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# GIS/VALUATION

TECHNOLOGIES CONFERENCE

2024

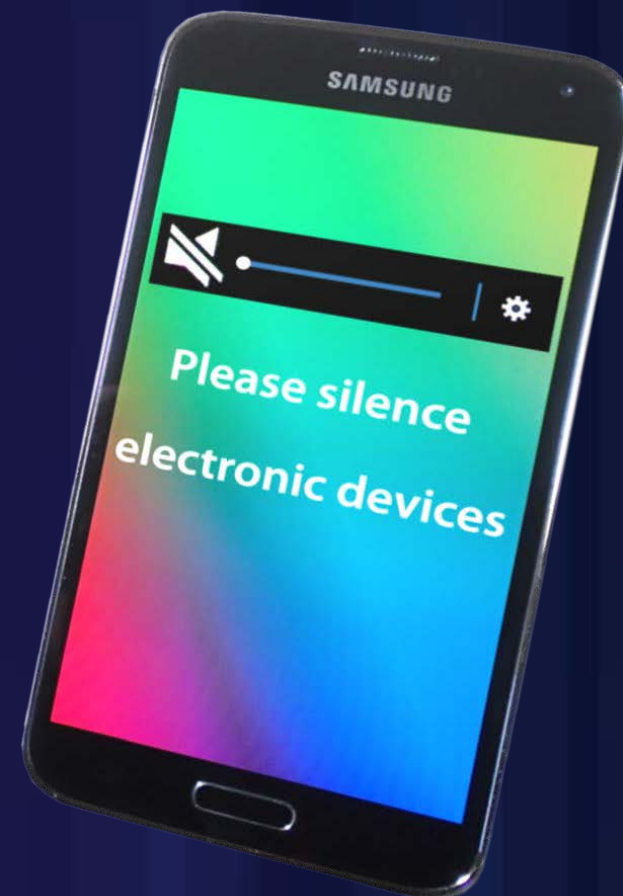


## Continuing Education (CE) Credit

Recertification Credit forms for CE credit can be collected from the registration desk on Thursday

## Housekeeping

- The conference proceedings will be available approximately 8 weeks after the conference
- Please silence your electronic devices
- Attendance at this conference counts toward GIS Professional (GISP) Certification and Renewal





# Unlocking Efficiency and Excellence: Augusta, Georgia's Journey to Modernize and Streamline Data Collection and Appraisal Management

*Scott Rountree, Chief Appraiser, Augusta-Richmond Board of Assessors, Augusta, GA*  
*Daniel Anderson, VP, Practice Leader, Data Cloud Solutions, a Woolpert Company*



**GIS/VALUATION** TECHNOLOGIES CONFERENCE





# Augusta – Richmond County

- Garden City of the South
- Population – 205,000+
- State capital of Georgia from 1785 until 1795
- Birthplace of “Godfather of Soul” James Brown
- Boyhood home of President Woodrow Wilson
- Home of Augusta National Golf Club





# Board of Assessors



Chief Appraiser: Scott Rountree

## Mission Statement

The mission of the Richmond County Board of Assessor's Office is to provide and defend uniform fair market values on all tangible properties in Richmond County; to generate an equitable tax digest for the State of Georgia, all levying authorities, and the Tax Commissioner; and to serve as a resource for the citizens of Richmond County.

- Nearly 90,000 parcels
- Assessments reviewed annually
- Required by the state to physically review every property in the county at least every 3 years
- # of office employees: 39
- # of field appraisers: 15

# The Problem

- The county's paper filing system was cumbersome and required too many work hours to maintain.
- The process of collecting field data on paper, and then entering that data in the office resulted in duplicate data entry which was not only redundant, but also lent itself to an increase in data errors.
- Additionally, the county did not have the necessary tools or processes in place to quickly analyze current and pending work assignments
- Requirement to physically review every property in the county at least every 3 years seemed unattainable



# The Vision

- The vision was to improve the overall efficiency of the office by implementing a mobile-based system fully integrated with the county's Computer Assisted Mass Appraisal (CAMA) system.
- Started with the mindset of "begin with the end in mind" and identified key objectives that would serve as mileposts along the journey.
  - Ability to manage & track workflow
  - Reduce the use of paper
  - Eliminate duplicate data entry
  - Improve data quality
  - Save time and money
  - Portable – changing CAMA systems





# Making the Switch to Mobile

In 2018, Augusta-Richmond County began surveying the marketplace to identify a mobile-based solution that would help them achieve their project objectives.

