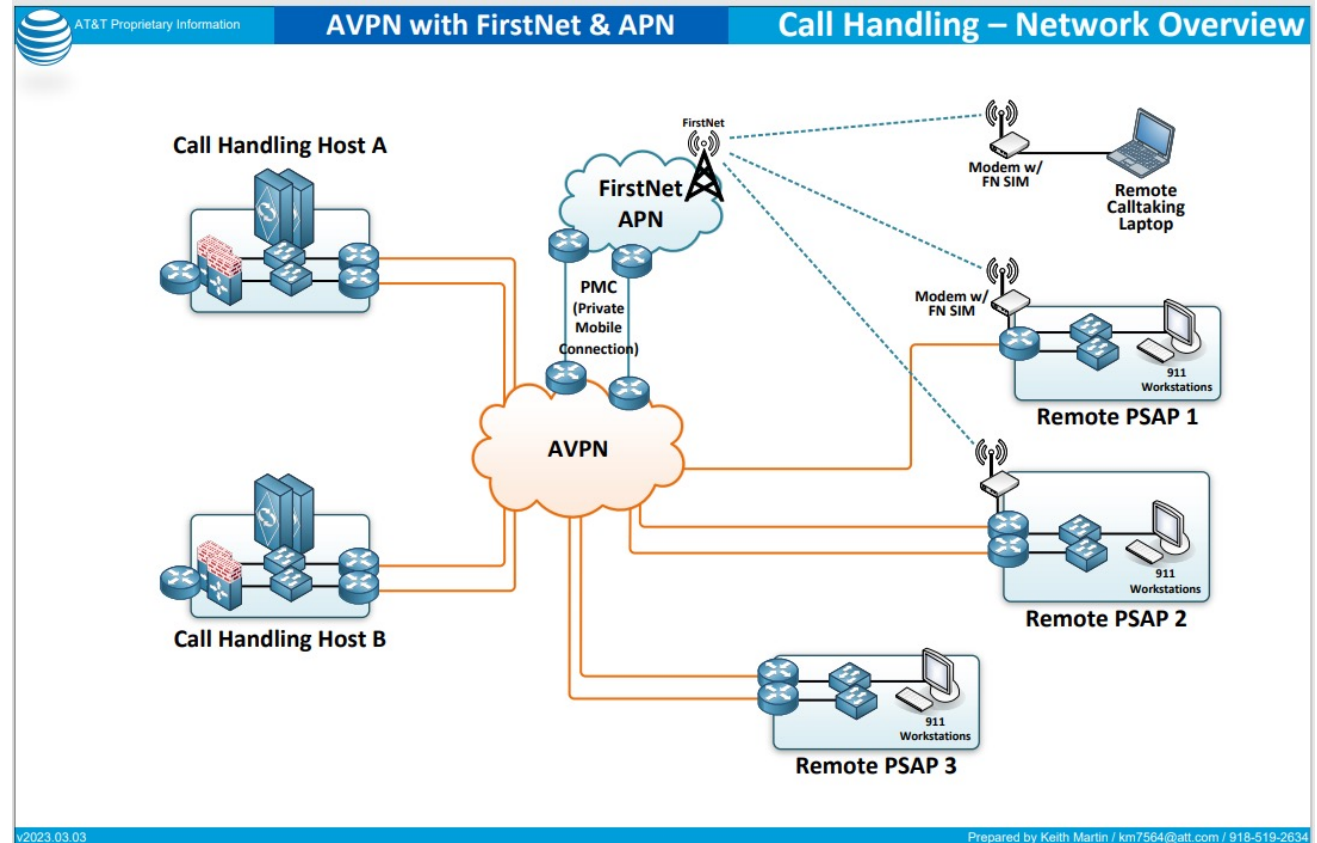
Confidential and Proprietary

AT&T NG9-1-1 PSAP Solutions – RapidDeploy Roadmap

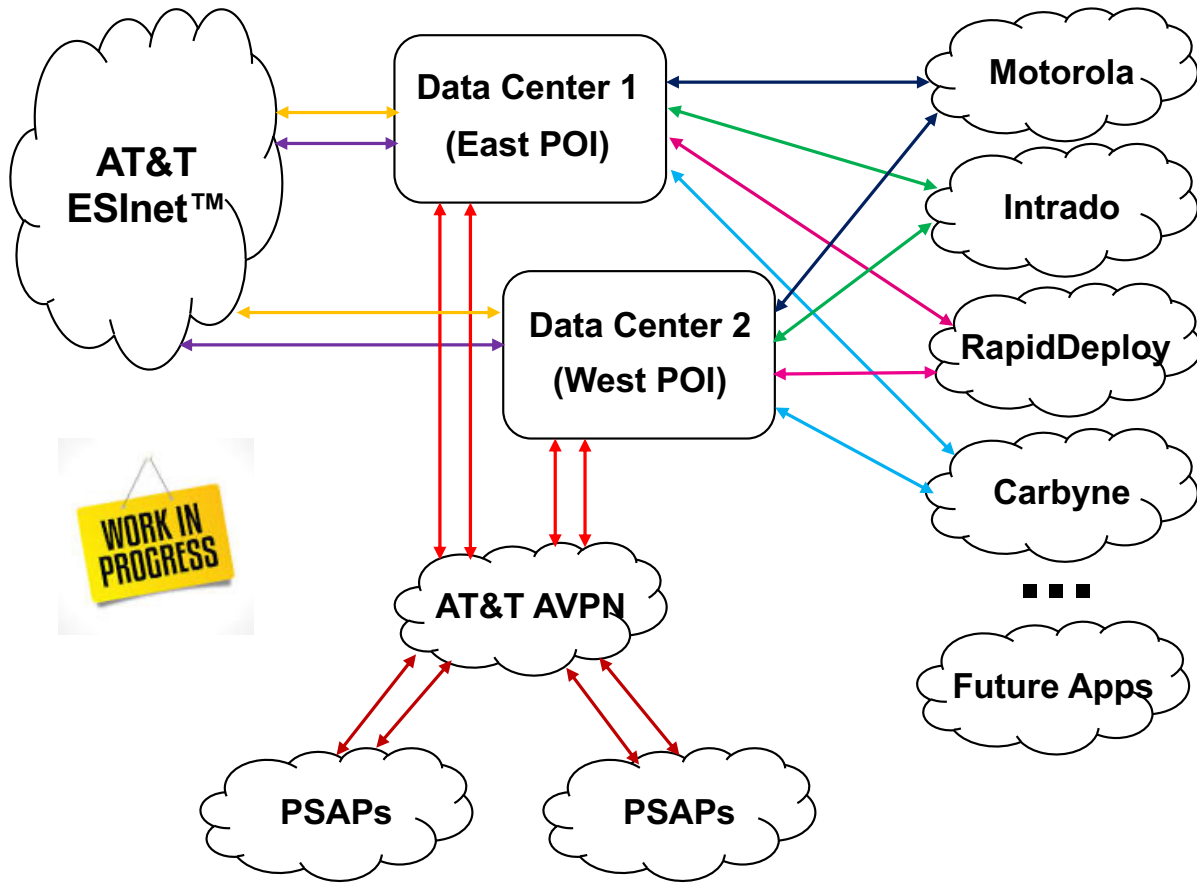
- Eclipse Analytics
 - 3Q23 - Transfer Origination Report, Summary Reference Sheet v2
 - 4Q23 - Normalized Data Ingestion
- RapidOne
 - Cloud-based NG911 Call Handling integrated on Radius map – forecast to labs 1Q24
- RapidResponse
 - FirstNet capable situational awareness Radius mapping based application, forecast 1Q24

AT&T NG9-1-1 PSAP Solutions – FirstNet Wireless Backup for Hosted Call Handling

- Extends AT&T ESInet™ FirstNet Wireless Backup (FWB) to Call Handling Hosts to...
- NG911 Call Handling Host to Remote PSAP using the same constructs to now provide FWB tertiary connection end-to-end for routing and call handling
- Fujitsu monitoring to add FWB in addition to existing AT&T AVPN monitoring



AT&T NG9-1-1 PSAP Solutions – Cloud PSAP Solutions Ecosystem

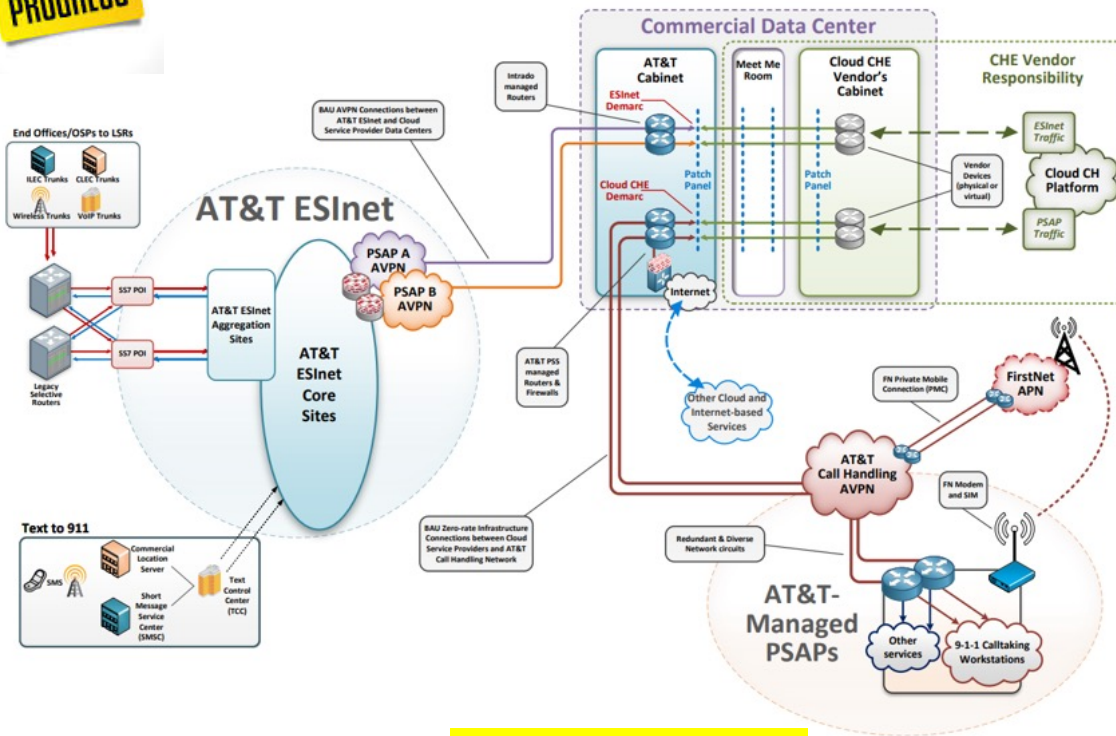


- AT&T ESInet™ ⇔ Datacenter POI
 - 2 AVPN per datacenter per Supplier (8 total links to each datacenter)
 - Redundant 911 tagged permanent infrastructure with governance
- POI ⇔ Cloud Supplier
 - 2 VPN per datacenter per Supplier (4 total)
 - Meet Me facilities within datacenter
- POI ⇔ AT&T AVPN Cloud
 - 2 AVPN per datacenter per Supplier (8 total links from each datacenter)
 - Redundant 911 tagged permanent infrastructure with governance
- AT&T AVPN Cloud ⇔ PSAPs
 - 2+ AVPN per PSAP or Hosted network
 - 911 tagged and monitored, as implemented

AT&T NG9-1-1 PSAP Solutions – Cloud PSAP Solutions Architecture



Updated Software at next Login!



