

# Utilizing ArcGIS Survey123

---

AMY TRIMM, MPH

CHATHAM COUNTY MOSQUITO  
CONTROL

[ANTRIMM@CHATHAMCOUNTY.ORG](mailto:ANTRIMM@CHATHAMCOUNTY.ORG)

# Disclaimers

---

# Is it worth it?

---



Paper

Lost, damaged, time to enter in database,



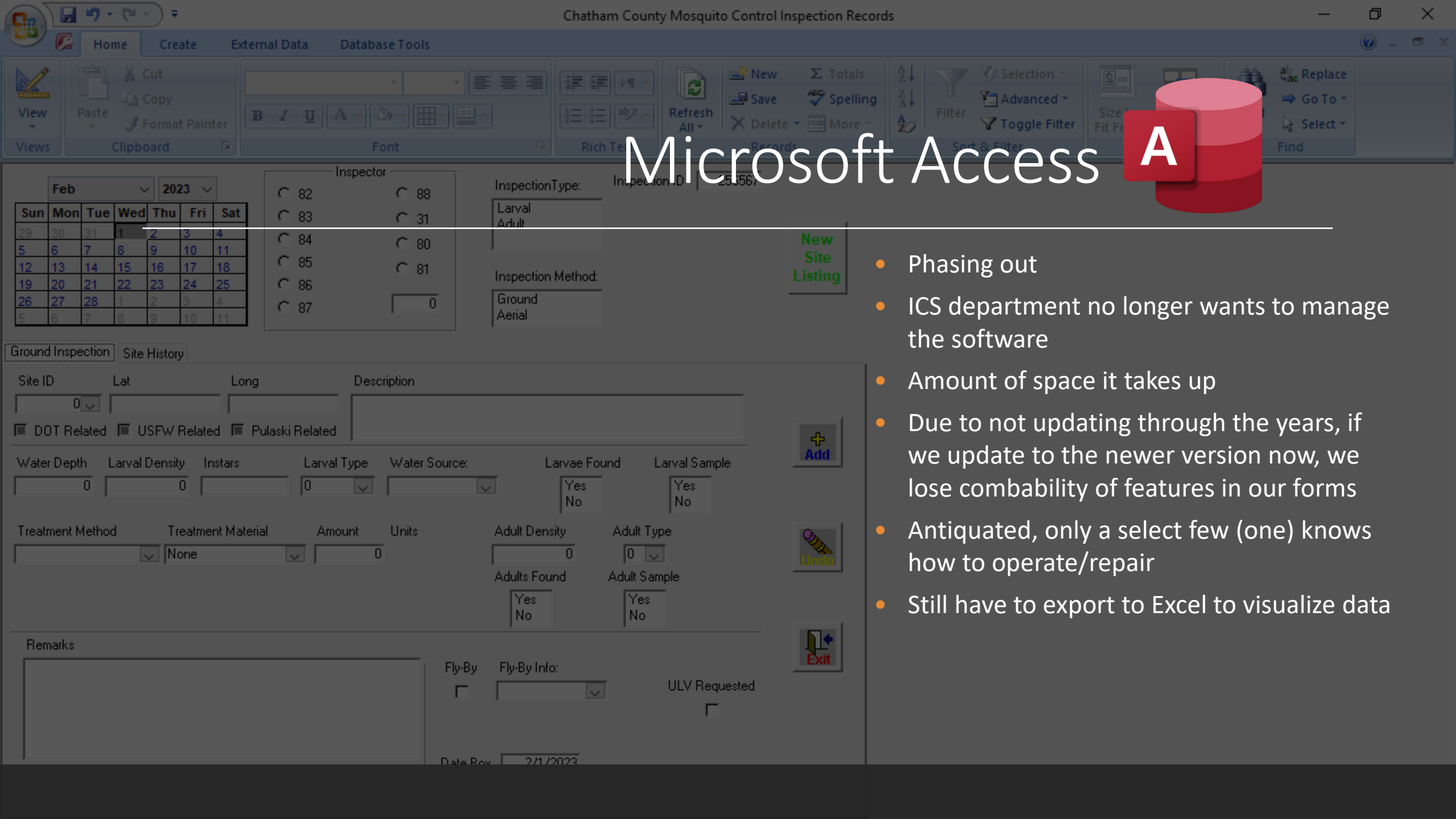
Display

Ability to see the data visually,  
transparency among staff



Cost

Startup and maintenance



# Microsoft Access



- Phasing out
- ICS department no longer wants to manage the software
- Amount of space it takes up
- Due to not updating through the years, if we update to the newer version now, we lose compatibility of features in our forms
- Antiquated, only a select few (one) knows how to operate/repair
- Still have to export to Excel to visualize data

# Paper Records

Inspector: \_\_\_\_\_

**Chatham County Mosquito Control  
Daily Sheets**