The county required an intuitive and fully configurable, commercial off the shelf (COTS) solution that would import/update data directly into the CAMA

The desired features included:

- optimized travel routing
- easy workflow assignments
- productivity tracking
- Sketching
- instant photo association
- real-time quality control with detailed auditing





# Non-Cloud

vs.

# Cloud



## Check-In / Check-Out Systems

- Freezes data
- Limited access to data
- Access to more data than needed
- High risk of data loss
- Requires device to be in the office



## “Paperless”

- PDF mark-up (still associating photos and duplicate data entry)



## Shifting the burden to IT



## Cloud-Hosted Solution

- Data is never frozen
- Access to more than assigned parcels
- Field optimized = access to only what you need
- No risk of data loss
- No requirement for device to be in office



## Fully CAMA Integrated

- Fully CAMA integrated mobile solution = no duplicate data entry



## Limited IT resources required

# The Solution

Selected a cloud-based solution that would help us meet the key objectives and included all the desired features

## Key Objectives

- Ability to manage & track workflow
- Reduce the use of paper
- Eliminate duplicate data entry
- Improve data quality
- Save time and money
- Portable – changing CAMA systems

## Desired Features

- Optimized travel routing
- Easy workflow assignments
- Productivity tracking
- Sketching
- Instant photo association
- real-time quality control with detailed auditing

