



GIO

GEORGIA GEOSPATIAL INFORMATION OFFICE

Engagement and Outreach in a Pandemic: *Lessons we'll carry forward*

September 22, 2021

NSGIC Annual Conference – Dallas, Texas

Please complete this survey, now:



Us... the *Georgia Geospatial Information Office*



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*Geospatial
Information Officer*



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*Geospatial Data
Programs Manager*

...or as our Clients refer to us... the Velvet Bulldozers

What we hope to share today

heads-up: this is NOT very GISy, its more about the **humans**.... Cause they're important too...



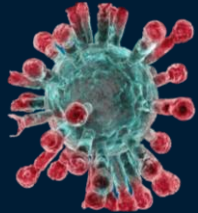
- Us, our goals and how they shape our work... (Bonus: + a whirlwind tour of our Covid activities)
- What we learned from living virtually during Covid that we'll carry forward (e.g. NG9-1-1)
Data for NG911 in GA is 100% dependent on us being successful at **OUTREACH** building bridges, and earning trust
- Tech we used to engage. What worked and what didn't?
- Open floor for discussion ~ Tell us about YOUR challenges and successes with the Humans

Us... stuff about us, & how that stuff frames our activities during COVID and beyond

Starting with the reality we wake up to every day....

Under normal, *non-global-pandemic times*, we find...

DATA OPERATIONS in our state to be...well... sort of a

Then....  happens

And everything became even harder, scarier, more disjointed, chaotic, critical, impossible.....



Geospatial Information Office:

Mom & Apple Pie Stuff

Our Vision

To empower all levels of government to higher effectiveness, efficiency, and innovation through the coordination and use of geospatial data, standards, and technologies.

Our Mission

Coordinate, promote, and enhance the development, and use in analytics, of geospatial data for the State of Georgia, its agencies, authorities, regions, and local governments



So, basically our job (and all y'all's jobs, just not in Georgia per say) is to...

Spatially Enabling Georgia's Government

We aspire to be a collection of **NSGIC Best Practices**, and are a sponge for guidance from our Public & Private sector NSGIC family members





ENABLE FACILITATED COLLABORATION

Build platforms and relationships to enable increased coordination and collaboration among governmental entities.



DEVELOP GEORGIA BASE MAPS

Build comprehensive living repository of foundational state geospatial data.



PROVIDE GEOSPATIAL SERVICES

Provide best-in-class geospatial application development and analytics adding value to key state priorities.

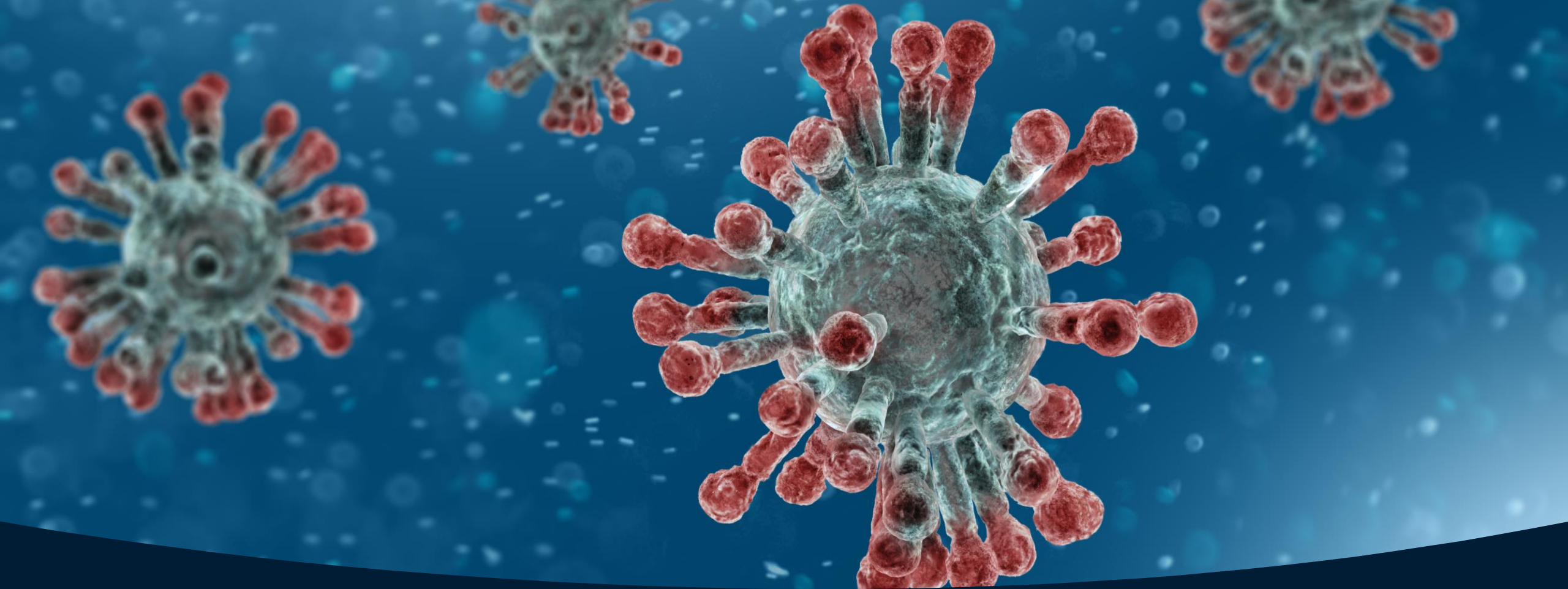


Our OUTREACH Style

for Covid, NG911... and
beyond

- What keeps you up at night?
- Are you willing to change?
 - Will you embrace new ways of *thinking* AND *doing*?.... Hope so, cause that's what we bring
- Who needs to be involved for this project to be successful?
 - Their opinion.... (e.g. agency leadership)
Often wildly different goals, from...
 - Their staff's opinion (the people who know what's good and bad, for them)