2024 Launch!

- Minimizes back-room equipment and onsite technician dispatch needs
- Treated as an NG911 network like AT&T ESInet™ including Change Management Controls
- NENA i3 standard / SIP Admin Line integration
- Redundancy via facilities, cloud instances, and connectivity
- Certification of architecture and Call Handling supplier for resiliency and functionality
- 2024 – FirstNet Wireless Backup once AVPN model certified
- Monitoring by AT&T ESInet™, Cloud Suppliers, and Fujitsu (AT&T AVPN and FWB)



FIRSTNET®

Built with AT&T

Social/Backup Plans/COOP

Angie Turbeville, Eastern Regional Coordinator

Tina Gardner, North-Central Regional Coordinator

David Newberry, South-Central Regional Coordinator

Brian Short, PSAP Assessment Coordinator



Ice Cream Social



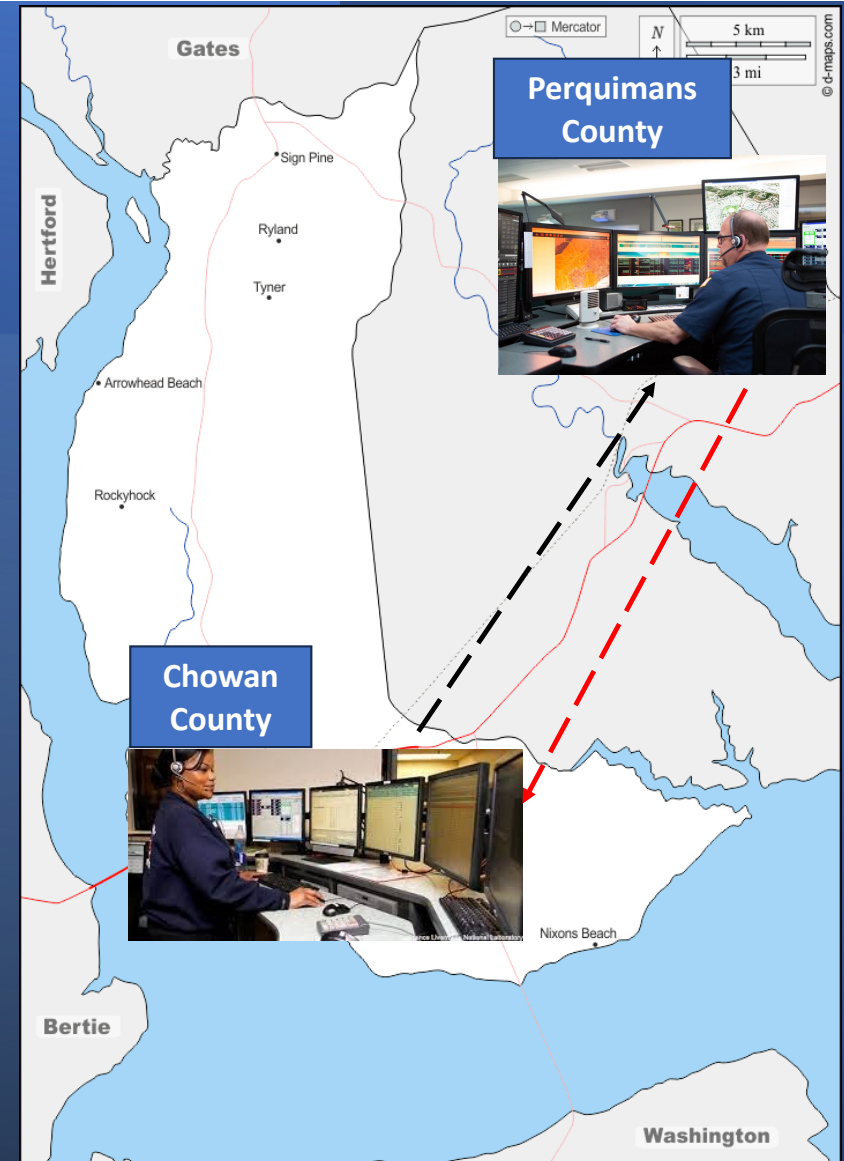
Alternate and Abandonment Routing

Regional Coordinators

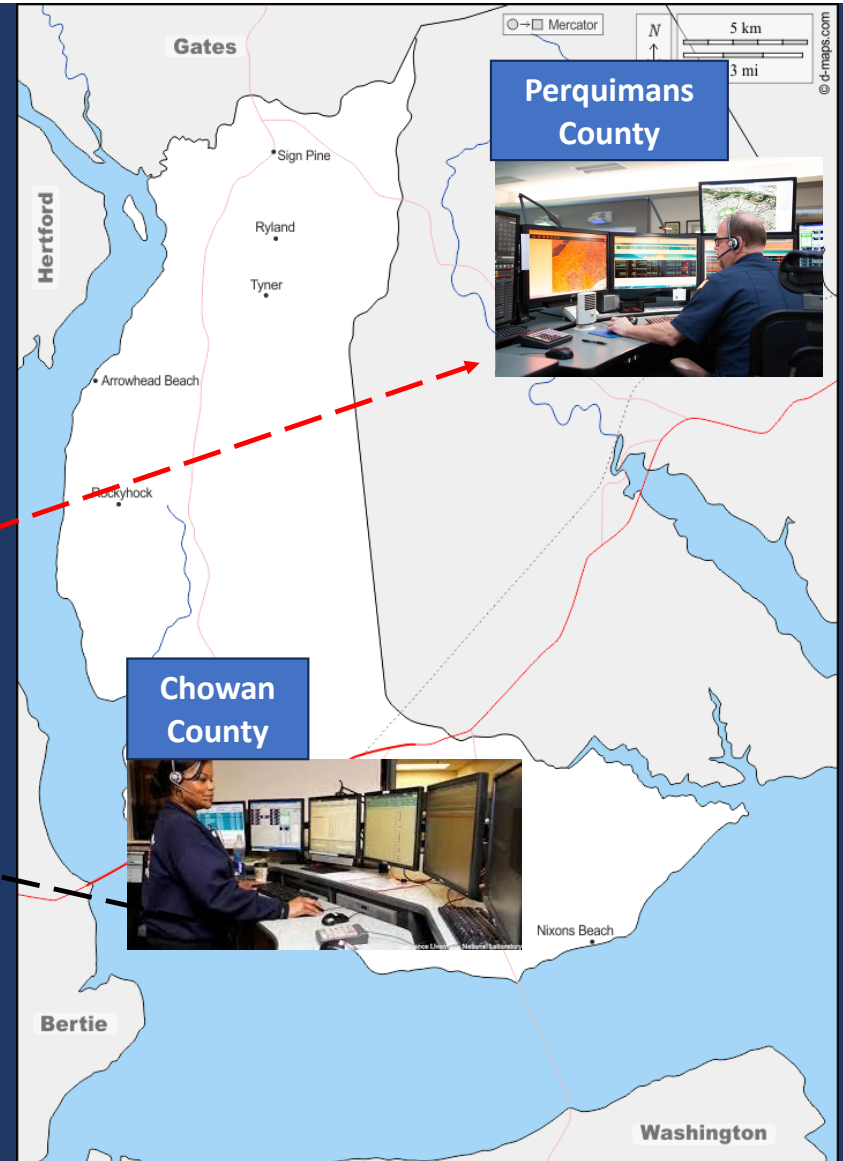
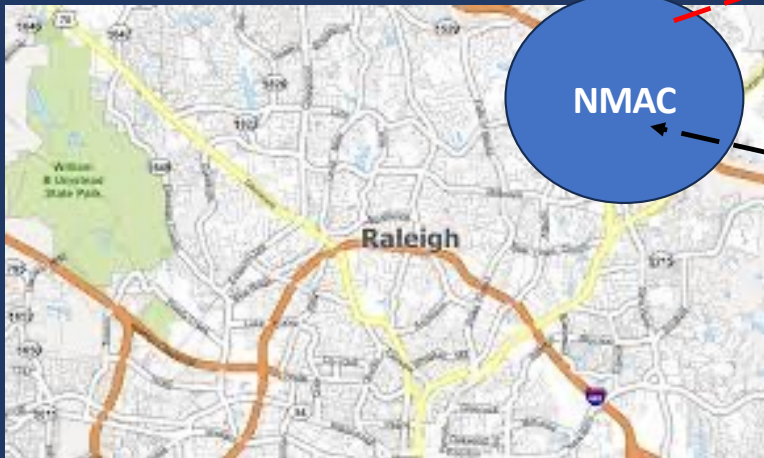
N.C. 911 Board

Alternate (Default) Routing: A 911 call is automatically routed to a designated (default/alternate) PSAP when the ESInet cannot deliver calls to the PSAP

Chowan Central Communications and Perquimans County 911 are each other's **Alternate routes**.