**2022**

Altosid Briquets      Altosid P35      VectoBac G      VectoLex FG      Cocobear Mosquito Larvicide Oil  
 AI: (S)-Methoprene    AI: (S)-Methoprene    AI: *Bacillus thuringiensis*    AI: *Bacillus sphaericus*    AI: Mineral Oil  
 EPA Reg No. 2724-421    EPA Reg No. 89459-95    EPA Reg No. 73049-10    EPA Reg No. 73049-10    EPA Reg No. 8329-93

Date & Time	Site /Inspection	Mosquito Larvae (Y/N)	Mosquito Adults (Y/N)	Water Depth	Larval Density	Instars	Treatment Area (ft <sup>2</sup> /acre)	Altosid Briquets	Altosid P35 (lbs)	VectoBac (lbs)	VectoLex (lbs)	Cocobear Oil (oz/gal)	Remarks

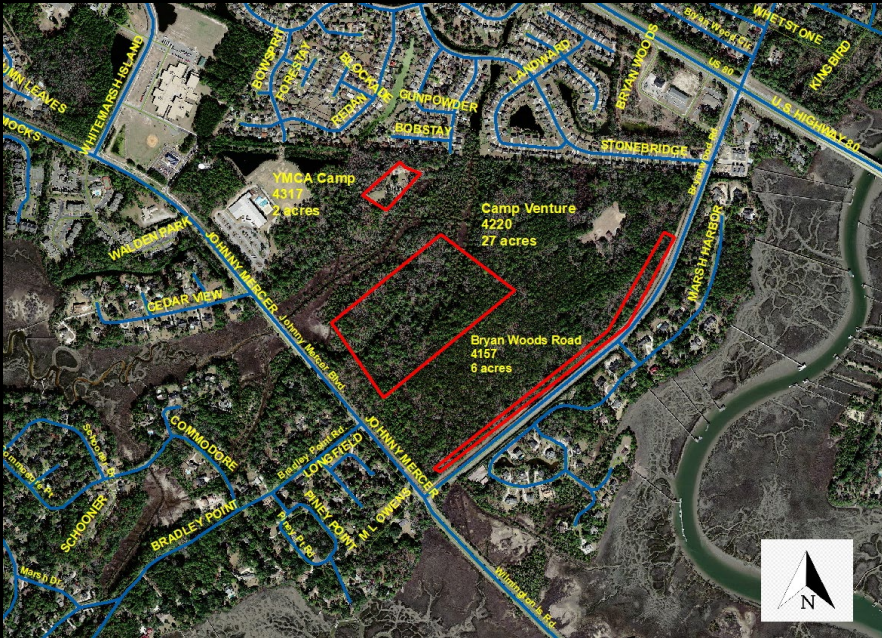
- Lost, damaged
- Dependent upon staff to enter immediately after being in the field
  - What if staff were unexpectedly off work?
  - An emergency?
- Time constraints
- Texting/calling in targets that needed to be larvicided
- Creating maps for targets upon return to the office

