Smarter Inspections, Safer Network with ArcGIS Online

- Gibson County Utility District -

GEOJobe GIS CONSULTING

Agenda

- Introduction
- Breakdown Workflows to Identify Problems
- Assess Products
- Implement Solutions
- Challenges & Lessons Learned
- Q & A

Introduction

Focus = Identify & Solve Problems

- *Preventative Maintenance Workflows*
  - *Valve Inspections*
  - *Regulator Station Inspections*
  - *Leak Survey*
- *Relevant Across Many Industries*
  - *Utilities (Gas, Water, Electric, etc.)*
  - *Public Works*
  - *Etc…*
- *Platform First Mentality*
  - *ArcGIS Online + ArcGIS Server (hybrid approach)*
  - *Collector for ArcGIS*
  - *Operations Dashboard for ArcGIS*

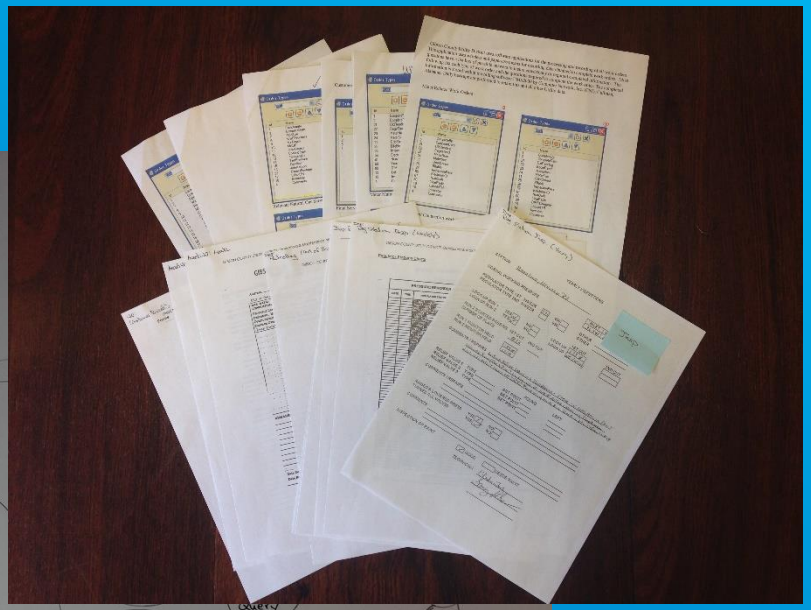
Utility Inspections

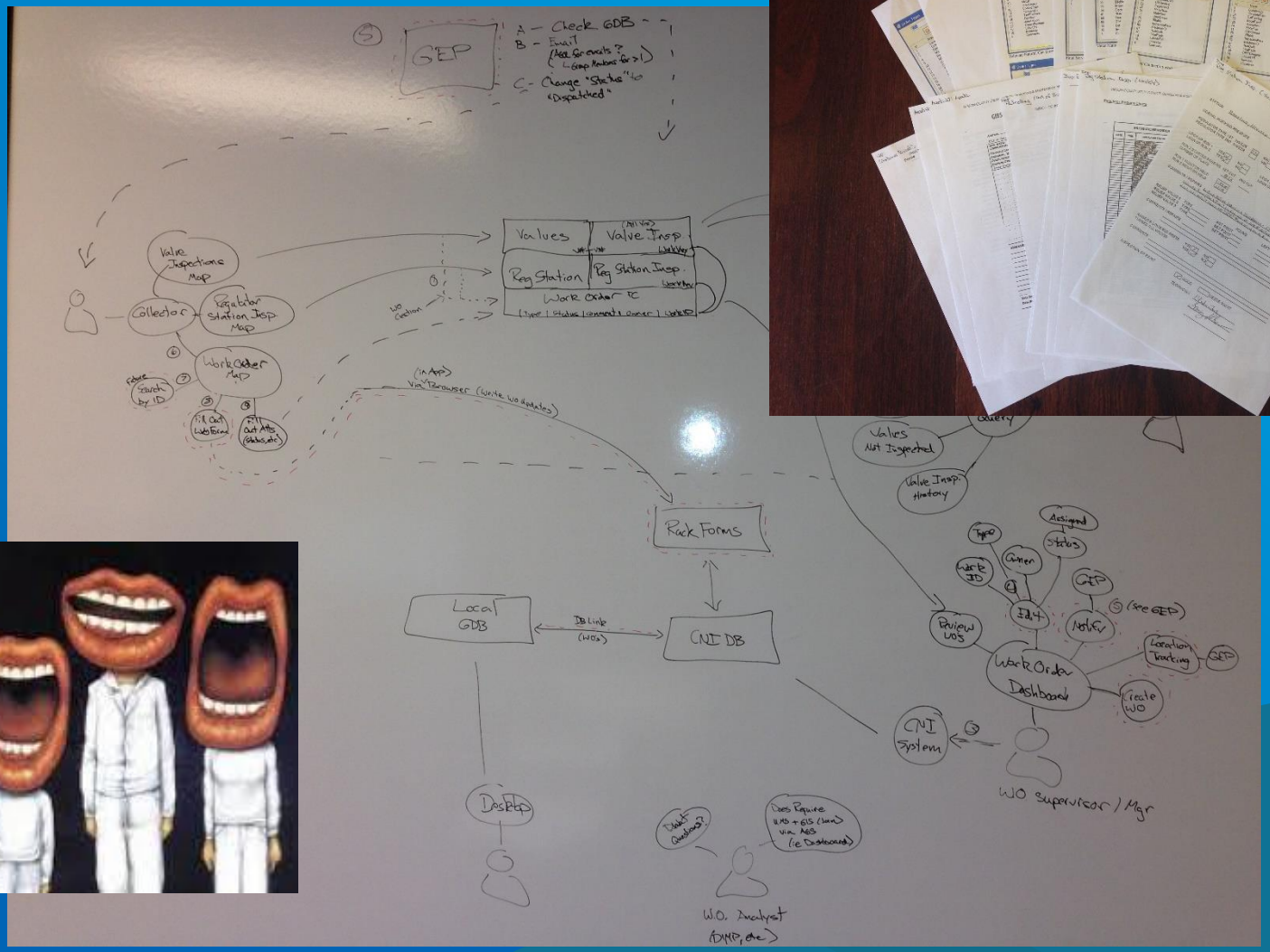
The Context…

- *Why Preventative Maintenance (Inspections)*
  - *Regulatory Compliance*
  - *Ensure System Integrity*
  - *Minimize Risk – Safety (Clients, Operators, etc.)*
  - *Maximize Efficiency (Minimize gas loss, prevent large repairs, etc.)*
- *Inspection Workflows*
  - *Valve Inspections, Regulator Station Inspections, Leak Survey, Gas Sniff Odorization, Corrosion, Rectifier, etc.*
  - *A Lot of: Work, Documentation, Time, Money, etc.*
- *Big Opportunities*
  - *Increase Efficiency & Effectiveness*
  - *Save Money*
  - *Increase Safety!!!*