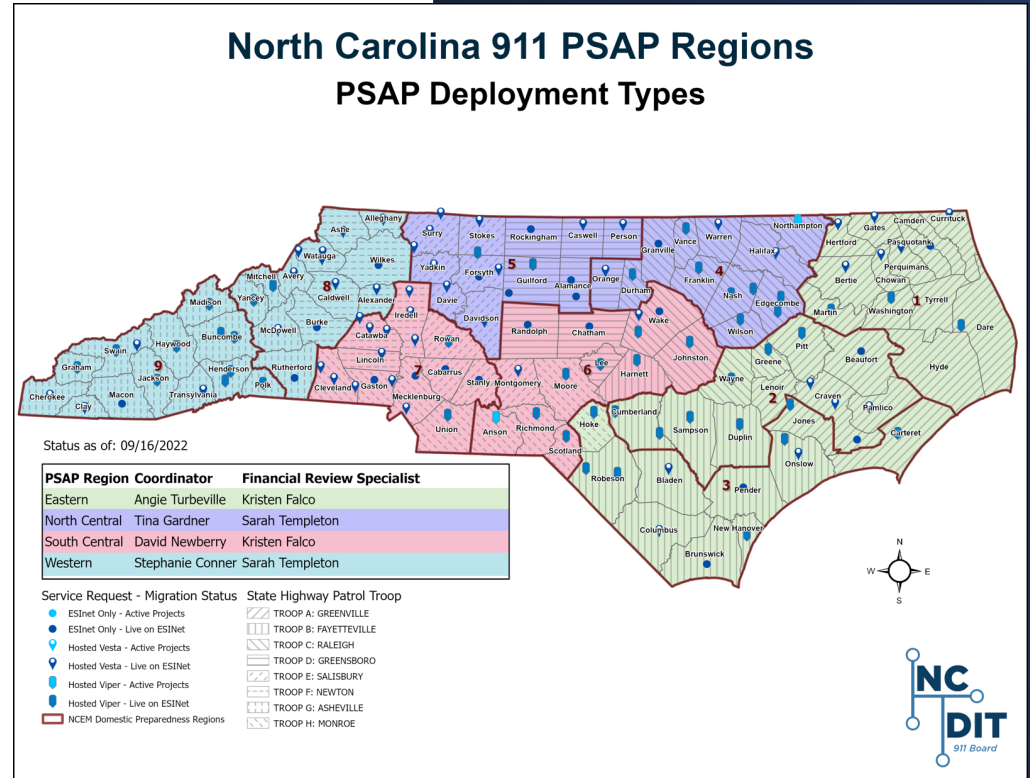
Abandonment routing occurs when the PSAP is manually placed into the abandoned state to preconfigured location(s) or triggered via PSAP Abandonment Module/Device (PAD) installed at the PSAP (*ESInet Only PSAPs*).



Backup Planning Example

Perquimans County 911

- Physical Backup– Chowan Central Communications
- 1st Alt Route/Abandonment – Chowan Central Communications
 - Hosted Vesta 2 and same host as Perquimans
 - Eastern Region
- 2nd Alt Route/Abandonment – Wilson County 911
 - Hosted Viper 1
 - North Central Region
- 3rd Alt Route/Abandonment – Lincoln County 911
 - (Hosted Vesta 1)
 - South Central Region
- 4th Alt Route/Abandonment – Rutherford County 911
 - Hosted Vesta 3
 - Western Region



Backup Plan: Items to Consider

- Alternate and Abandonment Routes beyond your neighboring county.
- Backup plan should include NMAC notification.
- How will calls be dispatched in the event there is no network connectivity?
- PSAP procedure for activation of your COOP plan.
- Include UPS run time.
- Include any MOUs or ILAs or Mutual Aid Agreements
- Include your deactivation plan
- How will staff relocate to the Backup?
- How will you notify your partner PSAP that you are no longer able to take 911 calls?
- List all costs associated with your Backup plan including annual maintenance.
- Testing and Use of a Backup Plan should be included in the form and the procedure.

Comprehensive Emergency Management Plan (CEMP)

Brian Short, ENP, RPL, CEM
PSAP Assessment Coordinator
NC 911 Board



Hurricane Florence



Ohio Train Derailment



Nashville AT&T Bombing

A Comprehensive Emergency Management Plan (CEMP) establishes a comprehensive framework of policy and guidance for circumstances that may adversely impact the communications center personnel from receiving, processing, dispatching, and monitoring emergency calls for assistance.

Typically, these plans cover procedures and emergency actions to be taken in response to fire and smoke, bomb threats, hazardous materials incidents, earthquakes, floods, and medical emergencies.

Note: This list is suggestive of the types of emergencies considered; it is not all-inclusive.



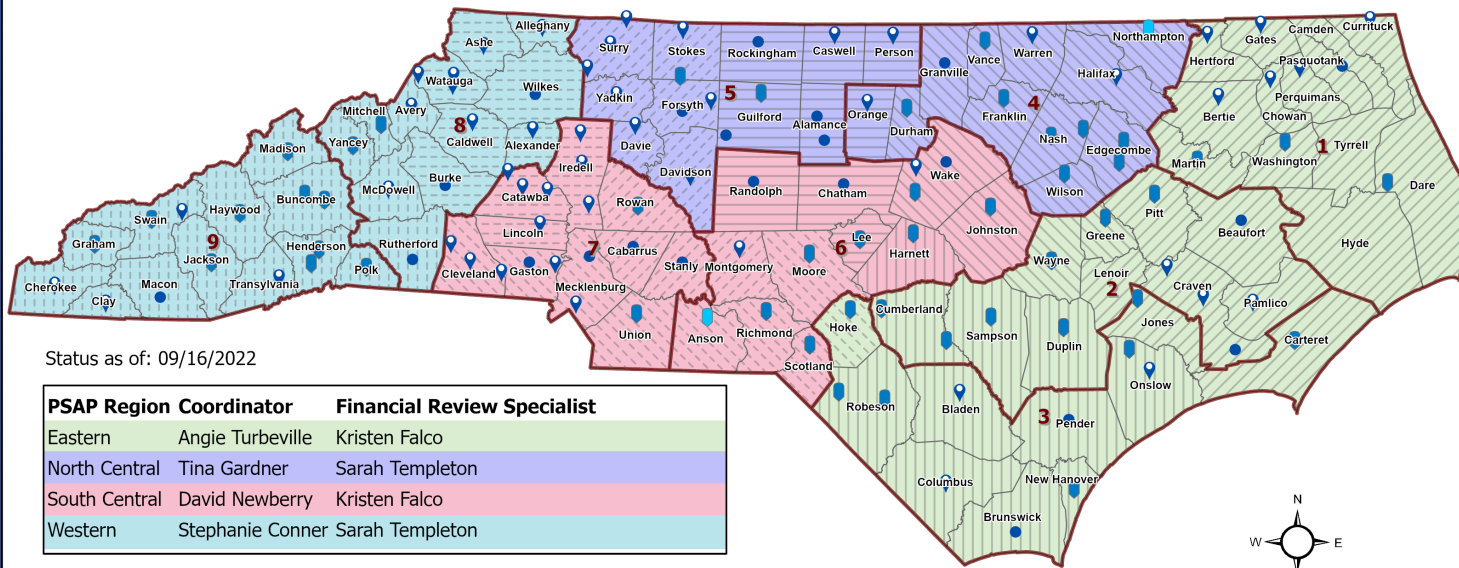
The CEMP is considered to be a companion document for your Backup PSAP plan as the two-work hand-in glove.

This document includes best practices, guidelines, and procedures on:

- Staffing
- IT Security
- Redundant Systems
- Situations requiring evacuation
- Evacuation Procedures
- Return to Normal Operations

North Carolina 911 PSAP Regions

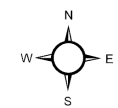
PSAP Deployment Types

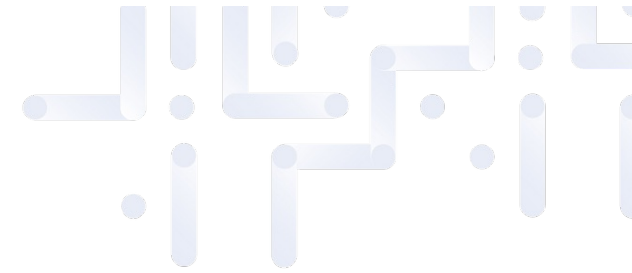


Status as of: 09/16/2022

PSAP Region	Coordinator	Financial Review Specialist
Eastern	Angie Turbeville	Kristen Falco
North Central	Tina Gardner	Sarah Templeton
South Central	David Newberry	Kristen Falco
Western	Stephanie Conner	Sarah Templeton

- | | |
|--|---|
| <ul style="list-style-type: none"> ● ESInet Only - Active Projects ● ESInet Only - Live on ESInet ● Hosted Vesta - Active Projects ● Hosted Vesta - Live on ESInet ● Hosted Viper - Active Projects ● Hosted Viper - Live on ESInet NCEM Domestic Preparedness Regions | <ul style="list-style-type: none"> TROOP A: GREENVILLE TROOP B: FAYETTEVILLE TROOP C: RALEIGH TROOP D: GREENSBORO TROOP E: SALISBURY TROOP F: NEWTON TROOP G: ASHEVILLE TROOP H: MONROE |
|--|---|





Z-axis and Indoor GIS for 9-1-1 Location Technology



August 24, 2023
NCDIT – PSAP Managers' Meeting



Past



Present



Future

*Dispatch in
the '70s and
'80s*





Telecommunicators Today

Key Points:

Technology will continue to evolve at a rapid pace

Call taking has become more complex and time consuming, and the data needs to support efficient decision making

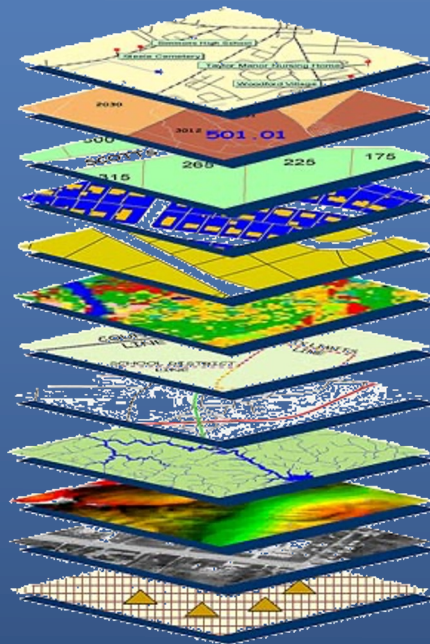
Applications will converge

A GIS-based common operating platform is only going to become more crucial

The Role of GIS Data – Then & Now



Mapping Emergency Locations



NG9-1-1 Call Routing
&
Location Validation

The Proven Process



Assess

Education
Standards review
GIS data analysis



Improve

GIS data development
and/or enhancement
to meet standards

...