Collaboration in Crisis

A whirlwind tour of the Georgia COVID-19 Data Task Force

Our Team of VOLUNTEERS



Our Team

(~ 3-30, at any given time)

We built a Think-Tank y'all



Data & Analytics Team

- Identify/develop/enhance data flows
- Daily > cumulative – enabling lookback
- Interrogating the Data (anomalies & causes)

Modeling Team

- Built a COVID-19 Think Tank → Amplifying everyone's individual efforts (Education, Government, Private Sector)
- Answering present day and future questions such as: when and where, by how much, under what conditions, etc...

Visualization & Application Development Team

- Enable data sharing through Data Hubs (Public/Private)
- Numerous Insights, Dashboards, Apps & StoryMaps... adding Tableau
- Convey copious amounts of data and information for various stakeholders

+ Communications & Cartography

Building a community of respect, which creates the tone for the entire Team. Creating a safe place to experiment, fail and try again

Key shifts that occur during a crisis



1. Uniting Around a Purpose

- Massive spike in energy from the workforce
- The very, very, very best of people

3. Seeing the Process/System Differently

- New eyes, fresh perspective, outside perspectives on processes... find better, faster ways of doing things...

2. Centered on Problem solving

- A wellspring of new ideas
- Focused on common goals

4. Unfreezing Organizations (...or not)

- Courage to take actions
- Move fast... try it, fail fast, learn, move on and try again... in short, to innovate

Roles we played during Covid (a role we gave ourselves)

*Data Governance: creates trust, which is the
currency that makes data sharing possible*

His Royal GISness Frank Winters, 2021

Coordinator

Find the **Humans**

- Convince them to get in the **sandbox**, and **play** together
- Organize three daily **meetings** for 9 months

Build new **Ecosystems**

- Task Force Collaboration Space
- Data Management System
- Public and Private deployment platforms

Facilitator

The **Data** (for crying' out loud)

- Find it
- Enable Access to it
- Interrogate it

Automate everything

- Grab data
- Move it around (format changes too)
- Daily Rollups
- Cumulative Rollups
- Generate Reports
- Health checks on all automations

Innovator

Solve Problems

- Ones we were asked to solve
- ... and many more we were not....

Perform **Analytics**

- Spatial & temporal

Be **Idea Fairies**

- Humans don't know what they don't know

Application Development

- Build it for a 5th grader
- Cartography (so vital)



**I wonder if I'm
gonna make it
awesome...**



Oh, we did.

Successes

Our Covid Hub

Client: Government & the Public

COVID DATA

Case Spread
Modeling
Hospital Region
Status

Planning

Informatics Impact
Reports (thanks Missouri ;-)
Event Risk Assessment
Planning
Covid Trends

Social Distancing & Mobility

Unicast
Safegraph
BlueDot

Business & Unemployment

Economic
Vulnerability
(Chmura)
Unemployment
(BLS)
Predominant
Industry (Esri)

Vulnerable Population

City Vulnerability
Index (Social
Progress)
Social Vulnerability
Index (CDC)
Health Insurance
Coverage (Census)

Social Media

Datastory/Spatial.ai
Georgia Tech
Research
Institutes/CDC

COVID-19 Georgia Geospatial Data Hub

Geospatial data enables informed planning, policy development, decision making, and response, which function together to improve the overall safety and economic resilience of the State of Georgia and its citizens

Businesses & Unemployment Social Media Vulnerable Populations Other Popular Maps Neighboring State Resources

Neighboring State Resources

The following gallery links out to dashboards that provide an overview of the impact of COVID-19 in neighboring states.

Florida's COVID-19 Data and Map Dashboard

North Carolina COVID-19 case count by county

Tennessee COVID-19 Unified Command Dashboard

Alabama Covid-19 Mapping and Data Dashboard

COVID-19 Regional Case Rates (data source: Johns Hopkins University)

COVID-19 Event Risk Assessment Planning Tool (data source: Georgia Tech)

Maps of Regional Hospital Capacity

These dashboards are a part of an effort with the Georgia Hospital Association (GHA) and the Georgia Emergency Management Agency (GEMA) to collect daily medical facility data and build informative visualizations. The data are compiled using a WebEOC developed survey, and the most important metrics for analyzing COVID-19 are leveraged in the dashboards. Both dashboards are updated twice daily, at approximately noon and midnight.