Breakdown Workflows

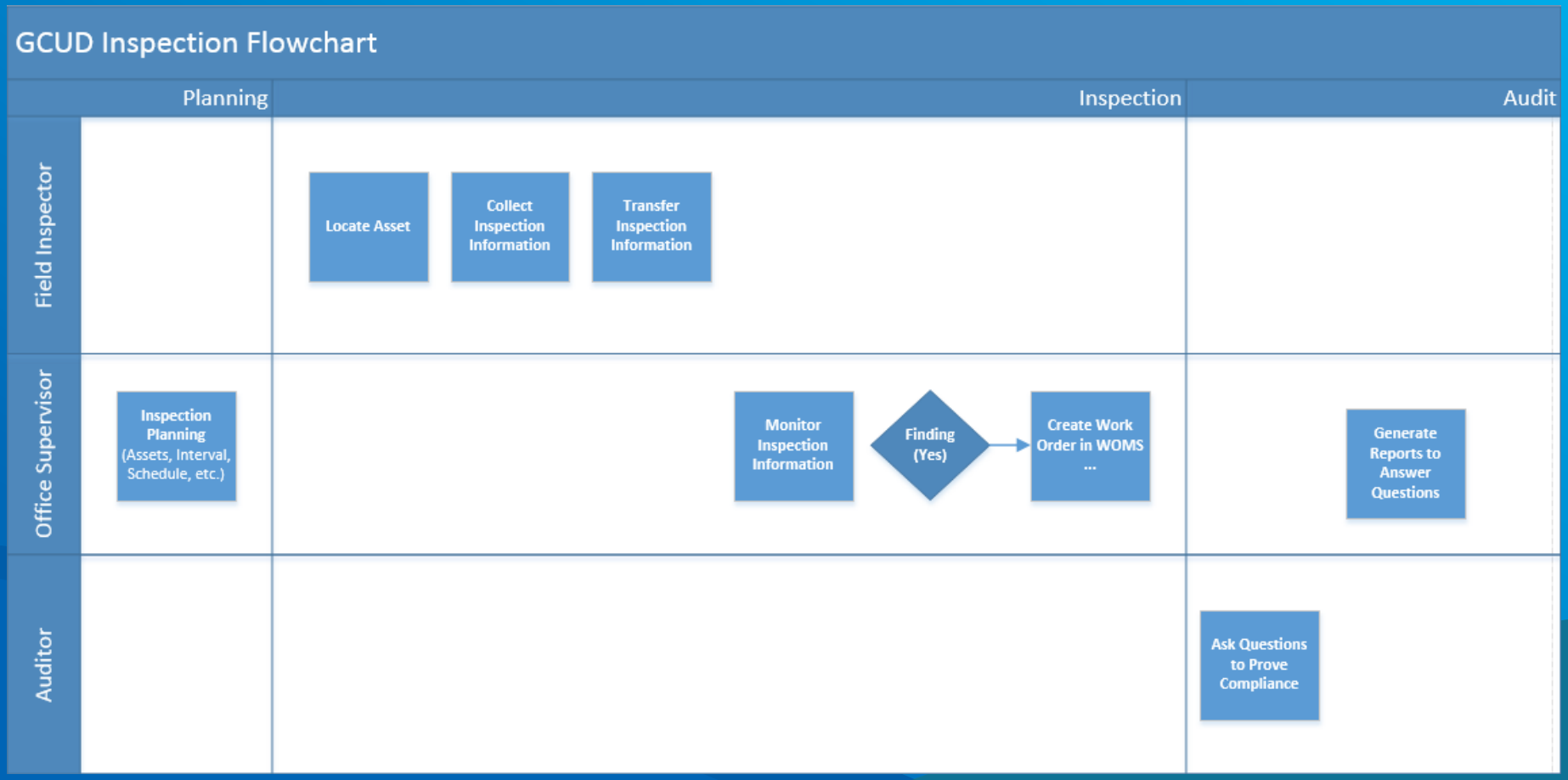
Talk, Draw, Document…





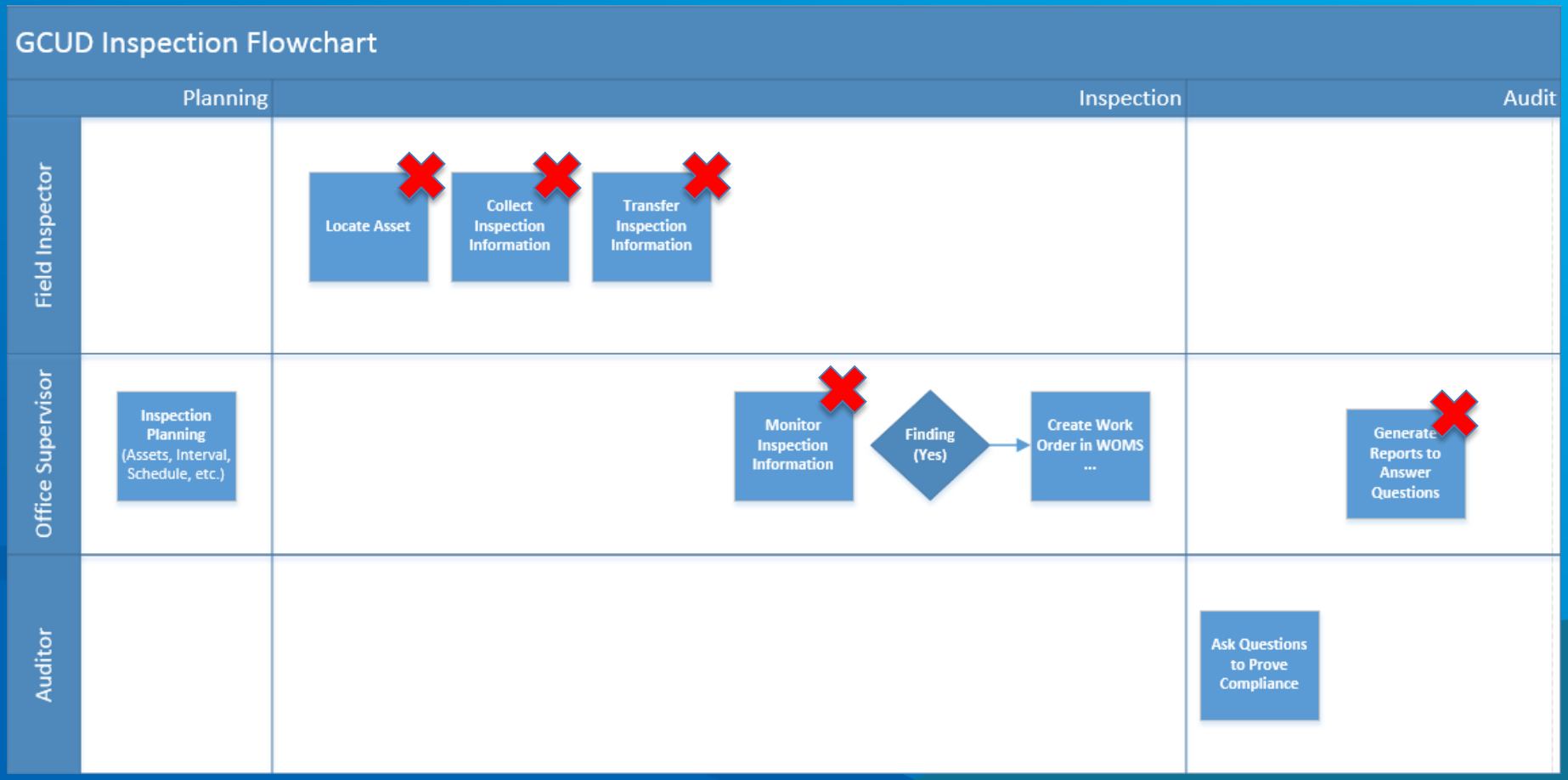
Breakdown Workflows

Common Pattern



