Managing Collector Data for Storm Assessments

Oklahoma Gas & Electric

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Began Using Collector April 2017

Storm Assessment
- Update Records
- Damage Locations
- Material Needed
- Extent of Damage

Problems with Old Process
- Communication
- Wasted Time/Resources
- Inaccurate/Untimely ETRs
- Inaccurate Records
- Safety
- Slow
- **Automated Data**
  - Truck Locations
  - Outages
  - Priority Customers

- **Back-End Processes**
  - Archiving
  - Construction Prints and Material Reports
  - Updating Base Layers

- **Web Applications**
  - ICS Planning
  - Engineering
  - Construction
  - Logistics
Automated Data

Truck Locations, Outages, and Priority Customers
Truck Locations

- Utilimarc Telemetrics
  - API – Python
  - Ran at Desired Interval
  - Windows Task Scheduler
  - Symbolized by Vehicle Type

- Situational Awareness
  - Control Center
  - Engineering
  - Construction
  - Logistics

- Minimizes Duplicate Work

- Improved Member Safety
Outages & Priority Customers

- **Scheduled Teradata Query**
  - SAS
  - Crontab

- **Scheduled Map Creation**
  - Python
  - Windows Task Scheduler

- **Outages Updated Every 30 Minutes**
  - Downstream Trace Created From Outages

- **Priority Customers Updated Every Month**
Back-end Processes
Construction Prints, Archiving, and Updating Base Layers
Construction Prints & Material Reports

- Map of Damage and Material
- Similar to Existing Process
- Limited Mobile Capabilities
- Difficulties Working with Mutual Assistance Crew
Archiving

- **Python Script Scheduled With Windows Task Scheduler**
  - Enabled When ICS is Activated

- **Purpose of Archiving**
  - Update Production Database
  - Historical Data

- **Creates Dataset “Storm_Date/Time”**
  - Every 2 Hours
Updating Base Layers

- Updates Asset Layers in AGOL From Production Database
- Python Script
- Ran Monthly When Mobile Geodatabase is Updated
Web Applications
Consuming Collector & Survey123 Data
ICS Office Apps Dashboard

- Applications Dashboard
  - Tabbed Story Map
  - One Stop Shop
  - Tailored for Particular Work Groups
  - Production and Training Environments
ICS Office Apps Dashboard

- **Assessment Assignment**
  - Create Assignments for Assessment
    - Utilize Outage and Downstream Trace
    - Grid Number Locates Assignment to Download
  - Manage Assignments
    - Summary Widget
    - View Progress and Status of Existing Assessments
ICS Office Apps Dashboard

- Planning Viewer
  - System Damage
    - Quick Counts from Collector Data
  - Executive Summary Reporting
    - Geoprocessing Tool
    - Collector and Survey123 Data
  - Big Picture of Damage
    - Mutual Assistance
    - ETRs
ICS Office Apps Dashboard

- Construction Viewer
  - Create & Monitor Construction Assignments
  - Manage Progress, Down/Hot Lines, and Environmental Hazards
  - View Survey123 Data
    - Supply Info
ICS Office Apps Dashboard

- Vegetation Management Viewer
  - No More Waiting for Assessments to be Complete
  - Manage Tree Trimming
  - Edit / Update Status of Work
    - View by Construction
Geoprocessing Tools

- Get Customer Count
  - Identify Number of Customers in Defined Area

- Get Feature Count
  - Identify Number of Customers in Defined Area
ICS Office Apps Dashboard

- Currently in Development
  - Logistics
    - Staging Sites
    - Manage Supply Truck Locations
    - Hotels
    - Manage Meal / Snack Delivery
      - Public GeoForm
      - Shelter and Food Banks for Excess Meals
  - Environmental Application
    - Manage Hazards
Updating Production Databases

- After The Storm
  - Archived Collector and Survey123 Data
    - Added to ArcFM Session
    - Correct Assets Updated
  - Updated Within Days After the Storm