Georgia Hospital Bed/Ventilator Capacity

Georgia Medical Facility Patient Census

Maps for Planning

COVID-19 Impact Reports (data source: Esri)

COVID-19 Event Risk Assessment Planning Tool (data source: Georgia Tech)

Insights for COVID-19 Trends

GA COVID-19 Status Dashboard

Statewide Data

Total Confirmed Cases: 258,354 (Current State Total: 258,354 cases)

Total Hospitalizations: 23,717 (Current State Total: 23,717 hospitalizations)

Total Deaths: 5,262 (Current State Total: 5,262 deaths)

9.18% Hospitalized 2.04% Deceased

Cumulative Case Count

Hospitals Capacity Planner

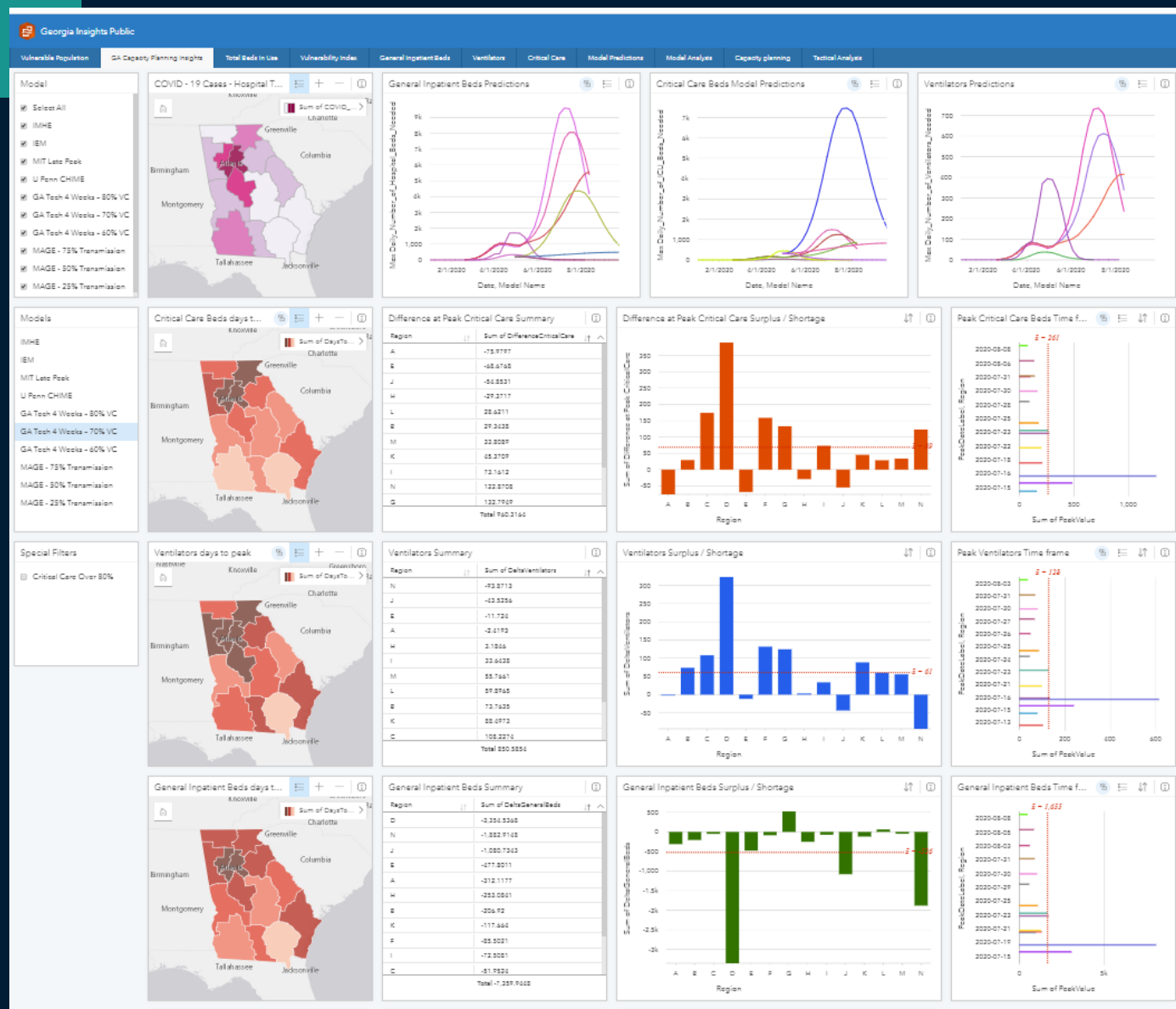
Clients:

- Department of Public Health
- Georgia Association of Hospitals
- Department of Community Health
- Department of Defense/National Guard

GOAL:

When, where and by how much will our State's Hospitals reach capacity (including surge) on beds & ventilators?

