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INTEGRATING GIS INTO MUNICIPAL OPERATIONS
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BASELINE: TRADITIONAL MUNICIPAL GIS GROWTH

- Building on other organizations' data – county parcels, roads and address points
- First mapping efforts typically involve city Planning Department layers: zoning, special planning zones, economic development zones, etc. – utilize county parcels, U.S. Census data, etc.
- City Council Districts and Redistricting (fun!!!)



GROWING IN MATURITY AND COMPLEXITY

- Mapping more complex city assets
 - Water
 - Sewer
 - Storm



ALL TOGETHER – WHAT DO YOU HAVE?

- Solid GIS base data foundation
- Building blocks across systems and departments
- Success builds interest



NOW WHAT?

- Gets people thinking
- "Hey... can we do THIS???"
- New ideas and ways to apply GIS to get answers – help solve problems across departments
- Moving forward...



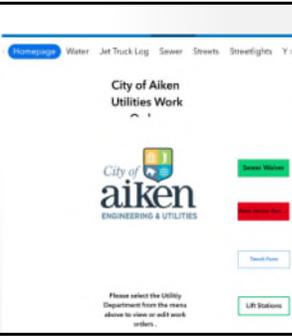
UTILITY WORK ORDER SYSTEM

- Dispatch
- Field workers
- Reporting
- Analysis

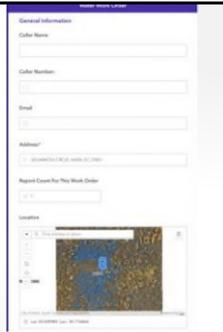


WHAT WORKS

- Landing page – easy to get to
- One stop shop
- Office and in the field

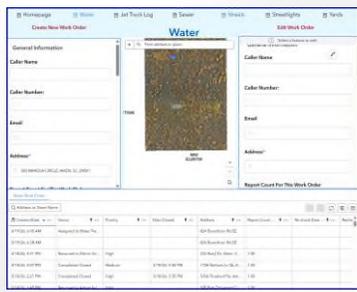


UTILITY WORK ORDERS IN THE FIELD



DISPATCH

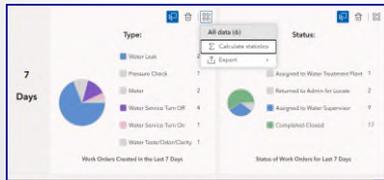
- Create work orders
- Edit / update existing orders
- View ongoing calls
- ... all tied to GIS locations for work orders, specific utility assets, etc.



MANAGEMENT SNAPSHOT VIEW



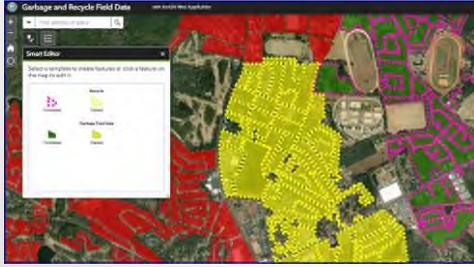
DASHBOARD DRILLDOWN AND EXPORT



PROJECT TRACKING



TRACKING / REPORTING TRASH PICKUP



TRASH VIOLATIONS APP

- Field data collection – picture
- Ties in with dispatch
- Track repeat offenders – they learn... they know...
- Billing for fines
- Cost recoupment
- Reduction in issues and false claims
- Significant cost savings



BUDGET / PLANNING EXAMPLE

- New developments, additional services
- Advanced notice of additional customers
- Estimate costs – route, number of pickups, etc.



PROPERTY CODE VIOLATIONS



ACCESSIBLE PARKING IN DOWNTOWN

- Documentation of available parking
- Noting location of wheelchair accessibility, ramps, etc.



PUBLIC NOTIFICATION – WATER ISSUE

- Difficult to understand areas by naming bounding streets
- Needed to notify citizens when water would be flushed out
- Pressure / water quality issues
- App provided complete answer and easy to use



DRONE INTEGRATION

- Law enforcement –
 - Crime scene
 - Accident scene
 - Incident planning – schools, sensitive infrastructure
- Site inspections – multiple captures during project completion process
- Aerial imagery updates in between area-wide contractor flights

DRONES – MID-CYCLE AERIAL IMAGERY UPDATES



MAPPING NON-GIS DATA

- Water billing
 - Non-payment shutoff
 - Notify code enforcement for site visit
- Tie-in to tax information in AS400
- Mapping and comparing neighborhoods – tax contributions
- Water meter tracking

CHALLENGES

- How to connect – easy
- How to tie together – not to hard
 - GIS assists when there is not a common key
- Clean data from other systems...

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FUTURE OPPORTUNITIES

What else can we do?



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