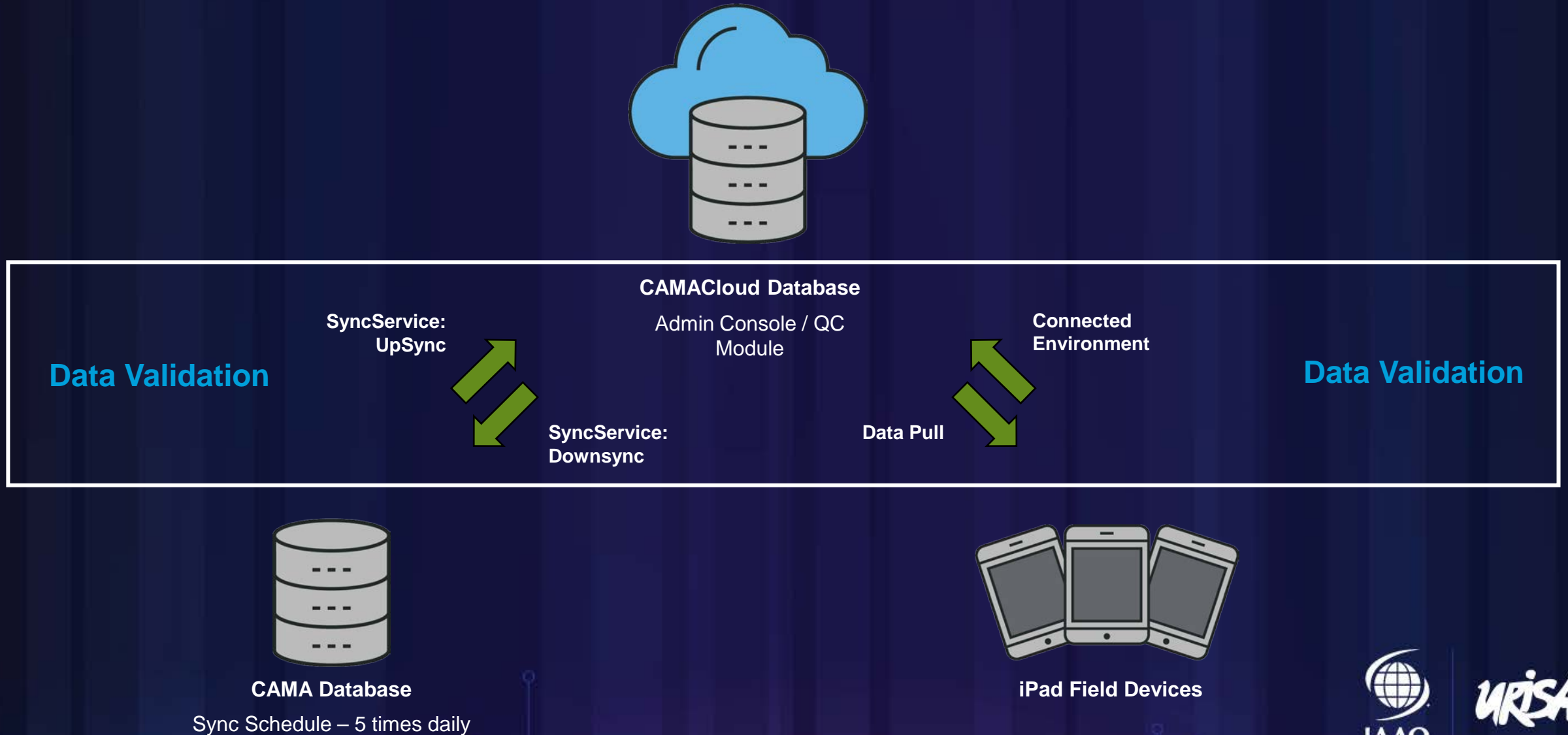


*We had a high degree of confidence knowing the solution was created by an experienced appraiser.*

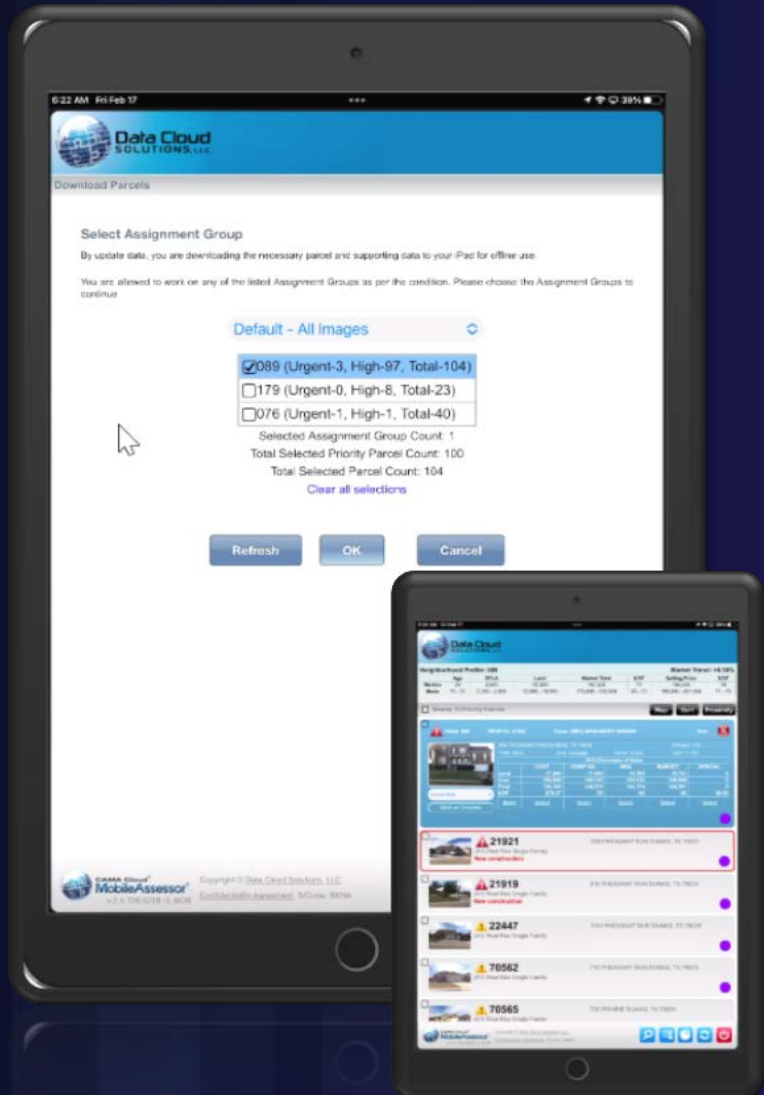




# Mobile Architecture & Data Flow



# Work Assignments



- Parcels segmented into 850 assignment groups
- Supervisors bulk prioritize parcels to be worked
- Appraiser access the property accounts' "work packs"/neighborhood/groups via a drop-down menu on their iPad
- Cloud-based – process does not require anyone to be in the office