Unforeseen benefit: Situational Awareness for entire hospital regions





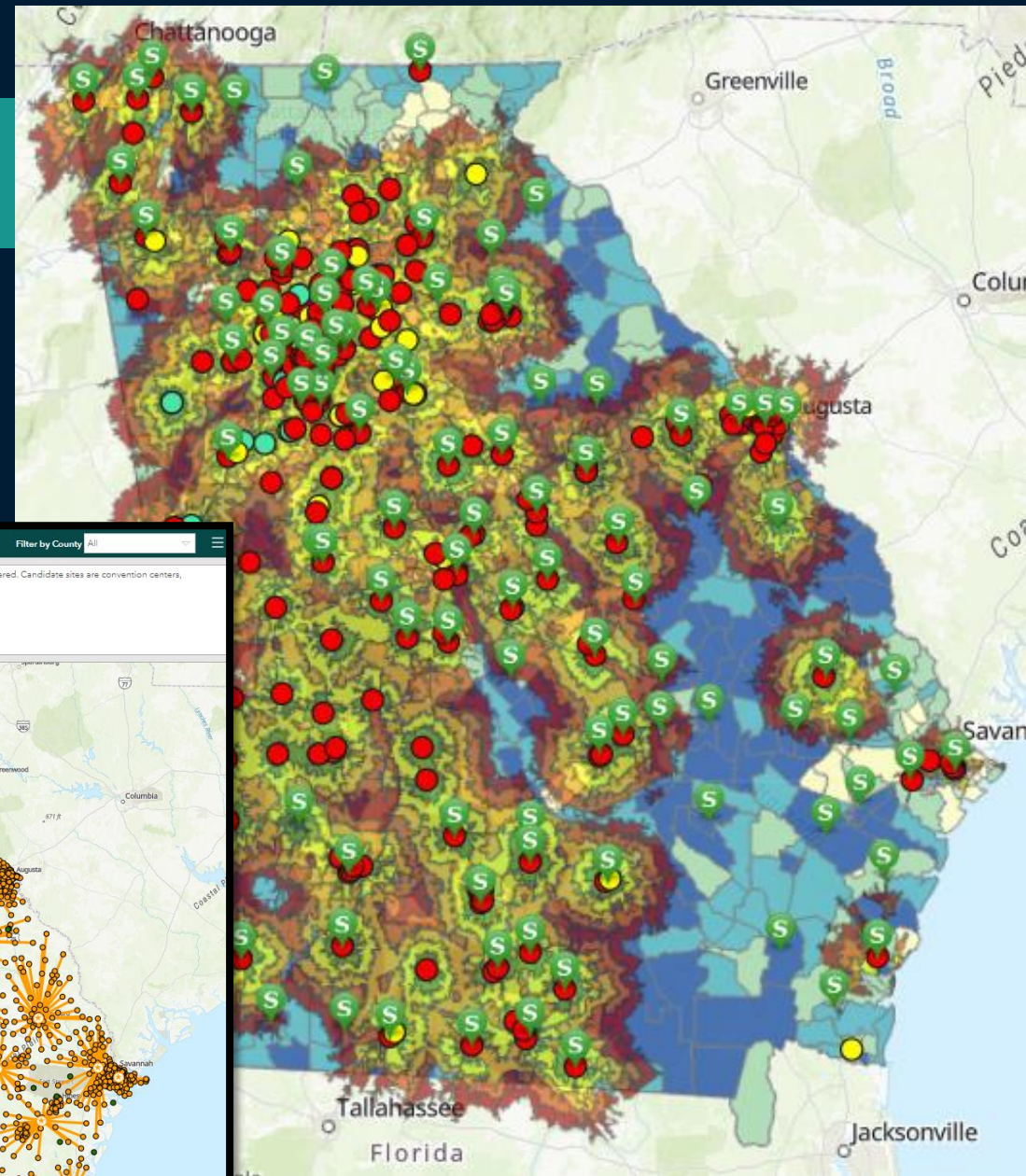
~~Successes~~

NOT

(not for a lack of trying, and trying, and trying..... did we mention we tried?!?!?)

Test Sites

Client: Department of Public Health



Testing Sites Model 50 Sites Dashboard

Facilities

 **50**

Estimated Population Met:

9,838,887

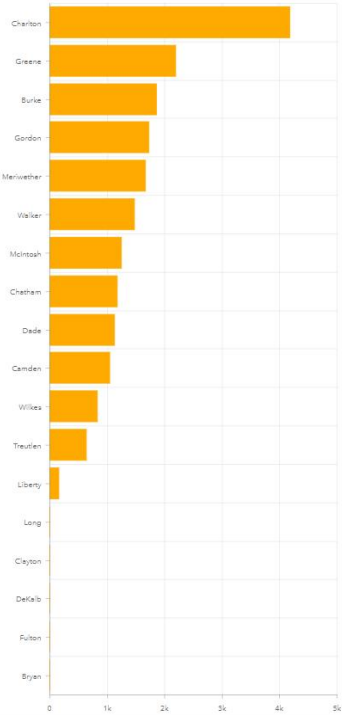
99.805% Demand

Estimated Population Not Met:

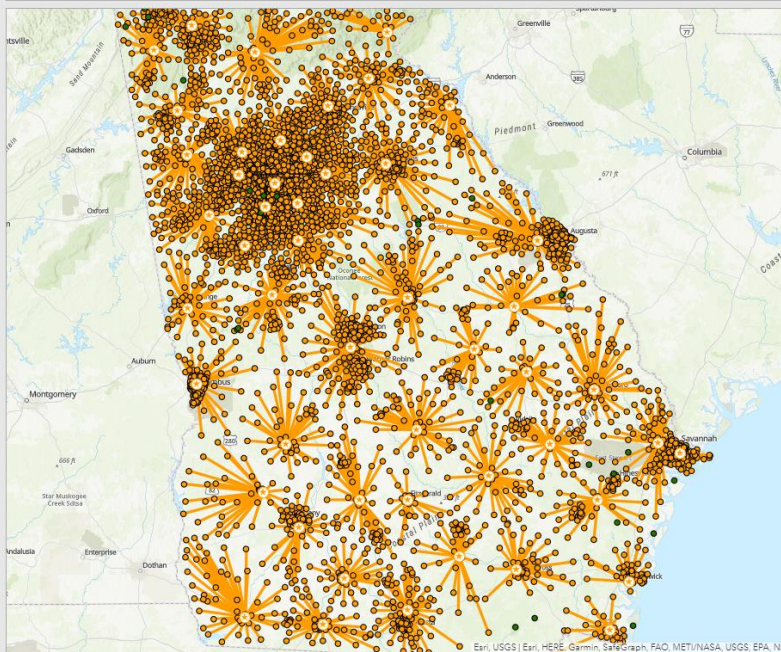
19,255

0.195% of Demand

Unallocated Demand by County



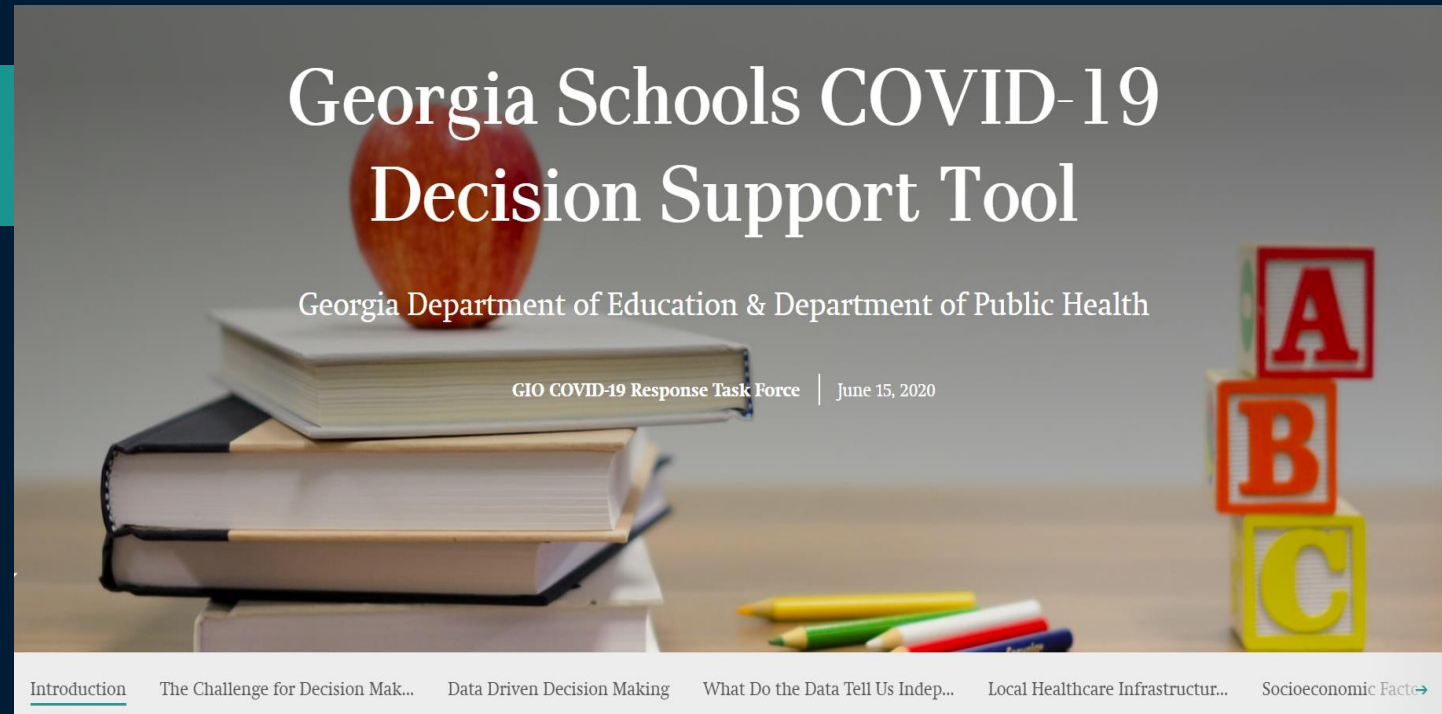
A model showing where to put 50 testing sites based on 30 min drive time urban and 60 min rural to maximize demand covered. Candidate sites are convention centers, fairgrounds, sports stadiums, and schools (above elementary).



Schools

Client: Department of Education

Helping our schools determine their re-opening strategies, and adjust course throughout the school year



COVID-19 Data

- Case rate per 100,000 residents
- Social distancing scores
- Hypertension rates
- Diabetes rates
- Obesity rates
- Tobacco usage

Demographic Data

- Age, sex, race composition of local communities
- Number of students served
- Multi-generation homes
- Students with disabilities

Local Healthcare Infrastructure Data

- Critical Care bed capacity
- Primary care provider rate
- Immunization rate

Socioeconomic Data

- Children eligible for free and reduced lunch
- Population at or below the federal poverty line
- Title I school eligibility
- Access to a computer in the household
- Food insecurity
- Childcare options

What did we learn during Covid?