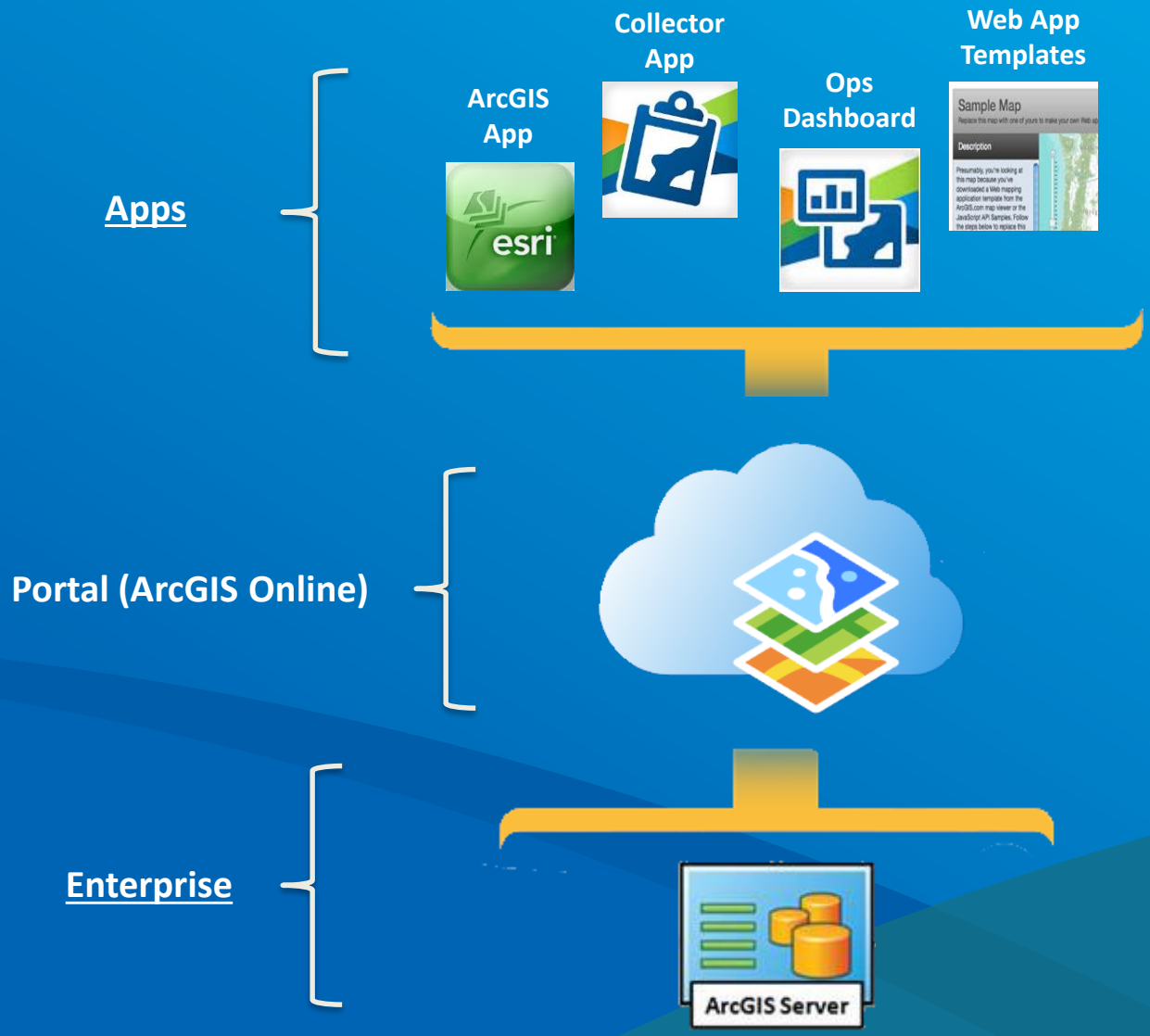
Breakdown Workflows

Identify Problems…



Assess Products

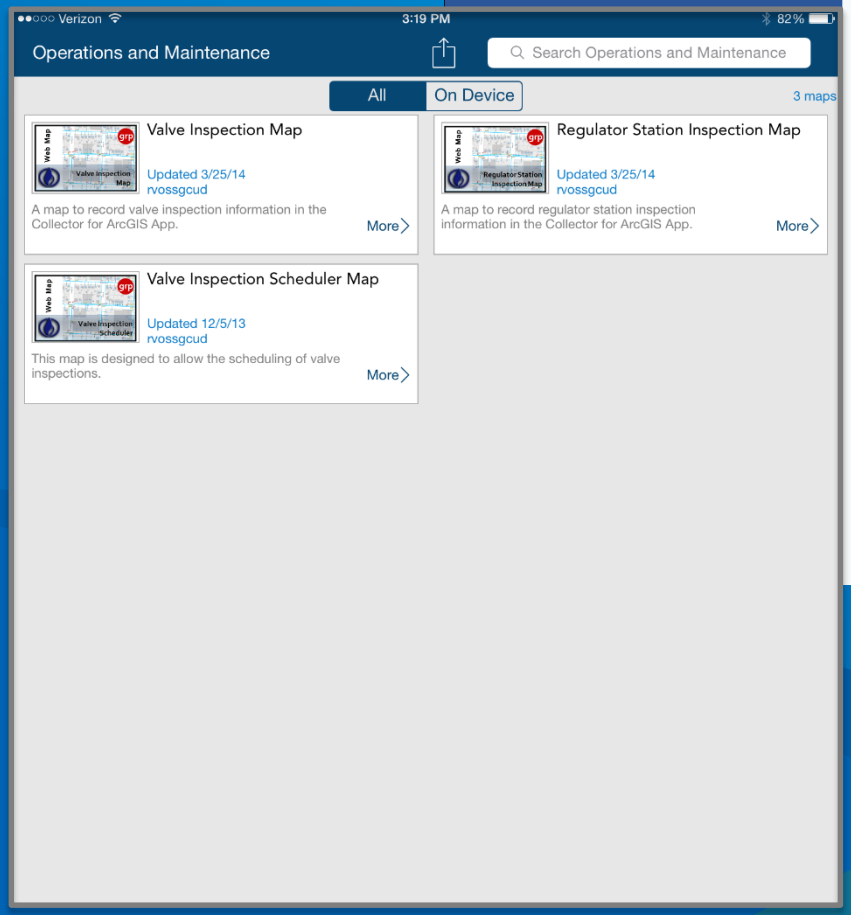
Platform First Mentality

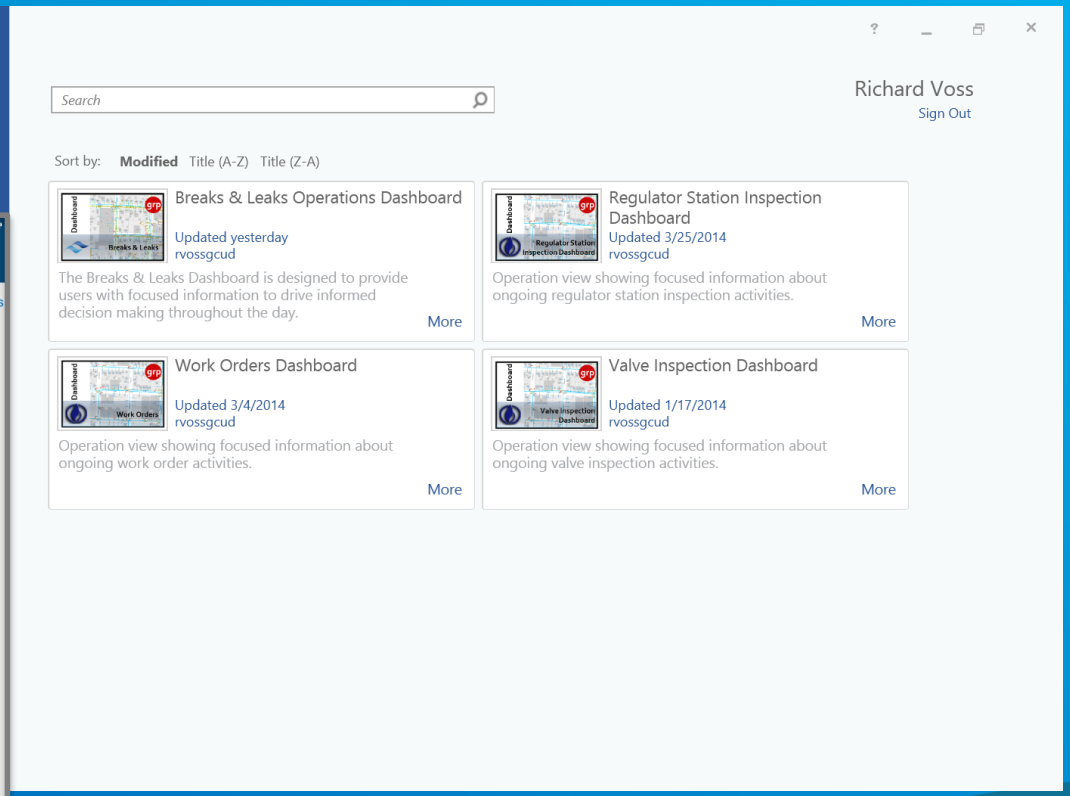