# Work Assignments

- Assigned work is on the iPad
- Parcels automatically sorted based on most optimized travel routes
- Data is organized to be conducive to field work with multiple data collection cards per property type and digital PRCs
- Dramatically cut down on work related to routing, as the X/Y Coordinates schedules the correct route and identifies correct parcel within the system.
- Instant photo association – take a photo and automatically goes to CAMA.
- Various maps (aerials, parcel boundaries, work status)
- Mark as complete step to move parcel through process of going to CAMA, with Auto QC, and QC report is run for appraisal staff for the next day's work flow, related to these inspections, and whether additional edits are necessary.



# Quality Control

- All edits made in mobile are synchronized to the office-based QC module (in-real time when connected to cellular service – otherwise data is cached and syncs when connected)
- All edits are highlighted in QC making it fast and easy to review
- Ability to approve, reassign with note, and reject if needed
- Approved data automatically syncs to CAMA system multiple time per day
- Very detailed auditing
- Helps to confirm staff are efficiently working assignments

Client Data Setup   Appraisal Task Control   **Quality Control**   Field Tracking   Reports

Save Changes   Close   Set As Reviewed   Reject   Previous Parcel < 140 of 691 > Next Parcel

4418 6 AVENUE  
Property ID: 269257  
NOT SET   APPROVE   Soft Reject

Selected Estimate: -- Not Selected --

Dashboard   **Parcel Data**   Digital PRC   GIS Map View   Audit Trail   Parcel Photos

**Land & Building Information**

Parcel Information  
Lot & Property Factors  
Exemptions  
**Land & Building Information**  
Permits  
Value Summary  
**Notes**  
Visit History  
GIS Links  
Condo Links

Showing record 1 of 1

Land & Building Information > Land (1), Residential (1), OB (0), Address (1)

Building Number : 1

Bldg Name :

Land Class (CAUTION!) : R - Residential

Prim Bldg Use (CAUTION!) : \* A10R - One/Two/Three Family Resid...

Structure Type : \* 10 - Row

Model : \* 02 - Res 2 to 3

Bldg Frontage : 20

Bldg Depth : 48

Bldg Perimeter : 136

BIS Code :

Bldg Status :

Residential Units : 3

Year Alt Code 1 :

Year Issued 1 :

Commercial Units : 0

Owner Occupied SQF : 0

Alteration Complete 1 :

Year Alt Code 2 :

Total Stories in all sections : 3

Year Issued 2 :

Alteration Complete 2 :