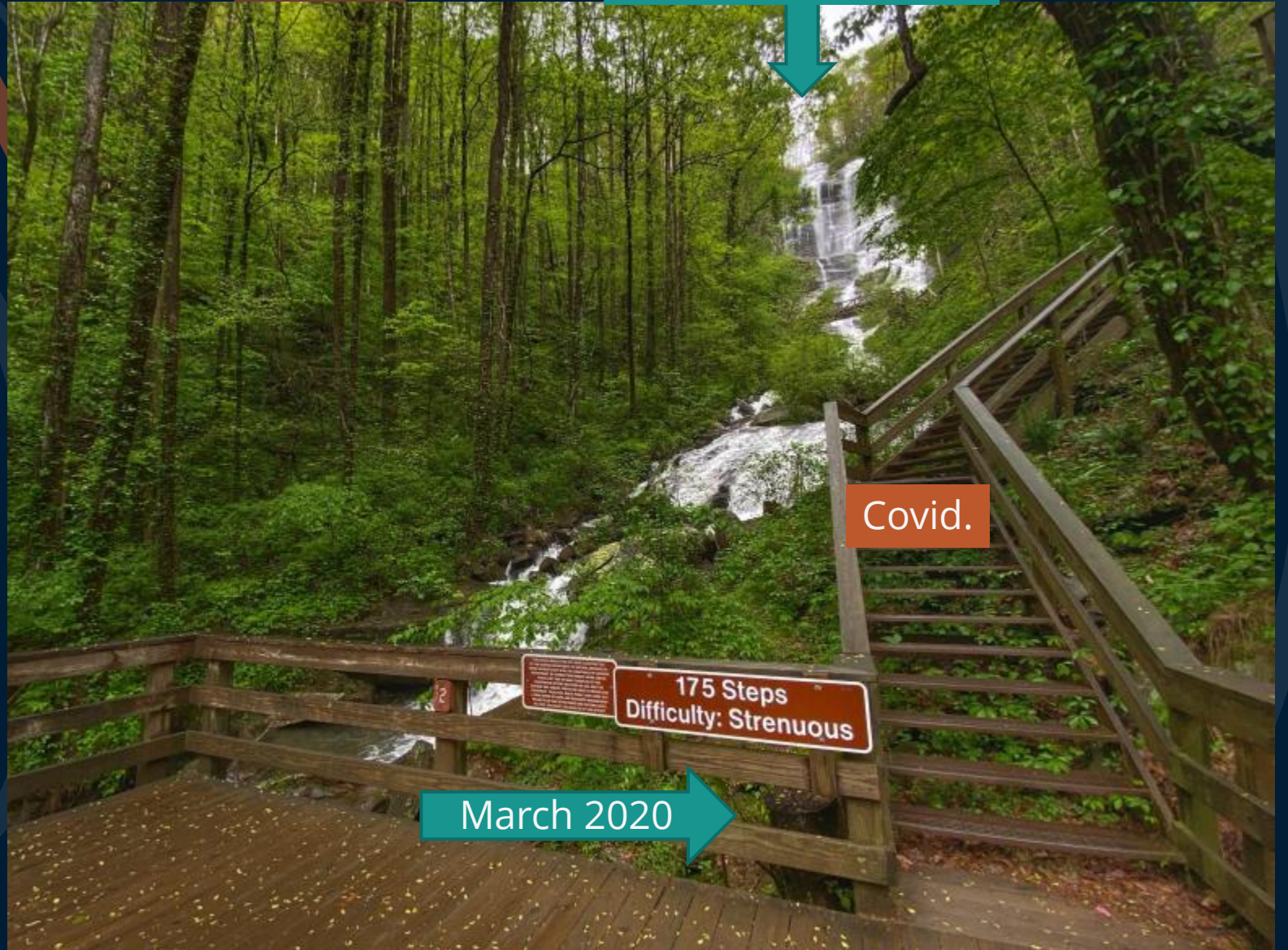
Covid Support

Community Engagement

Next Gen

How do we get from 'here' to 'there'...

What does it look like to collaborate well?



Covid.

175 Steps
Difficulty: Strenuous

March 2020

Some Sentiment

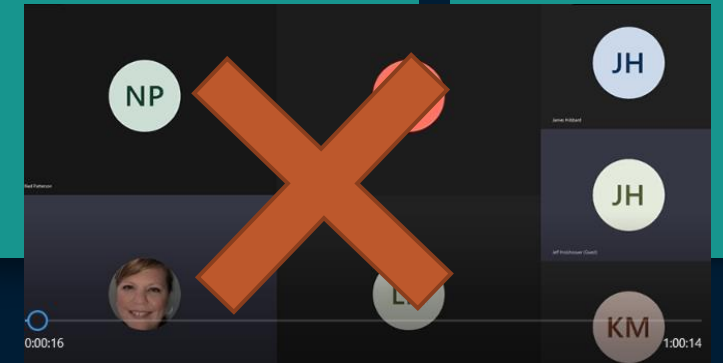


THAT'S SO OVER!

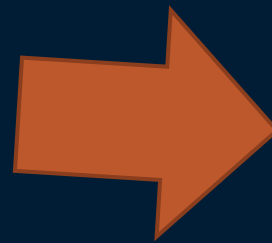
memegenerator.net

Not this. This doesn't really work.

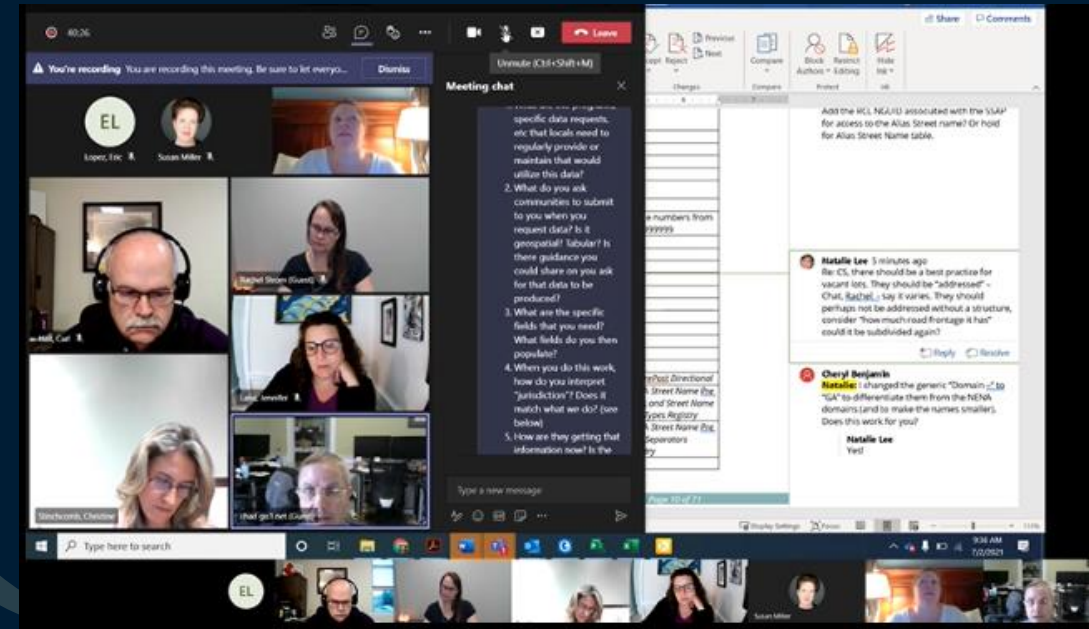
Wind out of your interpersonal sails? *It is for Us ;-(*