Assess Products

Platform First Mentality

Collector for ArcGIS App

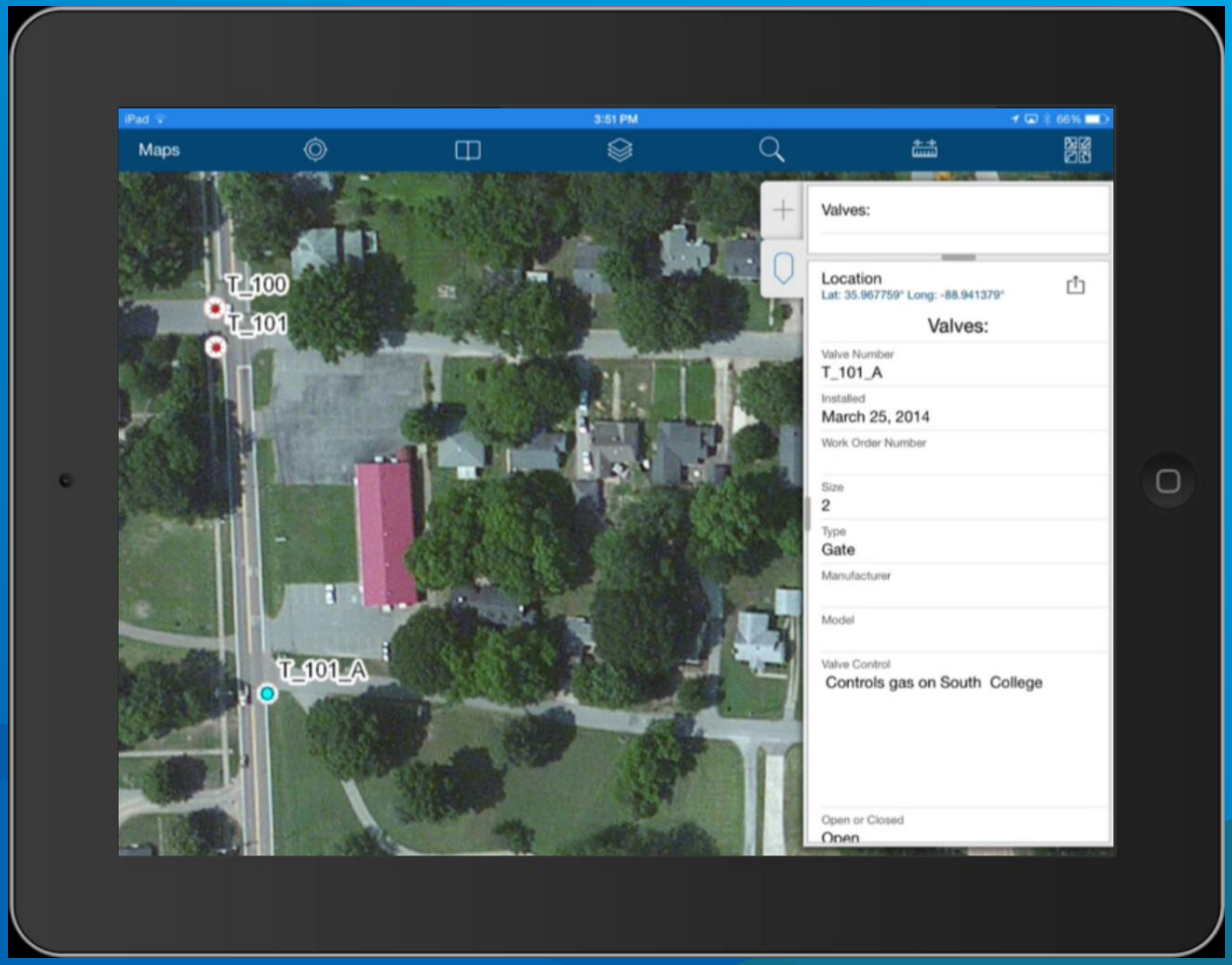




Operations Dashboard for ArcGIS

Implement Solutions

