GIS-Centric Asset Management System (AMS) Promotes GIS

City of Augusta, Georgia
Our team.

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Agenda

• Introductions
• City Overview
• Cityworks Asset Management System - Utilization at the City of Augusta
• Laserfiche Forms Management System
• GIS Challenges Prior to Implementation
• Stormwater Implementation Example
• Lessons Learned
• Questions
City Overview
City Overview

- Founded in 1735
- Richmond County Consolidated with the City of Augusta in 1995
- Augusta-Richmond County is 329 Square Miles.
- ≈200,000 Residents
- ≈571,000 Metro Population
- ≈ 9,000 Students at Augusta University
- Home to the Masters Tournament every April
Cityworks Asset Management Software
Cityworks AMS Offers

• GIS Centric Software Solution
  – “A core premise of the Cityworks GIS-centric approach is that the ArcGIS geodatabase is the organization’s best and most up-to-date authoritative data repository for local government assets” cityworks.com

• Collective GIS Map in Cityworks

• Work Orders submitted directly to GIS Editors by field crews

• Mobile Workforce

• One system of record to track GIS requests from various sources
Cityworks Utilization at the City of Augusta

• Engineering Department
  - Stormwater
  - NPDES / MS4
  - Environmental
  - ROW / Locates
  - Maintenance
  - Traffic
  - Signals
  - Signs
  - Pavement Marking
  - Traffic Studies
  - Street Lighting

• Utilities
• IT – Fiber Collaboration
• ADA Office
• 311 Office
LaserFiche Forms Management Software
Forms Management Software Offers

- Forms Management by LaserFiche
  - Electronically and securely captures data to optimize business processes
    - Augusta, GA implemented in 2015
    - Integrated with Cityworks in 2016
      - Transforms Paper Forms to Online Forms reducing costs, eliminating paper, and improving operations for business processes for several city departments
Multiple Form Types for AMS Service Requests/Work Orders

Citizen Forms
- Stormwater
  - Impervious Area Review
  - Credit Application
- Roadway Light Petition

Contractor Based Forms
- Project Inspections
- ROW Encroachment Permit
- Plan Review

Collaboration Forms
- Open Records Requests
- ADA Accessibility Intake Form
- Augusta Blighted Properties Initiative
AMS & Online Forms Management Example

- By leveraging Asset Management and Online Forms, GIS was able to provide departments with a streamlined solution for citizens, contractors, and internal departments to receive and track requests for services.
AMS & Forms (Cont.)

- Record is populated inside Cityworks as a Service Request or Inspection
- All custom fields are filled out
- Populated as a pending application in the Cityworks Inbox
AMS & Forms (Cont.)

- Auto generated email is sent to submitter to acknowledge the application was received
• Application is completed / Closed and approved inside Cityworks.
• Approved application is emailed to the submitter to print and keep on job site
• All of the outside contractors came in to see the new process and all say it is dramatically improved the submittal process
• Approval Process went from **3 weeks to 3 hours first day of go-live**
GIS Challenges Prior to Implementation
Challenges

- Multiple Maps for GIS Collaboration
- Data Silos
- No Consolidated Software Solution
- Lack of Department Data Ownership
- Communication Breakdowns
Benefits for GIS

Data Updates
- Over 2,500 GIS Updates
  - Crews now see the value of having current and updated GIS data
  - Prior to implementation updates from the field were few and far between
    - Approx 0 to 10 a year scribbled on a napkin...
- Each department can submit a WO to GIS to Update Assets they find “missing” or that need attribute changes from the field (*show WO and Redline*)

Address Validation
- GIS Road and Addressing Authority
  - GIS became the addressing authority in August 2014
- No prior formal tracking system for issues
- Now several SR’s are available to submit requests for addressing verification
  - E911 Geo Override
  - Returned Mail
  - Street Name Issue
  - New Sign
Stormwater Implementation Example
Stormwater Background

• Real, growing, and unresolved stormwater infrastructure problems.
• General Fund is unable to provide sufficient funds for stormwater infrastructure maintenance.
• A stormwater utility charges a user fee proportional to the services provided.
• Engineering Department is responsible for building and maintaining:
  • 329 square miles
  • 731 miles of ditches
  • 568 miles of storm drains
  • Over 12,600 catch basins
  • Nearly 1,000 flood detention ponds
Transparency & Oversight

Stormwater Fee - Effective: January 1, 2016

• GIS Involvement
  • Citizen Outreach & Engagement:
    • Stormwater Brochure
    • Augusta Maps: GIS Fee Lookup Map
      • [http://gismap.augustaga.gov/augustajs/?MapTheme=StormWater](http://gismap.augustaga.gov/augustajs/?MapTheme=StormWater)
  • Administration mandated an Asset Management Solution
  • GIS Implementation of Cityworks
    • Business Process Workshops & Configuration: April - July
    • Go-Live Deadline: Sept 1, 2016
Transparency & Oversight Examples

• Transparent Reporting

• Cityworks Reporting  Show Report
  • Ditch Miles
  • ROW Mowing Miles
  • Pipes Cleaned
  • Tree Maintenance
  • Inmate Labor (tonage)
Transparency & Oversight (Cont.)

- Graphs from Cityworks
- Cityworks EURL Map
  - WO per Commission Districts & Subdivisions
- LaserFiche Forms Management & Cityworks Service Requests
- Stormwater (IA Review, Credit Application),
- AGOL - eURL map service for Augusta Transparency Initiative
AMS Future Plans for the City

- Facilities (2017)
- Parks & Recreation (2018)
- Augusta Regional Airport
AMS Integrations

- Software Consolidation
  - One Stop Shop inside Cityworks

- AVL - Viewing Vehicle Details
  - Find Vehicle Based on WO Location
    - Current vehicle locations will be presented on the map and will refresh
    - Vehicle history will be presented so that it can be compared with the information on the work order
Lessons Learned
Lessons Learned

• Organization During Configuration and Implementation
  • Keeping track of all the users and the roles they play within their departments
  • Business processes and common threads between division and departments
  • Making sure ALL stakeholders are invited and present during crucial discovery meetings
Thank You!
Questions?