Column1	Column 2	Column 3	Column 4
City, State, Zip	City	State	Zip
First Last Name	First Name	Last Name	Middle?
Jan 1, 2023	January 1, 2023	01/01/2023	01/01
Street Avenue Road	St Ave Rd	St. Ave. Rd.	
Godley Street	Godley St	Godley St.	Godley
Aedes albopictus	Aedes albo or al	Ae. albo. or al.	Aedes / albopictus

# Data Standardization

Creating a table in ArcGIS is the backbone of any map

- How you store the data matters – field type, length, format
- Sharing data
- Clean, complete, & verified



# What we already had:

ARCGIS MAP DESKTOP

# What we needed: User Types (license levels)

---





# GIS Department

FOR CHATHAM COUNTY THIS  
GROUP FELL UNDER OUR  
ENGINEERING DEPARTMENT.

## What can you do with ArcGIS Enterprise?



### Make maps and apps

Use industry-leading software to create professional, device-friendly maps and apps.

- Visualize, analyze, and embed 2D and 3D data in web maps
- Create apps without writing code with app templates
- Build custom apps with the built-in Web AppBuilder



### Manage data

Support the data needs for your entire organization.

- Manage geospatial data at the database level
- Create a secure GIS content management system for your organization
- Easily scale up your data storage capacity
- Assess and report data quality
- Input data from your existing cloud stores



### Share and collaborate

Make your data, maps, apps, and tools accessible to any device, anywhere, at any time.

- Use layers, maps, and tools shared from ArcGIS Pro
- Make your content accessible to members of your organization
- Set up trusted sharing between portals
- Share maps and layers between ArcGIS Enterprise and ArcGIS Online



### Perform analysis

Distribute powerful server-based analytics and transform data to intelligence.

- Use standard analysis tools
- Perform raster analysis
- Perform big data analytics
- Connect to and analyze real-time data
- Author ArcGIS Notebooks
- Manage and script analytical workflows with the ArcGIS API for Python



### Secure and monitor your system

Provide secure access to your Web GIS and protect your deployment from cyber threats.

- Discover the ArcGIS Enterprise security model
- Configure encryption
- Authenticate users and secure access to your system
- Use ArcGIS Monitor to audit the health of your system



### Architect your deployment

Plan your deployment and create a reliable and resilient system.

- Choose a pattern for your base deployment
- Scale your base deployment
- Expand beyond your base deployment



### Automate your setup

Streamline and standardize your deployment setup and system upgrades.