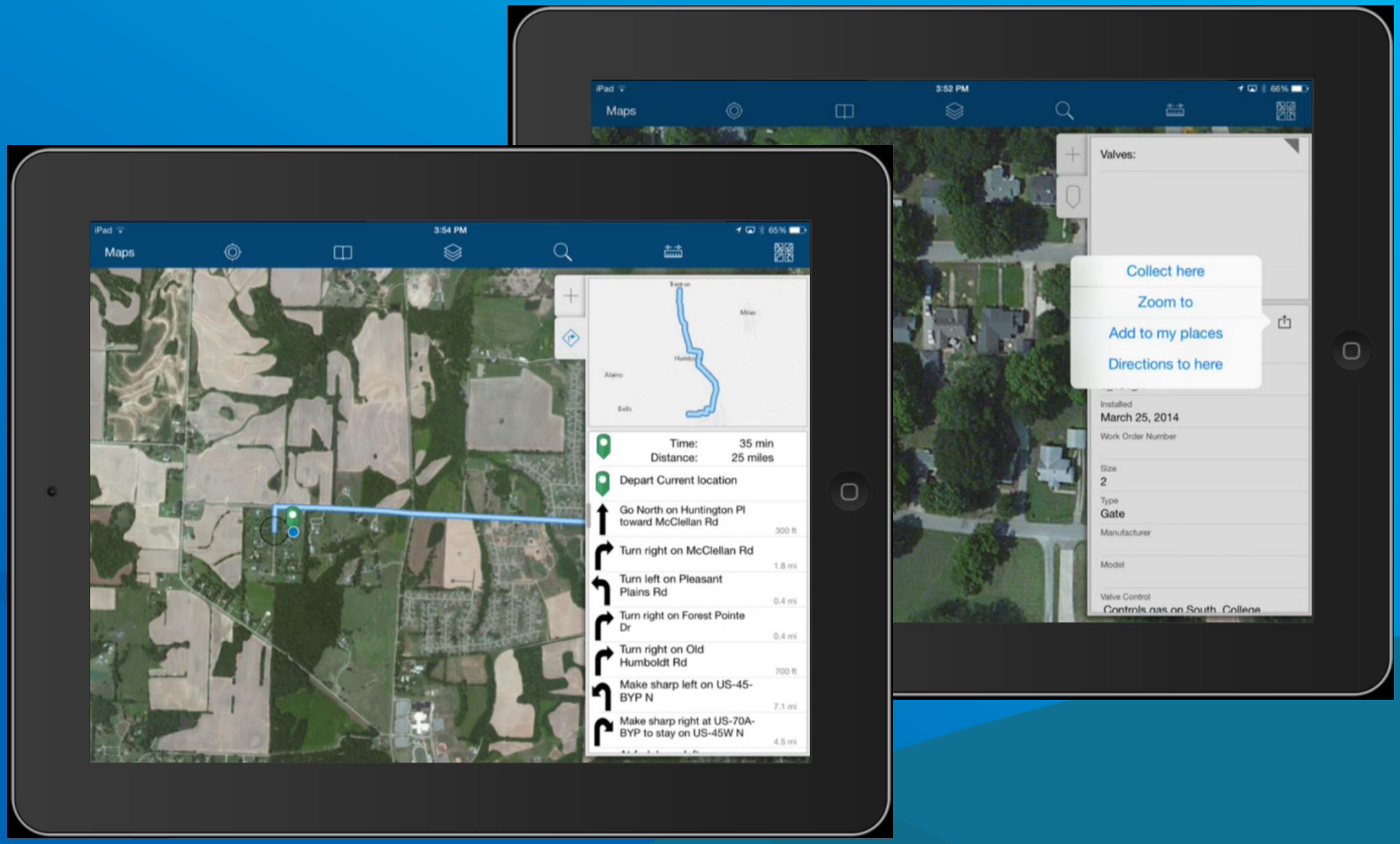
Locate Assets



Current GPS Location, Asset Locations, Asset Attributes…

Implement Solutions

Locate Assets



Turn by Turn Navigation… To Assets