Maintain

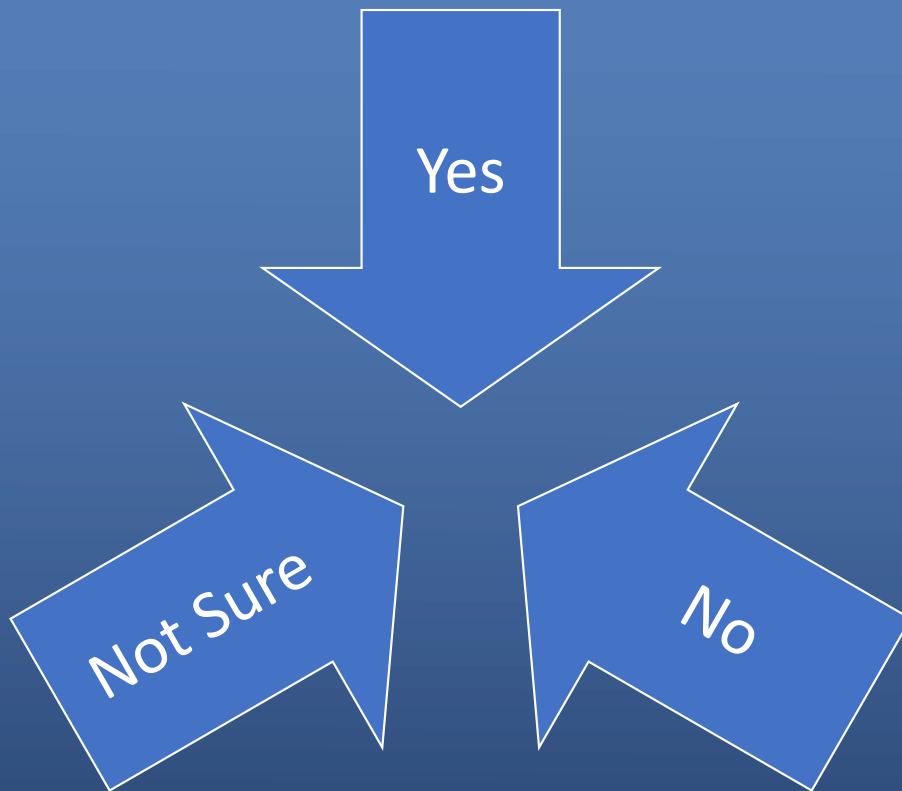
Workflows
Personnel
Q/C reporting
Aggregation
Provisioning



Recent Developments:

- In May & June of 2022 the top three U.S. wireless carriers certified that they meet or exceed FCC requirements to provide z-axis location information within three meters above or below the handset for 80% of wireless E9-1-1 calls made from z-axis capable devices in each of the top 25 cellular market areas.

Are you receiving Z axis data at your PSAP?



Enter location values from ALI screen:

Latitude:

Longitude:

Altitude (HAE):

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

Vertical Location Service (VLS)

Translation of latitude, longitude, and height above ellipsoid into dispatchable location including estimated street address, building, and floor level


Enter location values from ALI screen:

Latitude:

Longitude:

Altitude (HAE):

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

 Building detected at this location:

Address: 4101 WEST DIVISION STREET ST CLOUD MN 1FI ↔ 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 ?

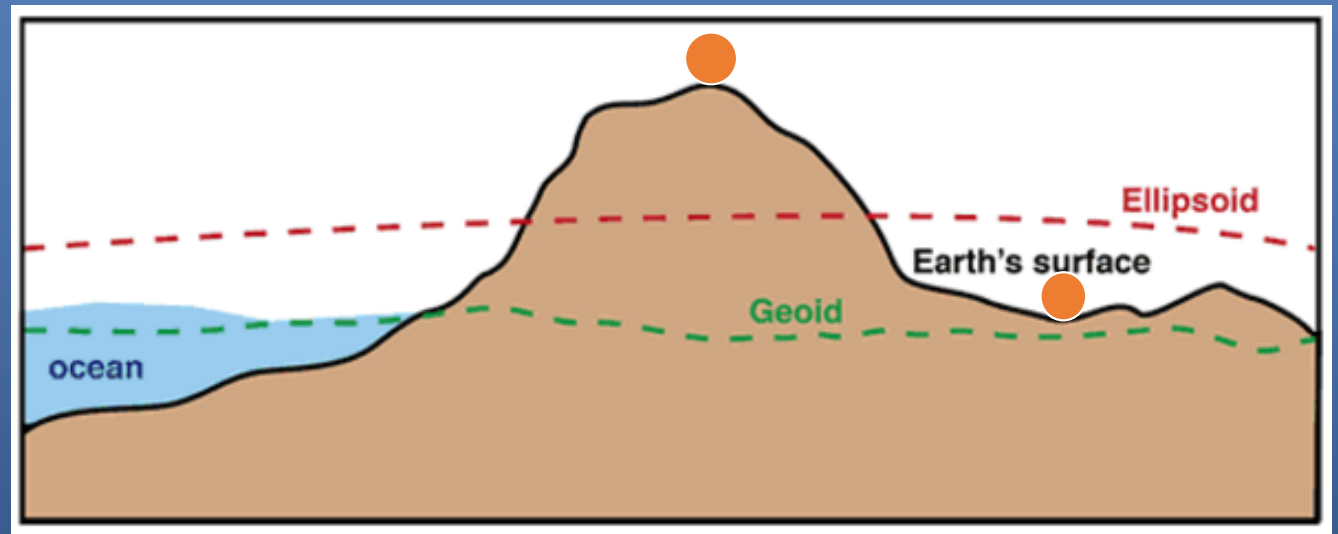
Feet per Story:

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

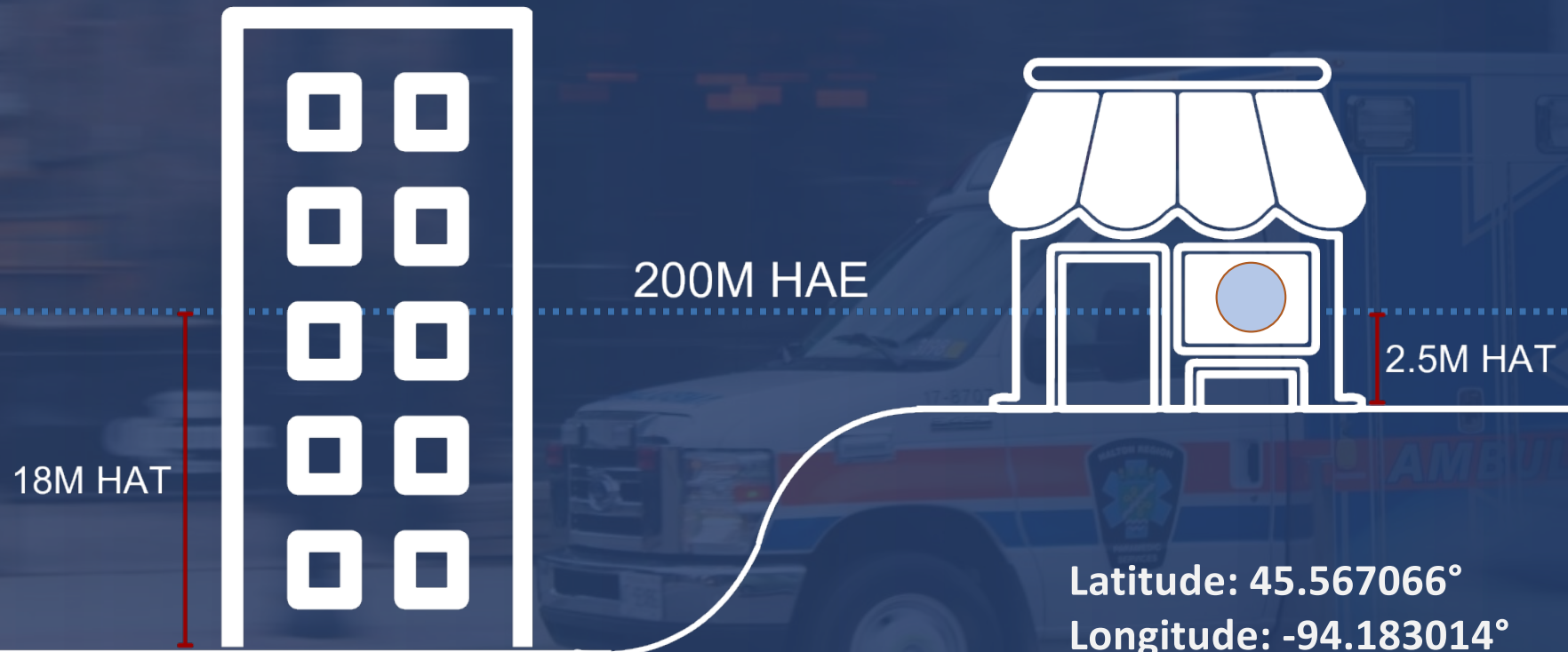
Height Above Ellipsoid (HAE): Z Axis



Latitude: 45.567066° N
Longitude: -94.183014° E
HAE: -15.2 m

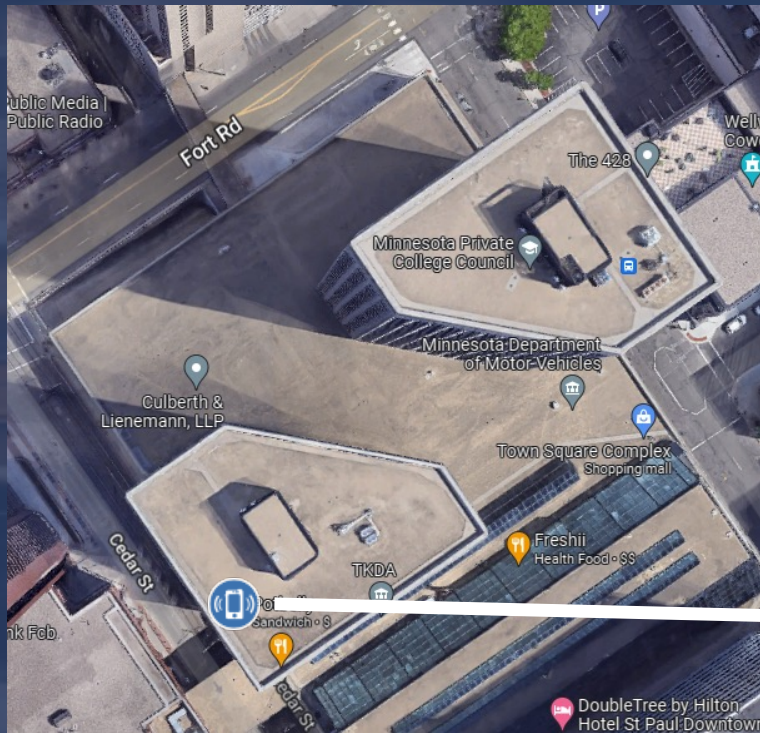


Translating HAE into a Caller Location



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

Why is a dispatchable location important- 3D Example



3D 9-1-1 Caller Positioning

GEQCOMM Venue Map

Map data © OpenStreetMap contributors, CC-BY-SA | Source: USGS, NGA, NASA, COAR, GEBCO, N Robinson, NCEAS, NLS, OS, MMA, Geodatasynthesis and the GIS User Community, GeoComm Labs 2017

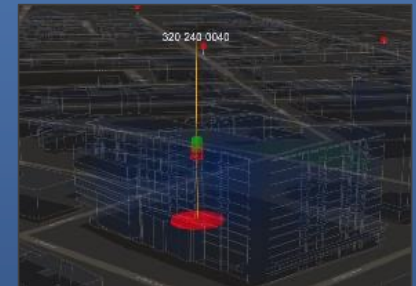
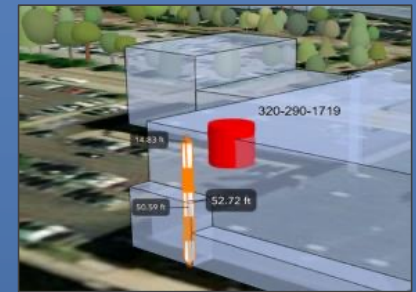
Find address or place