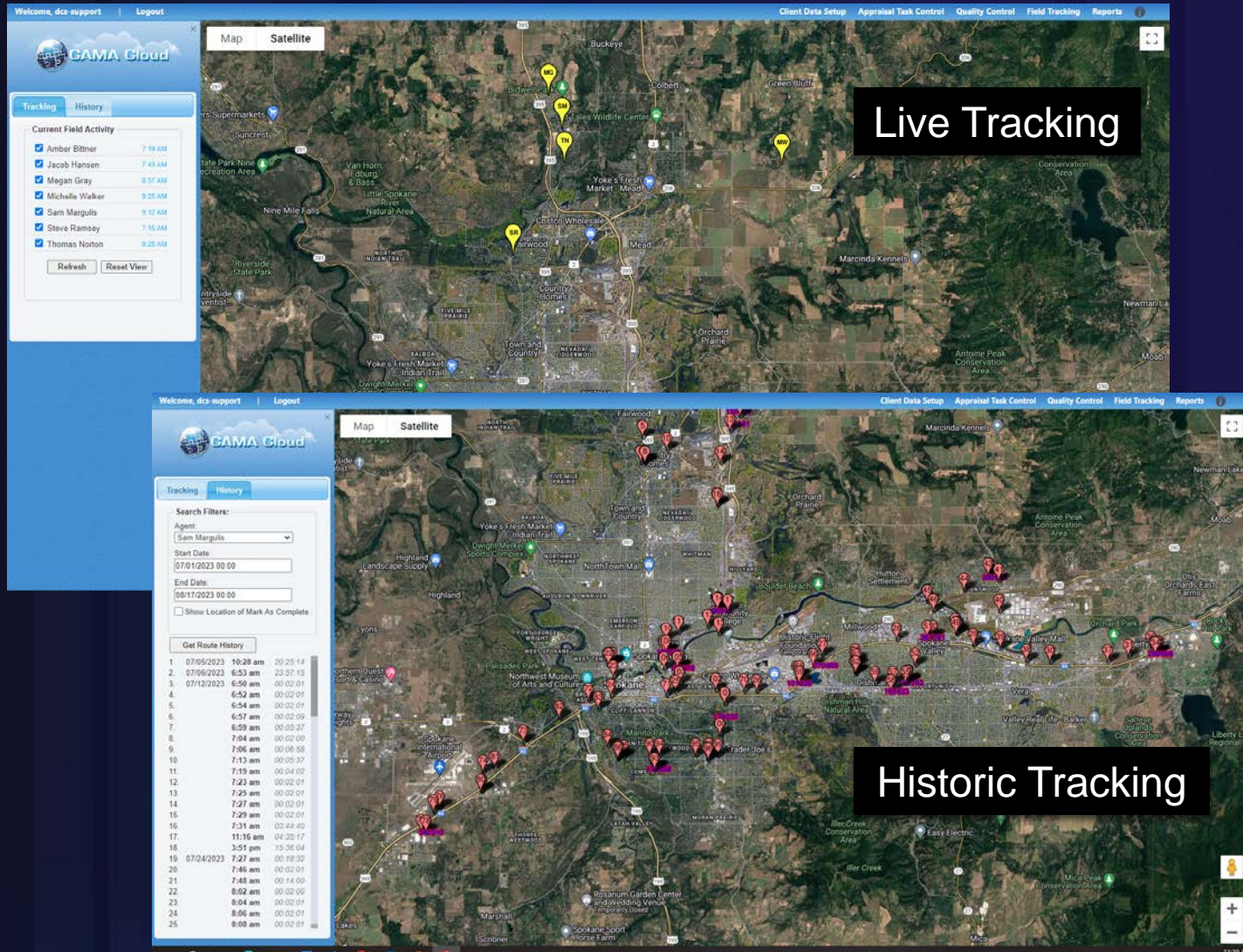
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Click on the appropriate value to select the approved one. You may also select/enter a new value if required.  
Initial Value: [blank]  
Date Changed by New Value  
10/20/2021 CARLA PHILLIP R - Residential

All rights reserved.



# Field Location Tracking



## Live and historical field location tracking

- Safety benefits
- Communication with owners (verify it's our people on the property)
- Way to confirm to homeowners that we have visited the property





## Benefits/Stats

- Little to no paper permit reviews!
- User friendly interface with all the information we need at our fingertips
- Support from our vendor is extremely responsive and helpful in resolving issues and providing solutions
- This visibility allows managers to monitor employee performance and enables supervisors to take corrective action when necessary to ensure quality standards are met.
- Seen a sharp increase in the amount of completed assignments during their annual field work cycle. By our second year of use for preparing our digest, we were able to review nearly 22,000 parcels.
- Additional time for other data quality projects like sales analysis.
- Fuel Usage – overall reduction over 12% due to optimized routing from one parcel to next during the annual discovery “permitting” period
- Calculated / Measurable Return on Investment (ROI) = 216 to 1

“It's definitely allowed a recalibration of what our expectations are for appraisers to be doing in the office and in the field