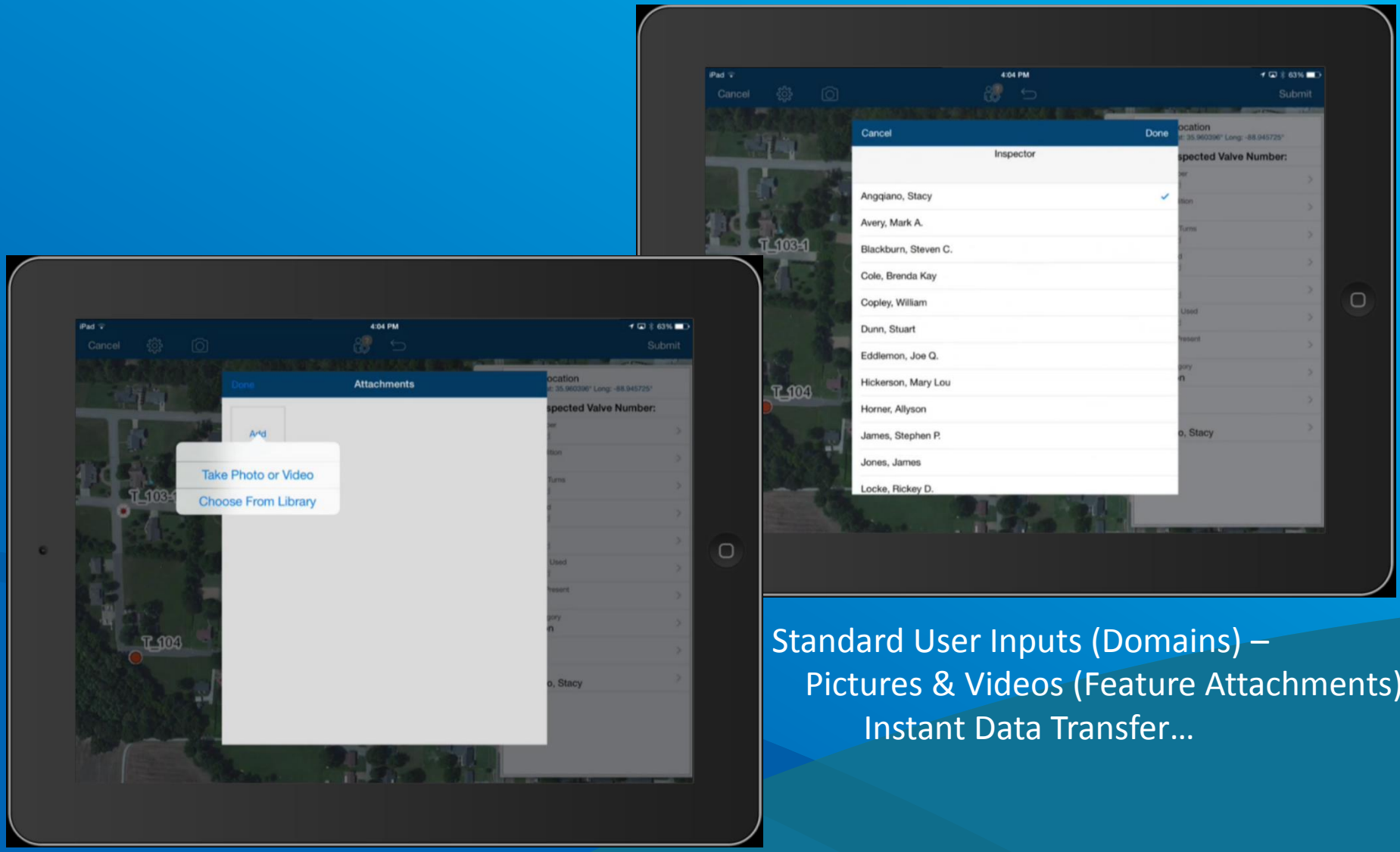
Implement Solutions

Collect & Transfer Inspection Information

Focused Editing Capabilities –
Paper Form = Attributes…