Minneapolis

- Bookmarks
- Responders
- Cameras: Level 1
- Cameras: Level 2
- Cameras: Level 3
- Cameras: Level 4
- Cameras: Level 5
- Cameras: Level 6
- Cameras: Level 7
- Cameras: Level 9
- Cameras: Level 10

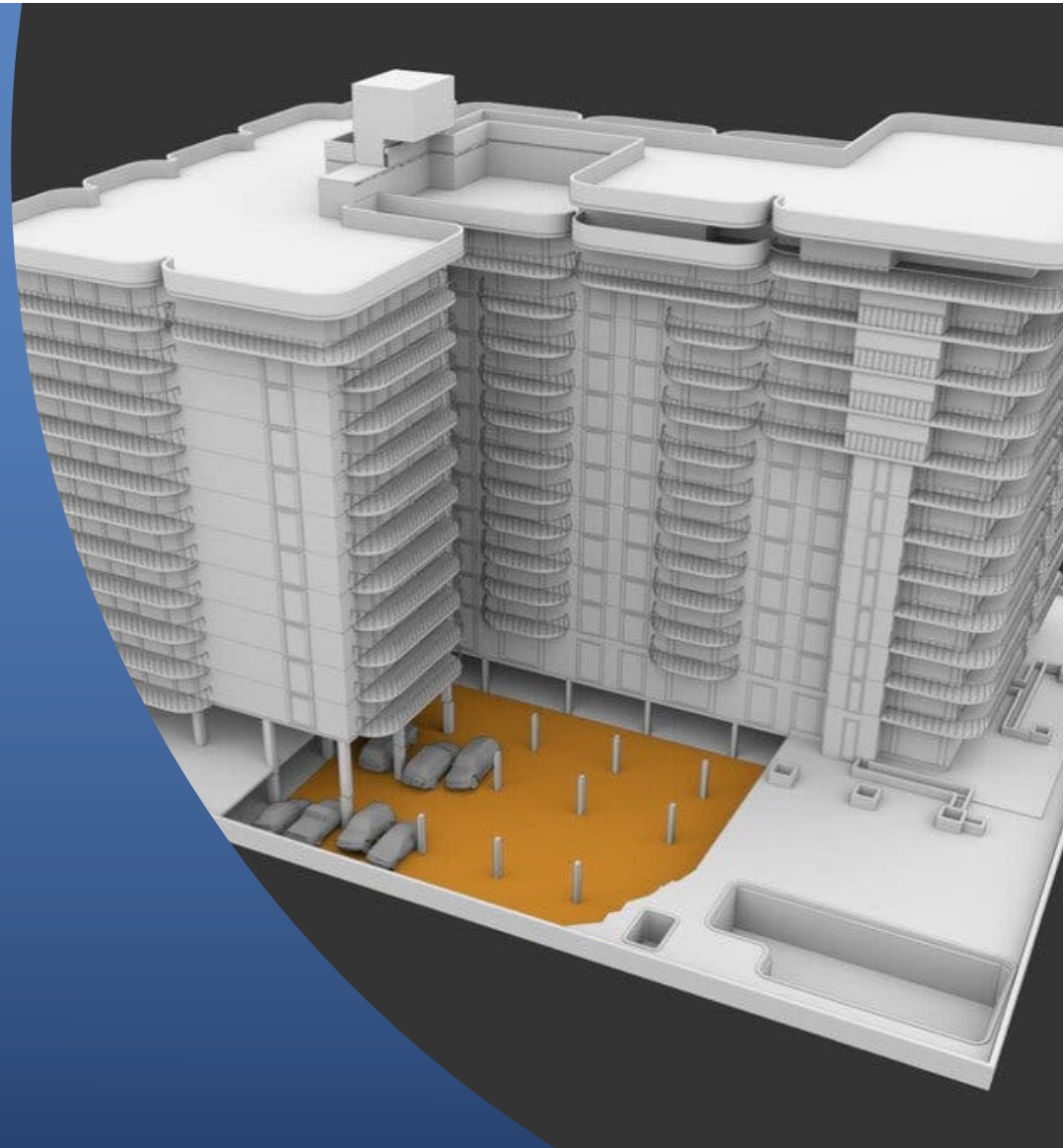
Name	Number	Priority	Type	Status	Department	Assigned To	Created By	Created Time	Location	Section	Row	Seat	Facility	Notes
Test	0006	3	Test	Now	Guest Experience		Geocomm Test	12/09/2016 14:00:31	Main Concourse	Legacy Gate			Inside	Test incident for Legacy Gate L_009*
Test	0008	3	Test	Now	Guest Experience		Geocomm Test	12/12/2016 09:35:36	Event Level	Tunnel - East (Main) Field Access			Inside	Lost guest wandering onto field. L_09*

Main Concourse Section 138 A

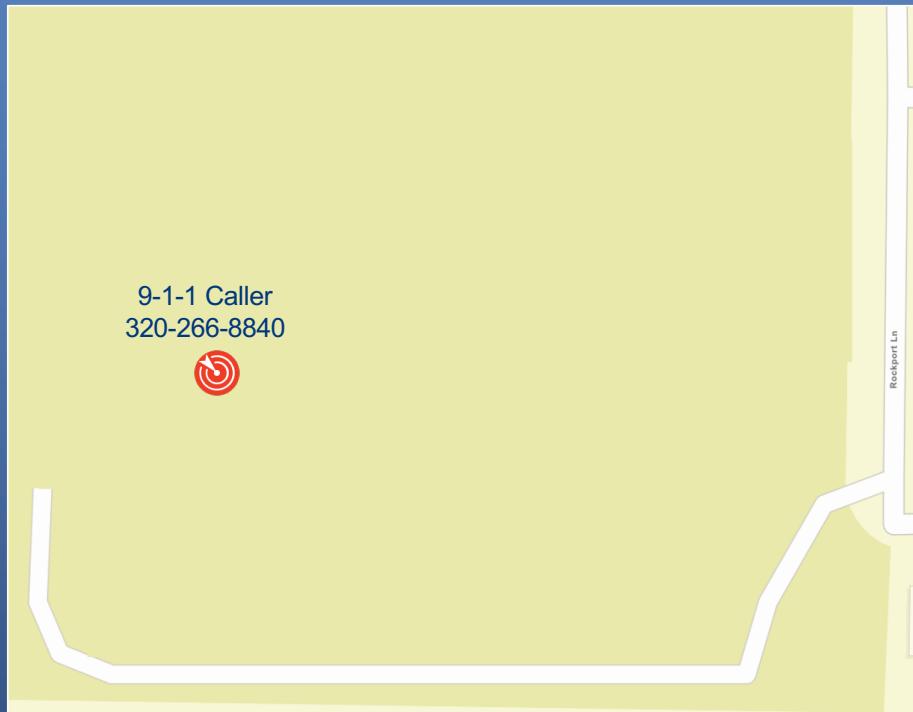


Recent Developments:

- The average person spends over 80% of their life indoors. The National Human Activity Pattern Survey (NHAPS)
- Today over 80% of all 9-1-1 calls originate from cell phones. 9-1-1 Statistics - National Emergency Number Association (nena.org)



The Impact of Indoor Maps



Indoor Maps

The screenshot displays the GEQCOMM Dispatch Map interface. The main map shows an indoor layout of a building with rooms such as 016 Gymnasium, 011 Ceramics, 009 Auto Shop, 015 Wrestling, 012 Art Room, 014 Wrestling, 008 Weight Room, 021 Mini Gym, Pool, Health Room, Girls Varsity Lockers, and Photo Lab. A search bar at the top left contains the text "1300 GEQCOMM Dispatch Map". Below the search bar is a sidebar with the following sections:

- Back to last search results**
- Points Of Interest:**
 - 126 13 AV S
 - addNumComb: 126
 - ESN: 421
 - gcFullAddr: 126 13 AV S
 - Full Name (CLDXF): 13 AV S
 - gcLgFIAddr: 126 13 AV S
 - Full Name (Legacy): 13 AV S
 - Incorporated Munic...: SAINT CLOUD
 - MSAG Community N...: ST CLOUD
 - Postal Community N...: SAINT CLOUD
 - Source Full Name: 13 AV S
 - Date Updated: 7/25/2018 10:06:45 P...
 - VESN: 5053
 - Postal Code: 56301
- RESPONDERS**
 - Police: ST CLOUD PD
 - Fire: ST CLOUD FD
 - EMS: GOLD CROSS AMB
 - SECONDRARY RESPONDERS
- AT THIS LOCATION**
 - [View Pictometry Imagery](#)
 - Owner Unavailable
- NEARBY**
 - Places (1)
 - Water Bodies (1)
 - NEARBY - MISC

At the bottom left, there is a tab labeled "9-1-1 Incidents". On the right side, there is a "Legend" panel with a list of map layers and a "FLOOR" selector. The "FLOOR" selector is currently set to "B1" and is circled in red. The legend includes items like World Imagery, Calls, Address Points, Building Point, Cell Towers, Dispatch_Ref_Pts, externalEntrances, Fire Hydrants, Government_centers, Lake_Wobegon_Mile_Markers, Land_POI, Mile Markers, Railroad Crossings, Section Numbers, SIU_Emergency_Phones, SIU_Entrances, SIU_Helicopter_Landing_Zones, SIU_Hydrants, and Updater. The map also features a navigation toolbar at the bottom right with zoom in (+), zoom out (-), home, and back/forward arrows.

The Impact of Indoor Maps



Integrated Vertical Location Service

Integrates with floor aware indoor mapping to show room level information for 9-1-1 callers.

The screenshot displays an emergency caller interface. On the left, a sidebar contains icons for 9-1-1, Incidents (27), Responders (1), Markups, Account (1), and Help. The main panel is titled "Emergency Caller" and shows "Start" at 16:46:29. Below this, "Latest Call Details" for "RapidSOS" shows a "Latest" time of 16:46:29. The location is identified as "2775 Bobcat Blvd, Roanoke" with a distance of "12.0 meters". A "RAW" field contains the coordinates "33.01900000, -97.20300000".