The Good Old Days



This can work!



Interpersonal Skills & You

- People are TERRIBLE.
- People are also AMAZING.
- Managing a large team of volunteers is a full-time, difficult job
- How you talk to people (your team and yourself) is important!
- How you identify/anticipate conflict, and address it matters
 - Knowing people means knowing their motivations
 - business perspective
 - personality type perspective
- Leadership needs good interpersonal and coping skills, especially when the team is under extreme stress:

Bravery, agility, grace, idea fairies, problem solvers, bridge builders, good at delivery of bad news...



Creating a comfortable space – draw people out – tell stories – break the ice...

Let's pop over to the **Poll**

Slackers do it fast, go here:



Why did/does Covid Need the GIO to Lead?

Huh. This sounds like NG9-1-1!

- NO ONE was driving
 - Covid: the “obvious” captain was not able/willing (*Hot Potato*)
- From our vantage point, we could clearly see:
 - Agencies not communicating (inside or outside)
 - Agencies not collaborating (inside or outside)

government WASTE in real time

- All agencies involved needed the exact same things:

Data & Expertise

- bits and pieces of data everywhere, and expertise was iffy at best
- Volunteers: no money (yet) but this was all hands-on deck
- We were already behind
- Everyone was reacting, no planning We were **building the airplane in the air**

I don't want it!

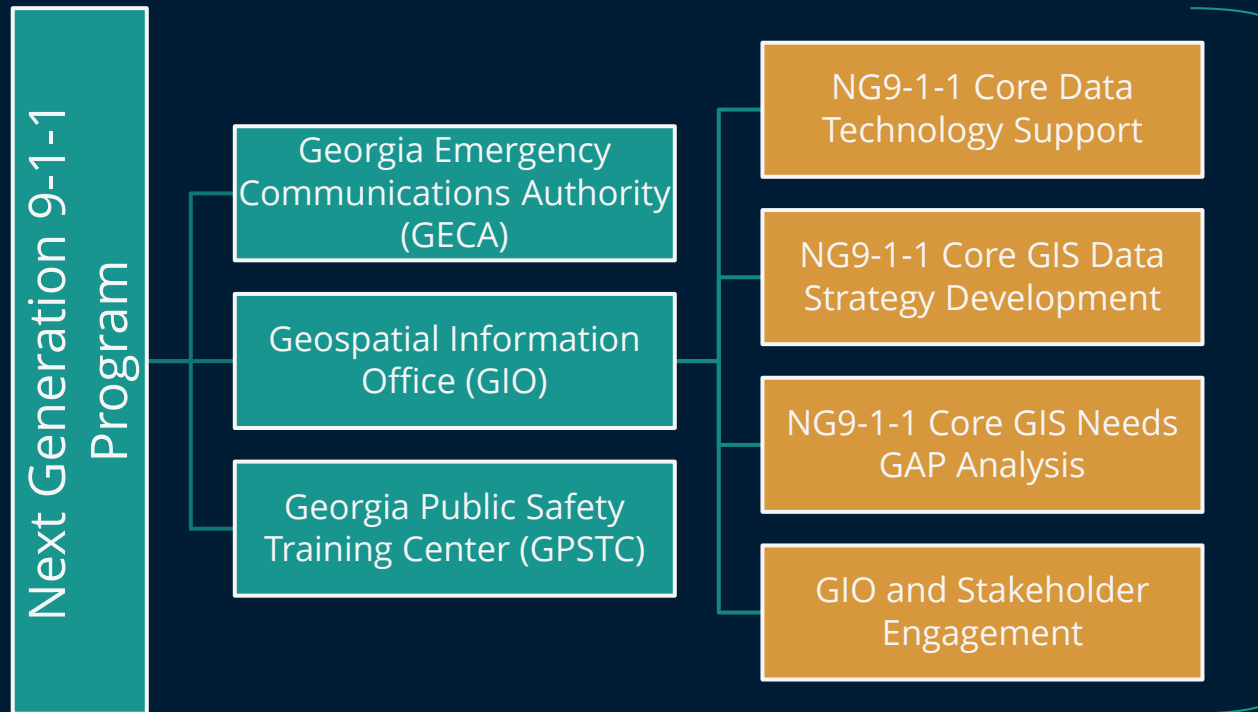


She was right.. Taking it was the death of her



GIO and Next Generation 9-1-1

Georgia's Geospatial Information Office and the Georgia Emergency Communications Authority are partnering to deliver NG9-1-1 capabilities to the State of Georgia and its 180+ PSAP partners. This effort will elevate the State of Georgia's 9-1-1 system.