Implement Solutions

Collect & Transfer Inspection Information



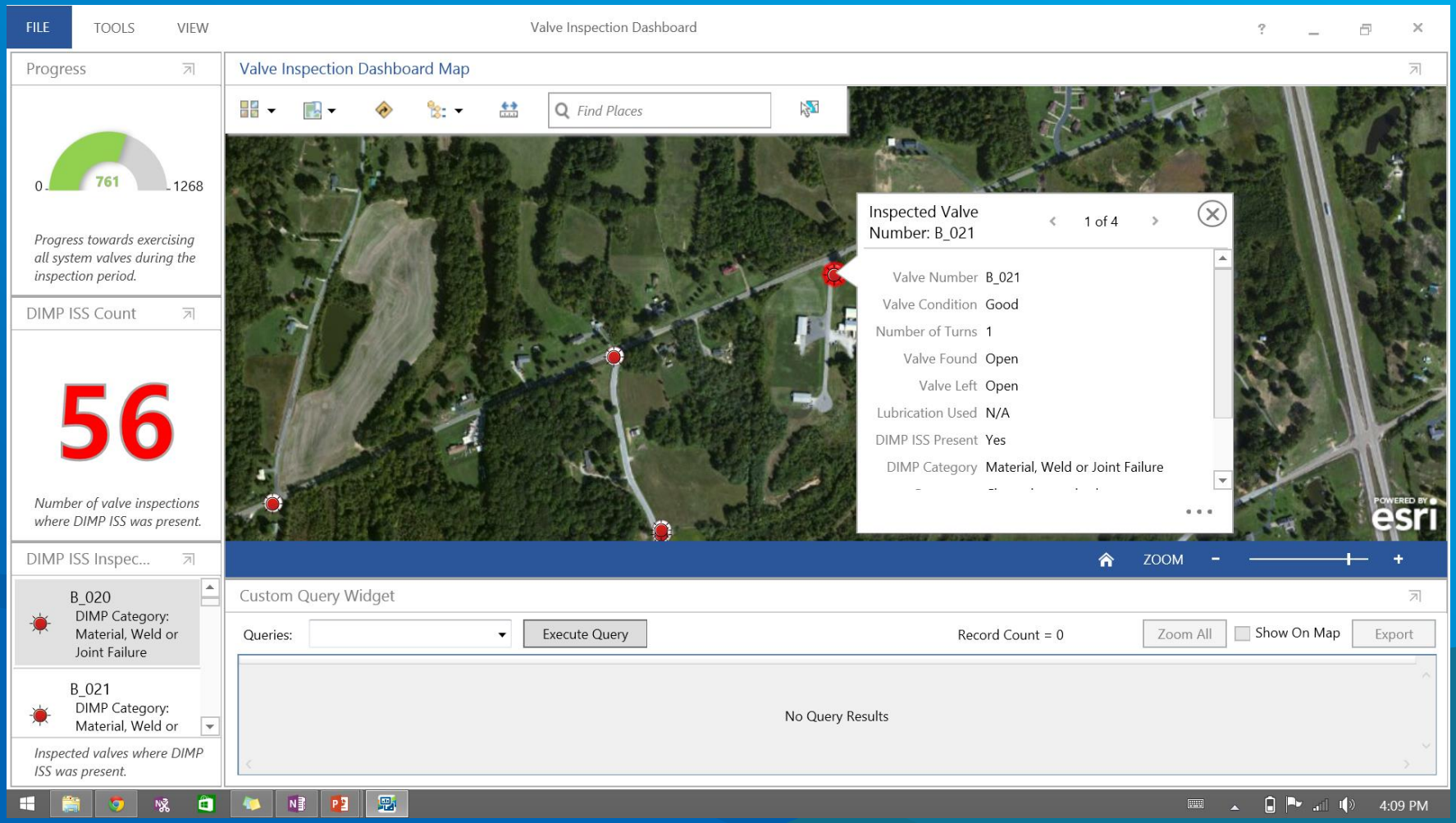
Standard User Inputs (Domains) –

Pictures & Videos (Feature Attachments)