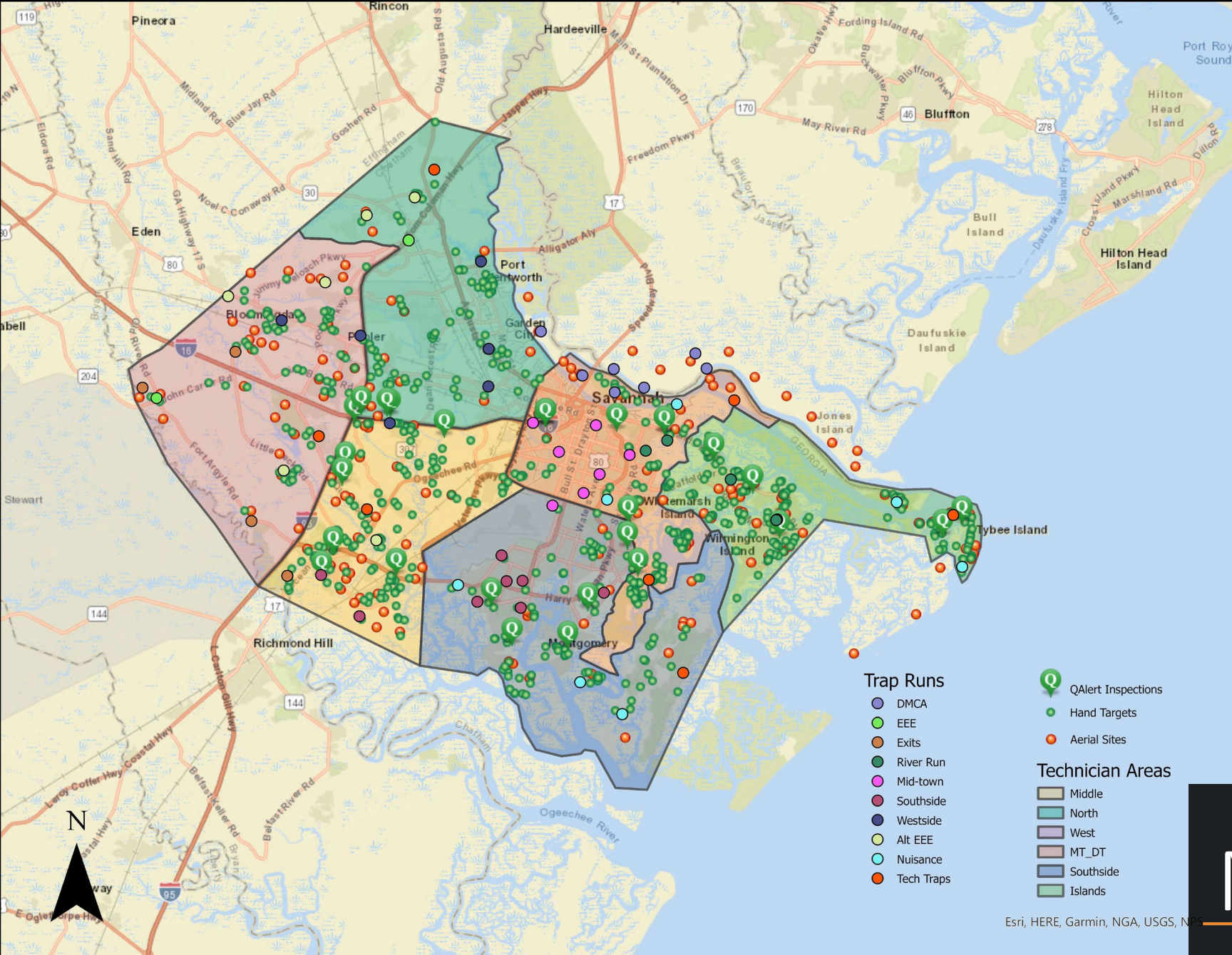
- Create a single machine deployment with ArcGIS Enterprise Builder
- Use Chef to automate the setup of custom deployments



### Deploy in the cloud

Use the cloud to host your deployment, store data, and run analysis.

- Deploy quickly and easily in the cloud
- Deploy ArcGIS Enterprise on Amazon Web Services (AWS)
- Deploy ArcGIS Enterprise on Microsoft Azure



# Moscon Portal

Esri, HERE, Garmin, NGA, USGS, N

# Survey123

---

- Quick/efficient
- Out in the field
- Smart phones (county provides each employee with a phone for official business)
- Visualize data on demand
- No need to move to Excel



# Survey123

---

- Customer/residential inspections
- County has an internet-based system for residents to input requests
- No way to record pesticide usage, other than in a text box



# Survey123

---

- Different style – office based survey
- Trap counts were only recorded in Access, but they were always exported to Excel to see the trends
- This information is recorded in just a table currently, eventually it will be visually displayed on the portal
- Quick turn around to those in the office and out in the field



Things to  
come:

- DIRECT TARGET DROP TO AVIATION UNIT
- TREND MAPPING
- TRUCK AND AERIAL SPRAY MISSION LAYERS
- TRANSPARENCY ACROSS THE ENTIRE DEPARTMENT



Amy Trimm, MPH  
Chatham County Mosquito Control  
antrimm@chathamcounty.org  
912-790-2546