A section titled "Building detected at this location:" provides the following details:
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**
Accuracy: This is a low accuracy estimate
Feet per Story: 14 (with an "Update" button)

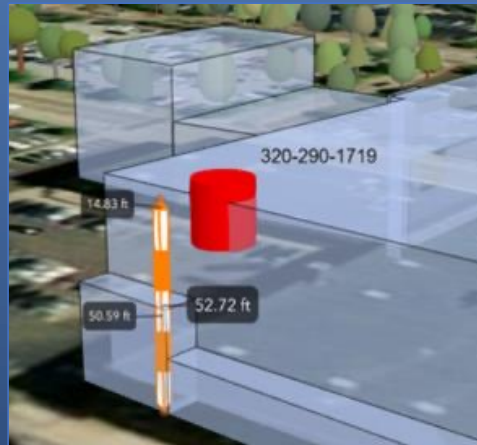
The right side of the interface features a map of the Hilton Bayfront Hotel. A red circular overlay indicates the caller's location, centered on room AD-101. Other rooms labeled include ATH-140, ATH-139, ATH-138, ATH-137, AD-113, AD-108, AD-109, AD-107, AD-104, AD-102, AD-100, AD-100.1, AD-116, and AD-117. A callout for "BYRON NELSON HIGH SCHOOL" is visible on the map, indicating it is on "Floor GF". A vertical floor selector on the right shows options from GF to 5F, with GF selected. The map includes a home button, zoom in (+) and zoom out (-) buttons, and a scale bar.

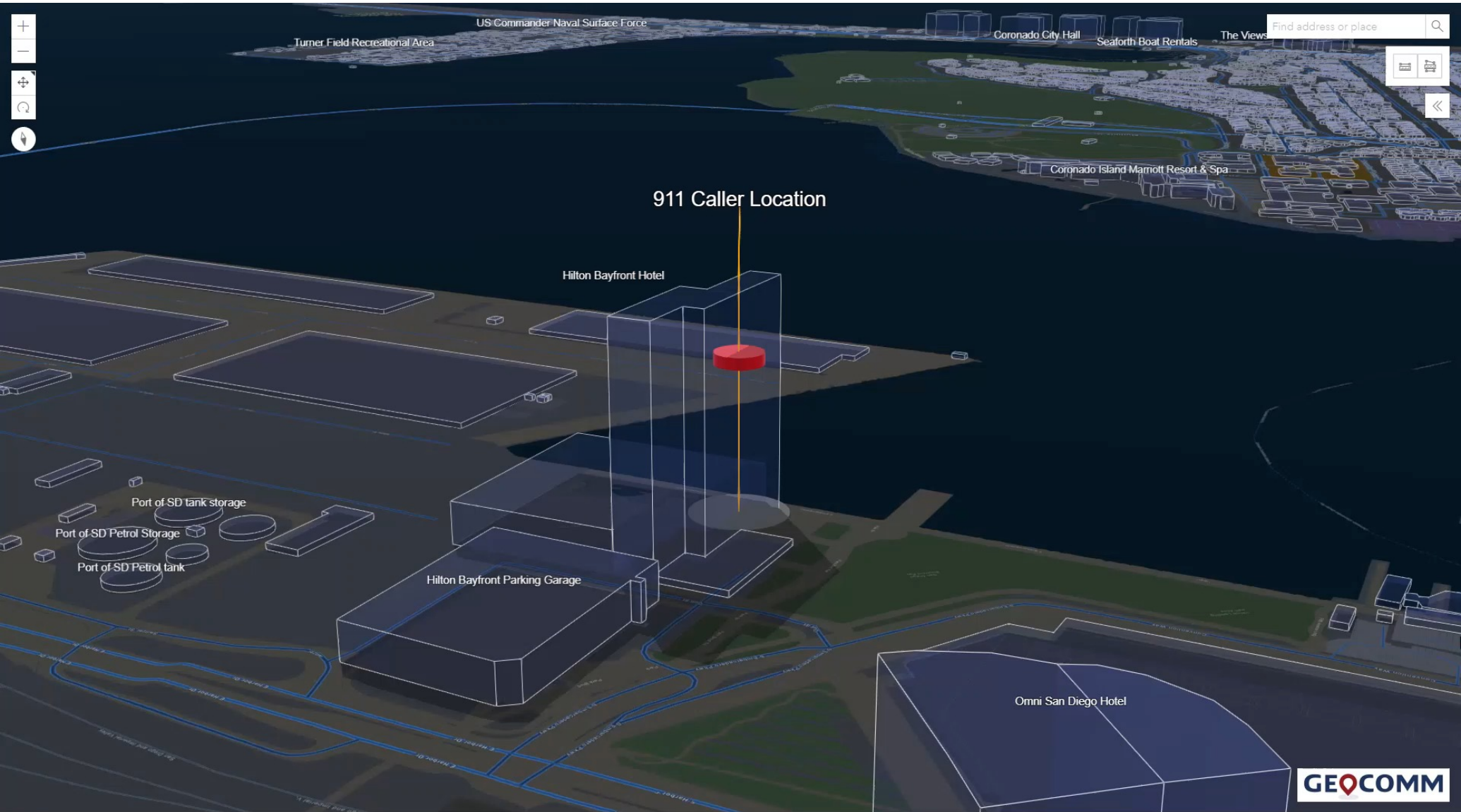
At the bottom of the map, a footer reads: "Esri Community Maps Contributors, City of Fort Worth, Town of Flower Mound, Texas Parks & Wildlife, BuildingFootprintUSA, Esri, HERE, Garmin, SafeGraph, INCREMENT... Powered by Esri".



601 W Saint Germain ST
Floor 2
Room 202
Saint Cloud
Minnesota

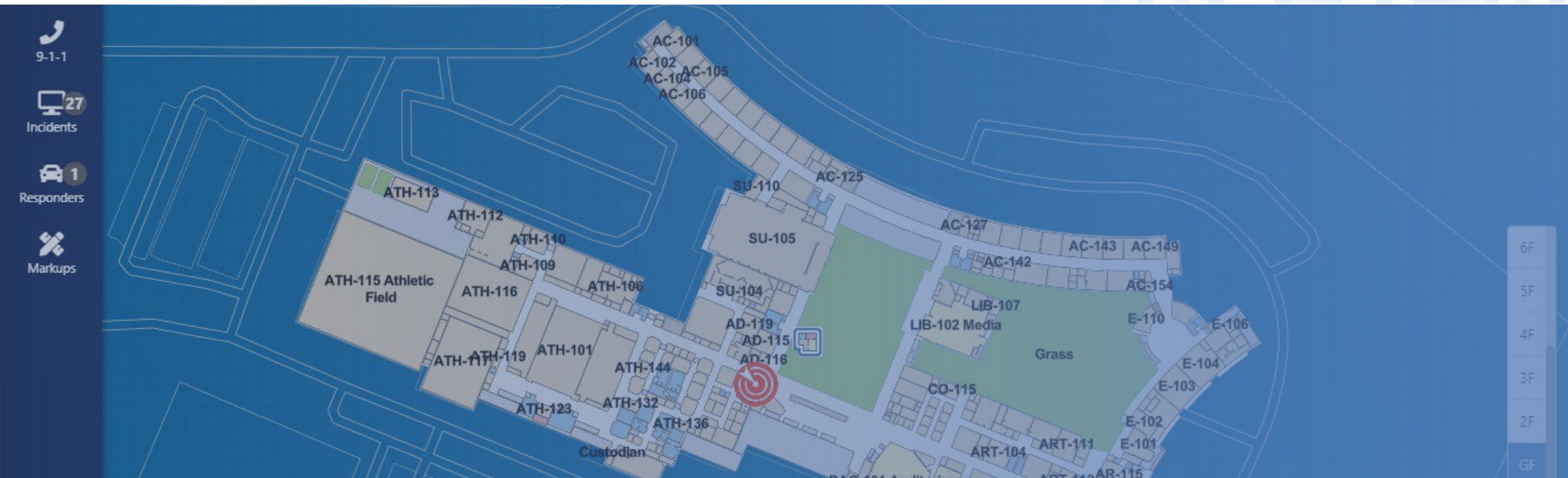
Latitude: 45.567066° N
Longitude: -94.183014° E
HAE: -15.2 m





Questions + Discussion

[Contact us Online](#)



FOR MORE INFORMATION CONTACT:

Susan Nelson

snelson@geo-comm.com

320.281.2176

SOUTHEAST TERRITORY SALES MANAGER

www.geo-comm.com

GEQCOMM



2023
NORTH CAROLINA NENA
WELLNESS RETREAT





MEET OUR TEAM



FINDING A POTENTIAL VENUE

VENUE

FINDING A POTENTIAL VENUE



LEARNING SPACE



FINDING A POTENTIAL VENUE



LEARNING SPACE



**EATING
SPACE**



FINDING A POTENTIAL VENUE



LEARNING SPACE



EATING

SPACE



BED AND BATH

SUITES



ADMISSION PROCESS



GENERAL APPLICATION



PHONE CALL SCREENING



3RD PARTY FOLLOW-UPS



The background of the slide is a dark blue field filled with numerous US dollar bills of various denominations (including \$1, \$5, \$10, and \$100) falling from the top. The bills are rendered in a lighter blue, semi-transparent style, creating a sense of motion and abundance. The text is centered over this background.

FINANCIAL OVERVIEW: Jamison Sears

FINANCIAL OVERVIEW: INCOME

- CORPORATE SPONSORS



id
18th
Meeting

NCNENA 2023
WELLNESS RETREAT

RAFFLE

Tickets

\$10 EACH



1ST PRIZE:
YETI HAUL

2ND PRIZE:

YETI HOPPER FLIP 18

3RD PRIZE:

2 YETI 30 OZ TUMBLERS,
1 YETI 20 OZ TUMBLERS
2 YETI COLSTERS

FOR TICKETS

CONTACT A NCNENA
BOARD MEMBER

OR

TEXT 910-650-9858

OR

MESSAGE US ON

FACEBOOK AT

NORTH CAROLINA NEN

Venmo



FINANCIAL OVERVIEW: INCOME

- **CORPORATE SPONSORS**
- **FUNDRAISERS**



FINANCIAL OVERVIEW: INCOME

- **CORPORATE SPONSORS**
- **FUNDRAISERS**
- **REGISTRATION FEES**

FINANCIAL OVERVIEW: INCOME



FINANCIAL OVERVIEW: EXPENSES



FINANCIAL OVERVIEW: EXPENSES

- **RETREAT VENUE**



FINANCIAL OVERVIEW: EXPENSES

- **RETREAT VENUE**
- **CATERING SERVICES**



FINANCIAL OVERVIEW: EXPENSES

- **RETREAT VENUE**
- **CATERING SERVICES**
- **SUPPLIES AND SNACKS**

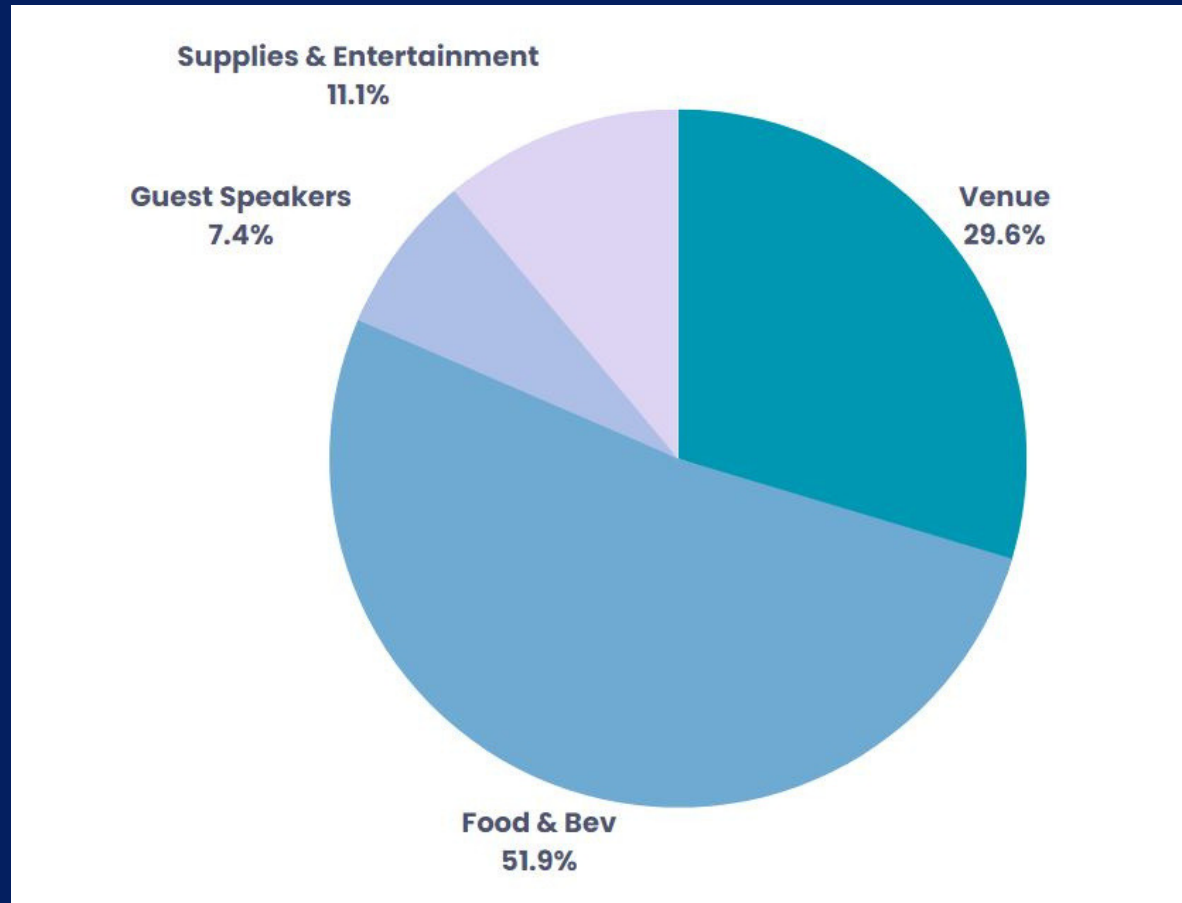


FINANCIAL OVERVIEW: EXPENSES

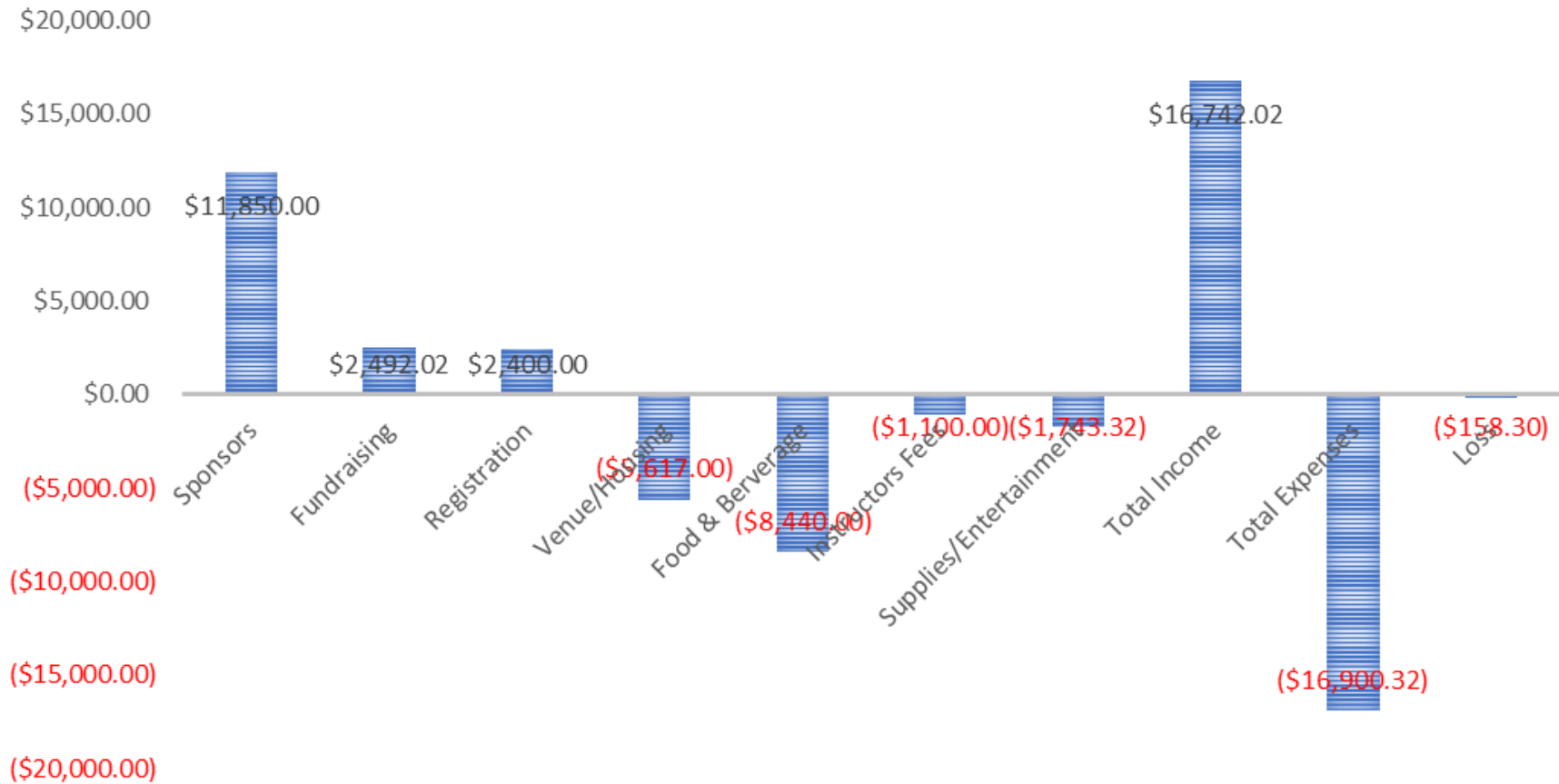
- **RETREAT VENUE**
- **CATERING SERVICES**
- **SUPPLIES AND SNACKS**
- **BASKETS AND BLANKETS**



FINANCIAL OVERVIEW: EXPENSES

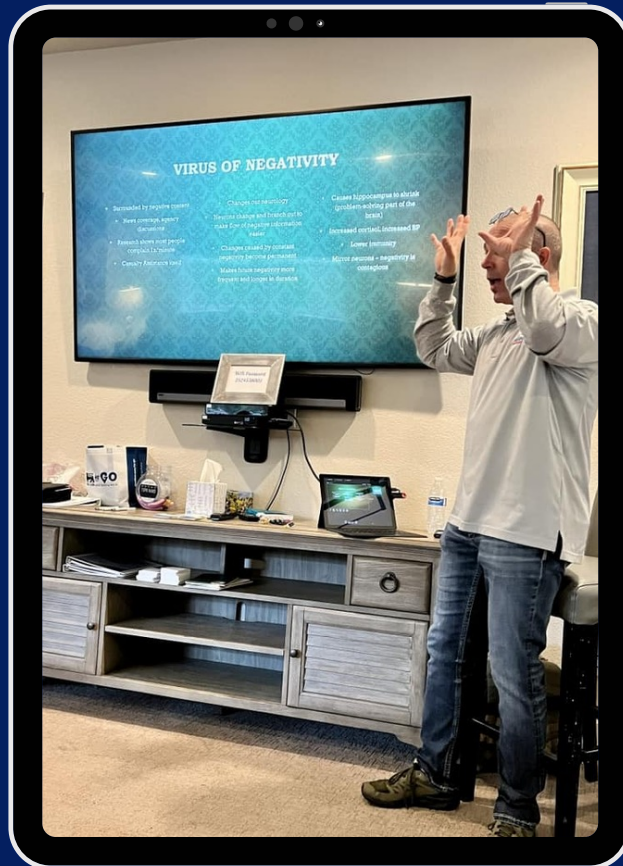


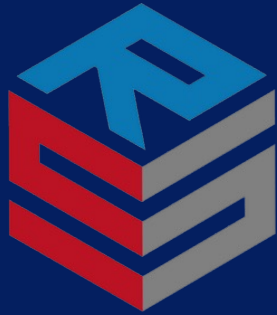
2023 NC NENA WELLNESS RETREAT



EDUCATION

Monica Howard





RESPONDER SUPPORT SERVICES

Keeping Responders Responding



SUNDAY
01.22.23

1700-1800	ATTENDEE CHECK-IN
1830-1900	WELCOME & ORIENTATION
1900-2000	DINNER
2000-2200	IF THEY'RE THE PROBLEM WHY DO I HAVE TO CHANGE?

MONDAY
01.23.23

0800-0900	BREAKFAST AND MINGLE
0900-1030	PEER SUPPORT 101: BREAKING THE STIGMA
1030-1100	BREAK
1100-1230	DIFFICULT CONVERSATIONS
1230-1400	LUNCH BREAK
1400-1530	RESPONDER SUPPORT SERVICES & VETTING CLINICIANS
1530-1600	BREAK
1600-1730	SAVING LIVES ON BOTH SIDES OF THE CALL
1730-1800	PRE-DINNER BREAK
1800-1900	DINNER
1900-2200	TRIVIA NIGHT

TUESDAY
01.24.23

0800-0900	BREAKFAST AND MINGLE
0900-1030	INTRO TO CISM
1030-1100	BREAK
1100-1230	PERSONAL TRAUMAS AND THEIR IMPACT
1230-1400	LUNCH BREAK
1400-1600	HOW TO HANDLE SUICIDIAL CALLERS AND COLLEAGUES
1600-1800	BEACH WALK AND TALK
1800-1900	DINNER
1900-2200	FAMILY FEUD

WEDNESDAY
01.25.23

0800-0900	BREAKFAST AND MINGLE
0900-1030	CUMULATIVE STRESS AND RESILIENCE
1030-1100	BREAK
1100-1230	NUTRITION WITH NAT PACKS
1230-1400	LUNCH BREAK
1400-1530	IMPACT OF PROPER SLEEP
1530-1630	DEVELOPING SELF CARE ACTION PLAN
1630-1700	BREAK
1700-1800	NENA ROUNDTABLE
1800-1900	DINNER
1900-2200	BONFIRE, SMORES AND CORNHOLE

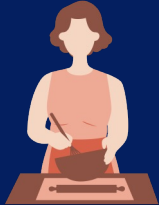
How will you practice *self care*



Will you start the day with your favorite warm beverage



Will you make yourself a well-deserved healthy meal?