Instant Data Transfer…

Implement Solutions

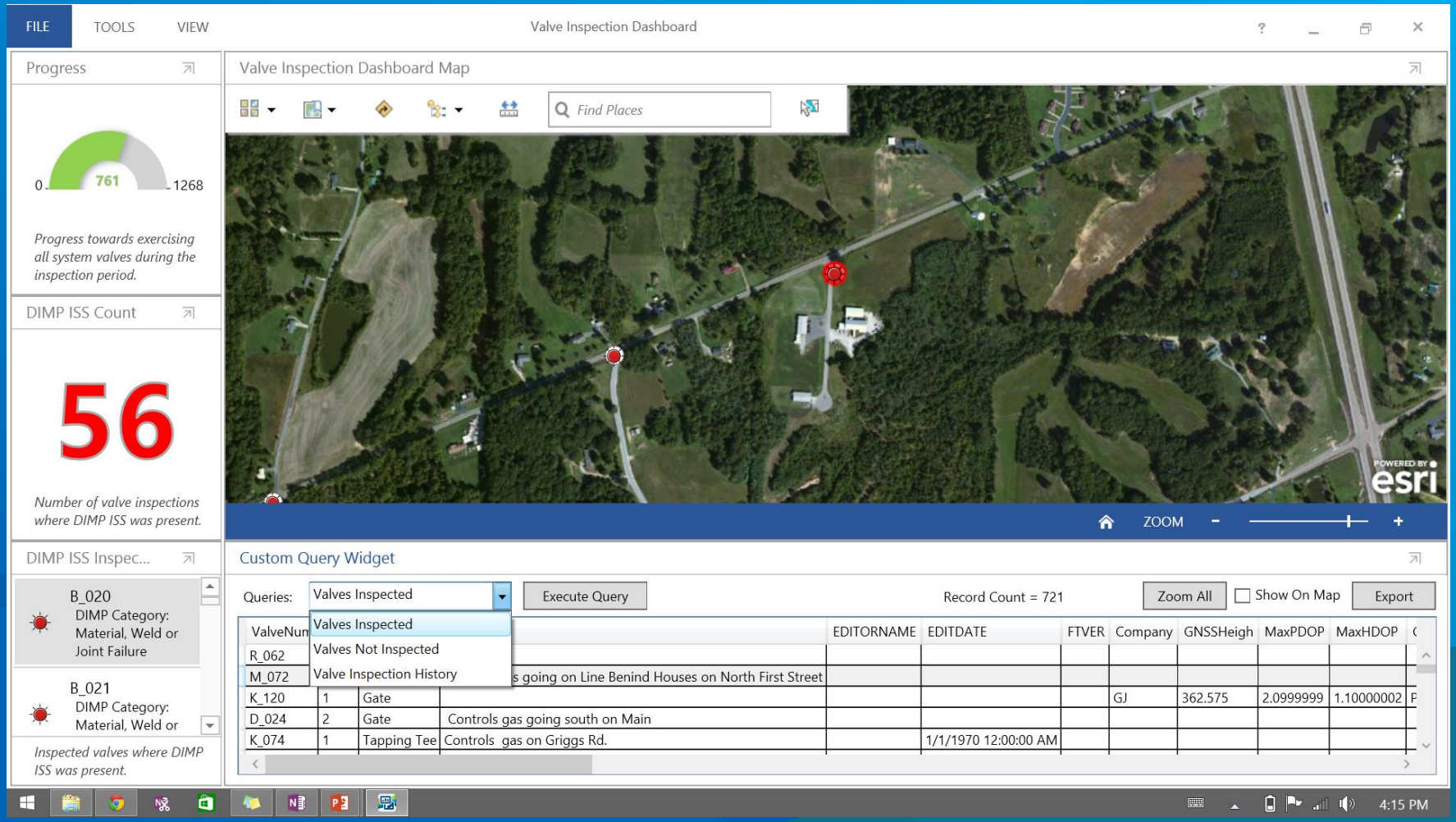
Monitor Inspection Information



Valve Inspection Dashboard: Real-time Data, Focused Information…

Implement Solutions

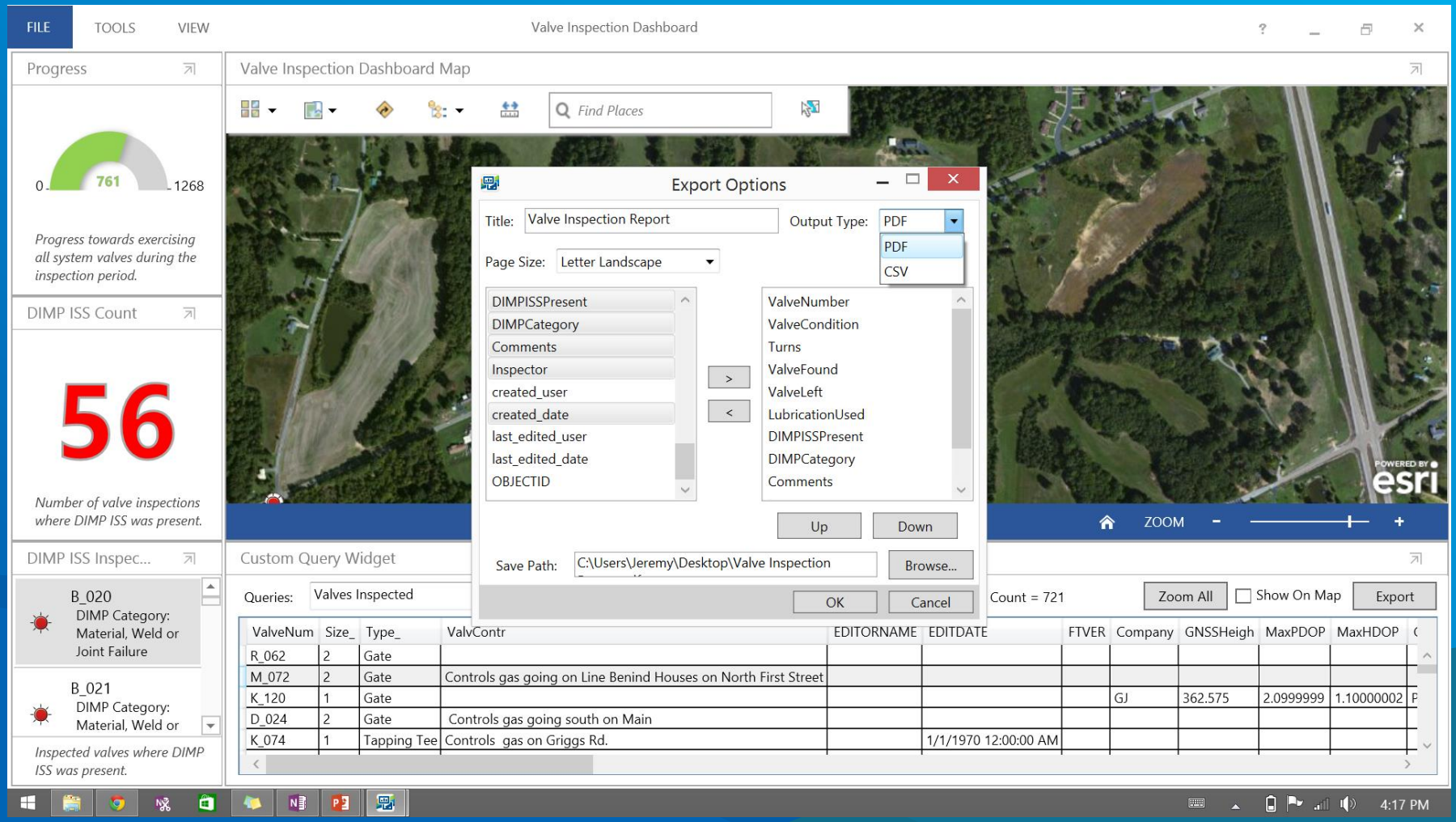
Generate Reports



Custom Query Widget: Build & Execute Queries, Table View, View on Map…

Implement Solutions

Generate Reports



Export Query Results, Customize Output Fields, PDF or CSV

Challenges & Lessons Learned

- Significant time investment on front-end to document workflows
- You must be patient with people & listen to their input because they know their business
- Now that information is accessible to the entire organization, people want more information – collect as much as possible on the front-end
- While we're solving these problems in a very user friendly way, it's still change and people react differently to that – be patient
- ArcGIS Online basemaps don't provide enough level of detail, especially for utility data – dynamic basemap

Thank You!
Q&A

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