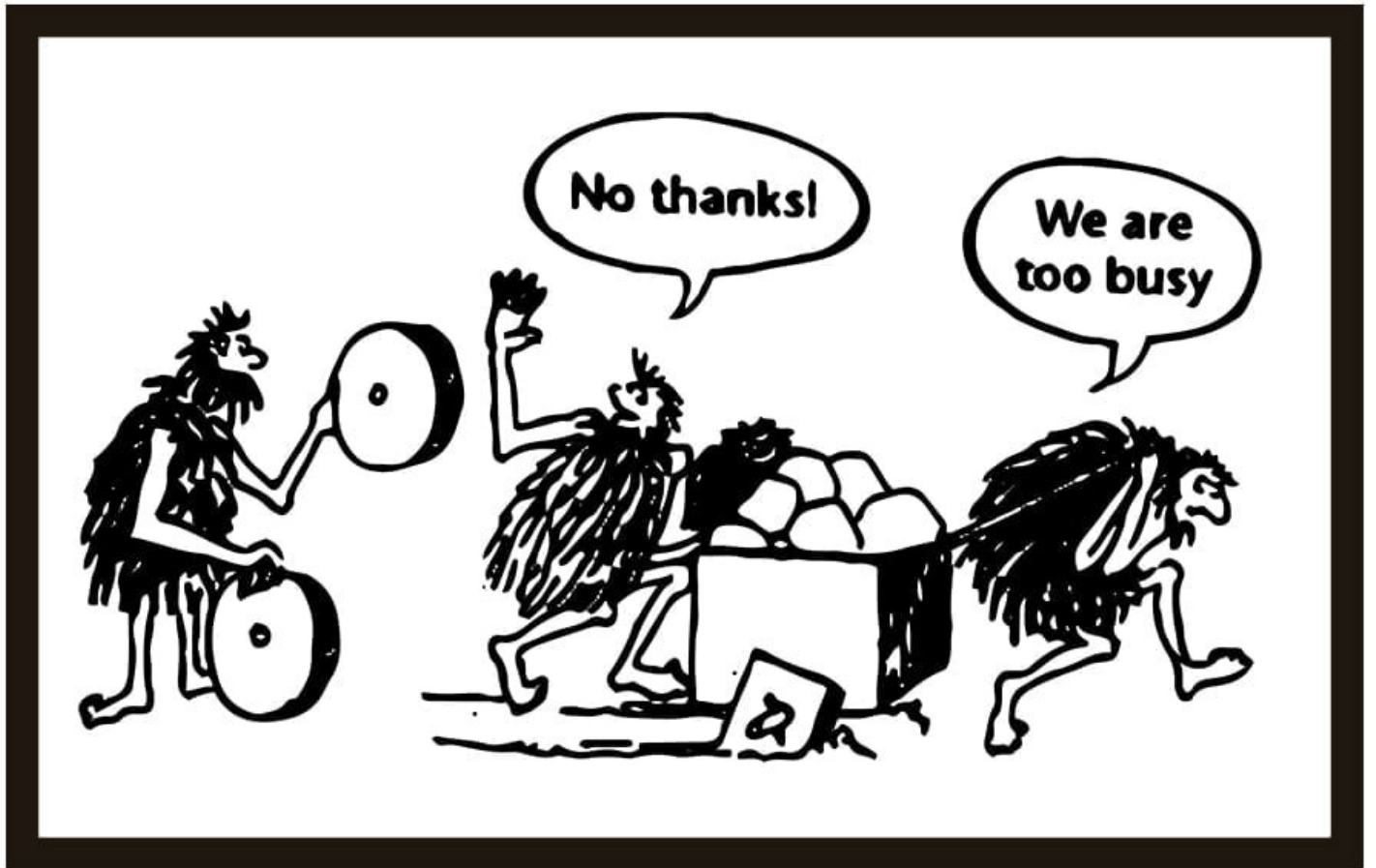


# A Bit of Advice

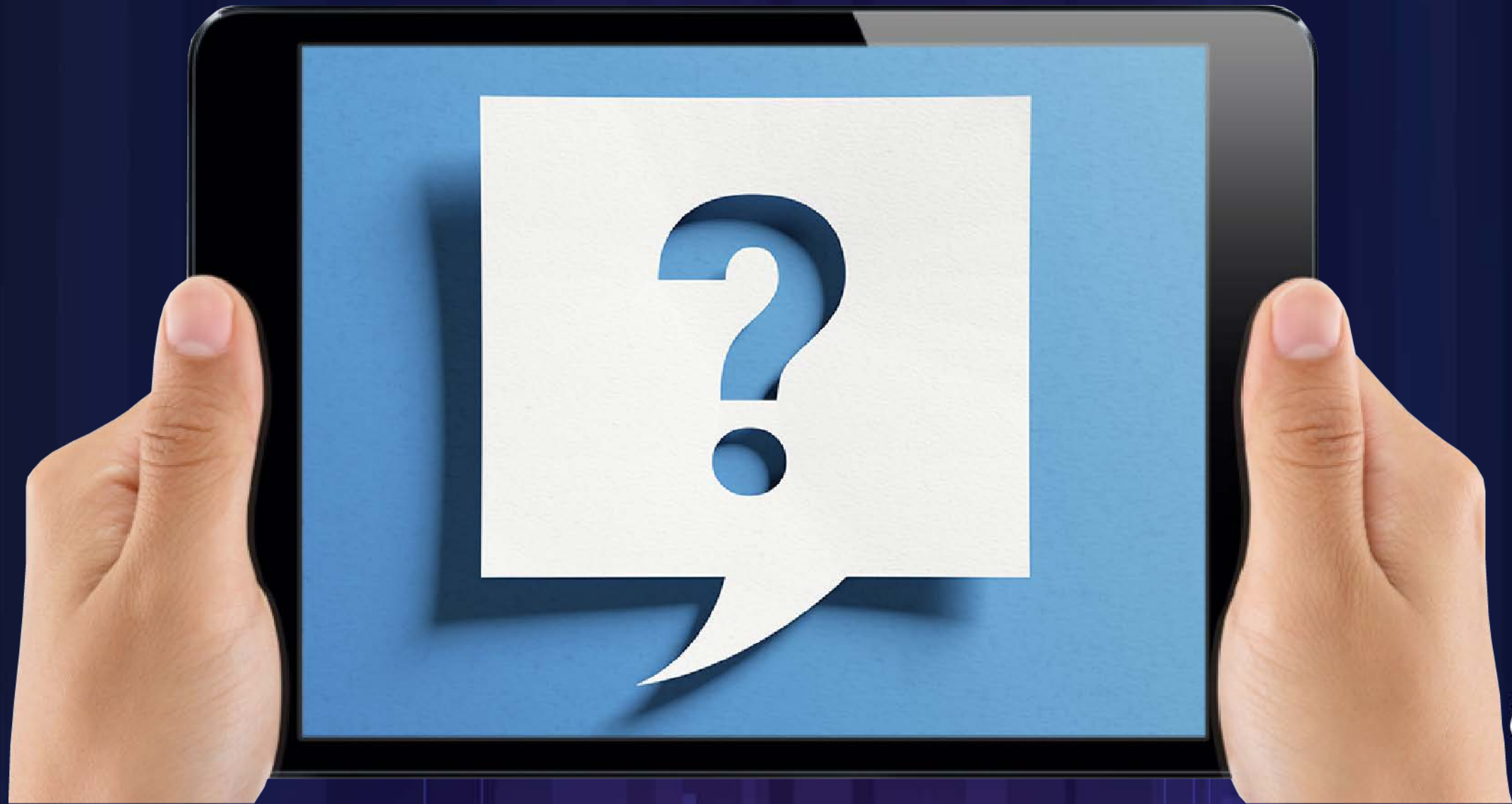
- Ask for references to learn how other counties benefit from the solutions – we talked to others including other integrated County Offices.
- Look past “mobile” - Take the opportunity to improve internal processes.
- Get IT involved early in the process, so they do not become an unexpected roadblock later in the process.
- Create a TEAM Atmosphere between IT, CAMACloud Technicians (+ *other vendors*) and internal front-line managers to address any issues and establish clear objectives with everybody on the TEAM.
- Get appraisal team involved early in the process to build excitement and handle any possible resistance to change.
- Choose a cloud-based option that does not require coming back to the office to “check-in” work.
- Seamless integration is an important factor as it completely eliminates duplicate data entry.



**Don't be these  
guys!**



# Questions?





# GIS-Pro 2024

October 7-10, 2024 • Portland, Maine