The NG9-1-1 GIS Program (or Strategy) must deliver:

- **Education/Training**
- **Technical Access (tools and data storage),**
- **Standards**

...to 700+ entities all while keeping them engaged and on the same page

Scan me!!



How exactly did we engage others?
What worked and what didn't?

Leadership and Outreach: Use Your Words (Velvet)

- You can do a lot by using these phrases:

- *Here is where you and I/ You both share a value*
- *When can we meet to talk more?*
- *Can you say more about that?*
- *What would help?*
- *Thank you!*
- *Tell me what I'm missing.*
- *Thank you*
- *I appreciate you -- You are so valuable to this effort -- you are saving lives.*
- *I was wrong, you were right*
- *I made a mistake*
- *I spoke too quickly*
- *What worries you about that?*
- **THANK YOU !**



Be a Bulldozer

- Be demanding, in a velvet bulldozer kind of way
- Data be made public
 - MS Teams be opened up for
 - Multiple agencies (not previously available)
 - Private citizens
 - NGOs
 - Military
 - Microsoft Staff
 - We took our state rep, adopted her and put her to work managing all our tech support needs
- Teach people HOW to read a map
- We were brutally honest on our Hub, when data was *bad* or *broken*, telling the world the data was broken or bad
- State IT shop --- “Give us stuff, for free, right now”

Tech in Play

What did we use?



Tech

- Esri Suite (Pro, ArcGIS Online, Hub, Insights, Application Dashboard, Survey 123, Dashboards, 3rd Party Apps)
- Virtual Machines
- Microsoft Azure cloud
- GitHub
- 1 Spatial 1 Data Gateway
- FME
- Python
- Microsoft Teams
- Tableau
- Email
- Confluence

Tips and Tricks

- Use collaboration platforms like Teams to the max!
- Use the tech and visualize everything
- Record and Post and document everything and give everyone access to it – POST MAPS!!!!
- Transparency (recording meetings, publishing)
- Make engagement easy, and multifaceted
- Bring tech to the problem – Don't wait to be asked
- Automated! Save time and reduce risk
- Create "heartbeat" notifications when data moves around

Best Practices

- Cyber Security
- Authorization/Authentication (Public/Private)
- Development & Production environments
- Cartography

Show and Tell: Outreach in NG 9-1-1

What does it look like now?

- Online teams space
- Monthly virtual meetings
- Educational workshops
- Hub Community for publishing data and educational material
- Survey Goddesses
- “Office hours” for major efforts
- We publish maps

The collage consists of three main components:

- Microsoft Teams:** A screenshot of a Teams channel named "Standards Working Group". The channel list includes "General", "Archetype Selection", "Athens-Clarke, Barrow, Oconee", "Contractor - 1Spatial Inc", "Contractor - 319", "Contractor - CAB Teams Space", "Contractor Collaboration", "Emergency Service Boundaries", "Emergency Service Boundaries (Fire)", "Field Coordinators Only", "GECA and GIO Space", "GIO Architecture and NG Build Out", "PSAP Boundaries", and "Site Structure Addressing Data". A chat history shows a message from "markjansen (Guest)" at 7/11 5:59 PM about "Military Jurisdiction Types" and a PDF attachment "AFD-130607-065.pdf". Another message from "Natalie Lee" at 7/15 7:27 PM says "Hi Mark! Sorry for the delay in re boundaries can be shared. I think classification before it gets sent handy...". A third message from "Natalie Lee" at 7/20 2:46 PM says "Reviews Outstanding".
- NextGen9-1-1 Website:** A screenshot of the "NextGen9-1-1" website. The main heading is "The Statewide 911 GIS program will focus on the below of". Below this is a three-step process: 1. GIO and Stakeholder Engagement, 2. NG911 Core GIS Needs GAP Analysis, 3. NG911 Core GIS Data Strategy Development. There is a "GECA Project Plan" button. A section titled "Explore More Resources" lists "Georgia's Validation and Aggregation Portal" with "Edit" and "Review" buttons. Below this is a "Has your PSAP completed" section with a map of Georgia showing PSAP status. A "Terms Related to Next Generation" section is also visible.
- GIS Map of Georgia:** A map of Georgia divided into regions, color-coded by readiness. The regions are: Central Savannah River Area, Middle Georgia, River Valley, Heart of Georgia/Altamaha, Coastal Regional Commission, South West Georgia, and Southern Georgia. A legend at the bottom indicates "Less Ready" (lighter blue) and "More Ready" (darker blue).

What's still broken, despite our gallant effort to change the world?

- Government is still broken – we didn't fix it
- Lots of humans in state government are Risk Adverse, and that's a huge drag
- Funding issues are the WORST
- State government processes still don't provide wiggle room for "good deeds", innovation, or rapid cross-agency collaboration



To Sum Up...

- Be good leaders (*constantly work on your people skills*)
- Find your people (*and keep them*)
- Harness the Tech
- Be brave, and kind..... It will take you far

In-Person and Virtual participation

Let's talk – we want to hear from you...
Let's go back to the Poll

Ask us any questions about our experiences?

What did you experience?

Thank you!

- We value your input and the work you do!
- Please stay in touch with us!
 - Susan.miller@gio.ga.gov
 - Natalie.Lee@gio.ga.gov