Will you take time to right out your thoughts or goals?



Will you plant flowers in the garden to brighten your day?



Will you move your body, whether indoors or outdoors?



Will you take long baths to dissolve any stress?



Will you indulge in 'you' time with your favorite book?



Will you end the day with a mindful moment

Self Care Action Plan

My Signs of Burnout

-
-
-
-

People I can reach out to

-
-
-
-

My Favorite Stress
Relievers

-
-
-
-

Positive
Affirmation

“ ”



Identify Potential Exposure (PTE):
 Awareness of stress injury formation (overwhelmed, emotional connection, helplessness, error/guilt, isolation, near-miss, fatalities)

Self-Awareness
 Excelling | Thriving | Surviving | Struggling | In Crisis

Stop & Fix
 Monitor depletion, connect, leverage green choices, take space



PSYCHOLOGICAL FIRST AID

SAFETY

- Establish "All Clear" practices after exposure
- Protect from more stress whenever possible

EMPOWERMENT & ENGAGEMENT

- Problem solving/assign a job
- Remind them of strengths, reflect what is working

CALM

Complete the stress cycle •
 move, sleep, share
 create, breathe, laugh

- Utilizing resources •
 i.e. grounding, decrease movement

CONNECTION

- Build a relationship
- Connect them with family, friends, loved ones, pets ASAP

COPING SKILLS TRACKER

Keep a record of the coping strategies that work best for you in different situations. You may see a pattern.

When you identify coping skills that work- try to brainstorm similar ways to cope that you could implement.

What Happened

Your reaction to it

Coping Mechanism

End result

DESK YOGA

FOCUS: SHOULDERS, BACK & NECK

INHALE to arch back... 10 sec

EXHALE to round spine... 10 sec **5x**

SEATED SPINAL TWIST
move Shoulders down! 10 sec **2x**

INTERLACE FINGERS & ARCH BACK 10 sec **2x**

SIDE STRETCHES 10 sec 10 sec **2x**

UPPER BACK STRETCH 10 sec **2x**

NECK + UPPER BACK STRETCH
Interlace fingers & push head down → Slowly transition to arched back 10 sec **2x**

BACK & SHOULDER STRETCH 10 sec **2x**

NECK STRETCH
Gently pull head to each side 10 sec **2x**

DESK EXERCISES

PUTTING THOUGHTS ON TRIAL

How accurate is your thought?



What is my worry or thought?

The Defense

What evidence do I have that my thought is true?
Facts. Not opinions.

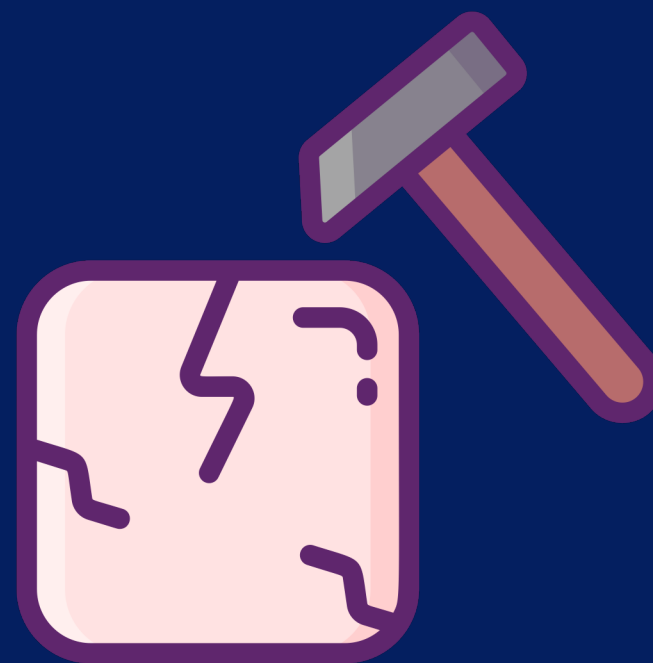
The Prosecution

What evidence do I have that my thoughts are not true?

The Verdict

When I examine all of the evidence, based on the facts, can I decide whether my thought is likely to come true or unlikely?

BREAKING THE ICE



Everything we dreamed of...

and so much more.

AFTER THE RETREAT

Ashley Warner

400TM

46

400TM



47

400TM

48



400TM

49

400TM



400TM

46

400TM



47

400TM

48



400TM

49

400TM





KAYLEIGH
Green

Each of you shared your stories and opened your hearts to each other- something that was far from easy. You each comforted others, you learned from others and you taught others. On Sunday, January 22nd 2023 I met 15 strangers and 4 days later I walked away with 15 new forever friends. To my fellow board members- especially my Wellness Retreat Committee folks- thank you for letting me chase this wild dream. To all the speakers- thank you for coming & being part of something life changing and sharing your stories and knowledge.

But to the attendees- THANK YOU for trusting us by attending our first retreat. Thank you for coming in with open minds and open hearts. I know that there were not really many expectations for this retreat but you all still came anyways. You all changed my life in major ways and you are the reason this retreat was a success.

ASHLEY
Warner


They say everyone you cross paths with in your life serves a purpose. Each person I met at the first ever NCNENA Wellness retreat was placed in my life to transform my ***grief into grace, traumas into triumphs*** and ***strangers into friends.***

As a dispatcher it's hard to fall into a pattern of taking care of everyone else before ourselves but we can't be the best spouse, friend, sibling, parent, and co-worker if we keep pouring from an empty pitcher.



WE MUST NOT WISH FOR THE DISAPPEARANCE OF OUR TROUBLES BUT FOR THE GRACE TO TRANSFORM THEM."
-SIMONE WEIL



A group of approximately ten people and a dog are gathered on a sandy beach at dusk. The scene is dimly lit, with the sky showing a soft twilight glow. The group consists of several women of diverse backgrounds, some wearing winter hats and jackets. A man in the foreground on the right is wearing a dark baseball cap with 'Nate Packs' written on it and sunglasses. A large, fluffy dog is sitting in the center of the group. The background shows gentle waves breaking on the shore.

I still become overwhelmed with emotion when thinking back on the retreat. The love and support from those who truly relate to you is a feeling like no other. It really takes a strong, trustworthy group to basically tackle multiple people "trauma dumping" for almost an entire week. That just goes to show how much everyone cares. I also really appreciate how this was a professional environment, but everyone was still able to be themselves. I really appreciate that the staff would take time to just talk, TRULY listen or answer literally any questions we would come to them with. The help definitely extended beyond class sessions. I'm a very introverted person, and I seen myself up open up significantly within 4 days. I actually had a therapy session with my regular therapist the Friday following the retreat. After speaking with her, she looked at me dead in my face with tears in her eyes and said "I don't know what in the world this retreat has done to you, but I am so incredibly proud of you and I am so thankful there are people who care for you like I do." I cannot think of a single "coach" that didn't take the time to speak to me when I went to them whether it was for advice or just to vent. I will forever be so thankful I received this opportunity.



400TM

46

400TM



47

400TM

48



400TM

49

400TM



400TM

46

400TM



47

400TM

48



400TM

49

400TM



KEEP IN TOUCH

Farron Kendrick
Apr 19 · 📍

... of my team! It was a rough 3 hours t... with this incident, but in the end it w... u!! We received notification of a suicid... that worked for one of our local stati... v his location as he was driving. I begi... is phone when he called us directl... s racking him because if law enforce... n he would be run his vehicle into a tr... w he had his portable radio with him... to our every move coordinating with t... Dept patrol units. We then had to kee... f the air and communicate throu... See

NC NENA Wellness Alumni
Private group · 21 members

Joined · Invite

Reels About Rooms Photos Event

Write something...

Early into the shift a few nights ago, promptly correct her when she was protocol while on the phone. After sl issue, she disconnected and began asked her what was wrong and she t was tired. Tired of life. Tired of being Tired of trying to stay strong for her hearing that, I knew I HAD to pop th had thought about doing it several ti never muster up the courage.) I ask out of the room and talk with me in ÷ dived in and asked her if she had th...



11:12
Search
NC NENA Wellness...
Kayleigh Marie
Admin Mar 5 · 📍

Check Your Battery
How are you currently feeling?

Feeling great! Keep meeting your needs and practicing self-care.

Feeling good! How can you maintain the levels you're currently at?

Feeling okay. How can you make your day a tiny bit better?

Meh. How can you love on your self today? Be extra kind to yourself.

Struggling. Practices bridge. What area of your life is suffering the most right now? Focus on that one area today.

I'm empty. Pinpoint what's draining you and try to create a boundary & then do one thing that fills you up.

BlessingManifesting

5 likes · 1 comment · Seen by 18

Like Comment Send

Farron Kendrick
Feeling good! 😊
Like Reply

Write a comment...

Search
NC NENA Wellness...
Monica Taylor Howard
Mar 22 · 📍

Yall!!! Stephanie Brackett did an amazing job with this call and her husband was there fighting the fire. Thankfully the neighbor was able to help her out of the bathroom window and saved her life. Great job Stephanie! And way to rep NC North Carolina NENA with your clothing choice! So proud to call you my friend!

Keely McDougal
Mar 21 · 📍

Today I had the privilege of meeting just some of the amazing people that worked together effortlessly to save myself and our ho... See more

Home Friends Watch Marketplace Notifications Menu

12:06
Search
NC NENA Wellness...
Farron Kendrick
Jun 6 · 📍

Thanks to this retreat, I have fell in love with Goldendoodles (all credit goes to Chase!) Since January I have been trying to convince my husband to let me get one. Well today's the day! Her name is Remi!

Friends Watch Marketplace Notifications Menu



CONTACT US

Jason Compton- Team Lead

jason.compton@ncnena.org

Monica Howard- Western Regional Wellness Director

monica.howard@ncnena.org

Ashley Warner- Central Region Wellness Director

ashley.warner@ncnena.org

Kayleigh Green- Eastern Regional Wellness Director

kayleigh.green@ncnena.org

Jamison Sears- Wellness Treasurer

jamison.sears@ncnena.org

Ryan Chambers- Chapter President/Team Member

ryan.chambers@ncnena.org



SCAN
ME!



linktr.ee/NCNENA