Big Changes & Low Costs

How ArcGIS Online Has Transformed ODOT

http://okdot.maps.arcgis.com/

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Background

- ODOT had a long history with GIS portals
- GRIP system
- In service over a decade
- Ultimately killed by SVG support
- In 2013, ODOT began looking for a replacement
- Lots of interest in Utah’s UPLAN system
- In late 2015, purchased subscription to ArcGIS Online
Why Do It This Way?

- Needed something extremely flexible, scalable, and future-proof
- Maintainable in-house
- Must be easy to use
- Simple, directed, subject-based apps with advanced capabilities if needed
- Proven success in other states
- Industry standard
- Other capabilities (mobile, Collector, etc.)
- Quick dev time
- Low cost
Up and Running

- Went from zero to fully deployed in a weekend
- Everything done entirely in-house
- ‘Soft launch’ late 2015, formal launch in early 2016
- Massive response from users and partners
- ‘Extreme ROI’ – Portal cost less than $20k to set up
- Generated $1 million + in savings the first year
- Close to $2 million over initial 2-3 year period (est.)
- Savings to manpower, capabilities, development
- We didn’t build an app, we built an ecosystem
Up and Running

- Over 170 dedicated applications
- Over 120 unique datasets
- Mobile-capable apps
- Organized by subject area or maintenance divisions
- Easy to find links to legacy map products
- Everything from construction updates to environmental data to project planning
Category Galleries

- Groups subject-based maps together
- Easy to browse and find maps
- Access PDF’s and other docs
- Can link directly to gallery for quicker access
Master Inventory Viewer

- One stop shop
- Replaces GRIP system
- Allows users to easily access a wide range of data
- Can add external data, print, export, perform queries
- Replaces need for desktop GIS software & Google Earth in many cases
- Saved approximately $100k in desktop licenses alone
Current Construction Updates

• Current ODOT Projects
• Timeframes, financials, contractor info
• Previously a paper hand-out not easily accessible to people
• Used extensively by the general public, news organizations, etc.
• Dramatically reduced construction-related call volumes for Media & PR
• Savings in manpower
• Easier access for the public
8 Year Workplan

- Construction projects in 8-year plan
- Detailed financials
- Info about ROW, utilities, and construction
- Previously a paper publication
- App greatly increased transparency
Division Project Planning

- Workplan & Asset Preservation info
- Detailed project info
- Used by Division Engineers to perform project planning and rebalancing
- Previously a spreadsheet
- Saved significant amount of time in planning efforts
TAP Project Planning

- Transportation Alternatives Program (TAP)
- Data fed directly from the submittal database
- View projects on map, determine eligibility and scope
- Previously a spreadsheet
- Saved significant amount of time in planning efforts
CIRB Project Planning

- County Improvements for Roads and Bridges (CIRB)
- Prior to this, many counties had no way to reliably view and interact with data
- Projects symbolized by status
- Massive upgrade in our ability to communicate with county governments
- Better outreach, more accurate data
County Commissioner Projects

- Dovetails with CIRB projects
- County Comm. coordinator given edit access, drew lines, we added data
- Counties had never had this in electronic format before
- Dramatic reduction in time to perform project outreach
- Local ownership of data; DOT platform
ADA Projects

- Consultant data
- Easy way to see areas of concern and associated projects
- First of its kind in US
- Dramatic reduction in time to perform project planning and tracking
- Civil Rights Div. able to edit data and project status
- Internal and external users
Open Data

- Part of AGO Platform
- Allows easy querying
- Direct data export
- Links to geojson and REST feeds
- Eliminated need for public-facing Arc server feeds
- Allowed better integration with open-source statewide GIS mapping platform (OKMaps)
Other Benefits

- **REST Services**
- Using Collector, field data collection savings of $250k +
- Native mobile apps using AppStudio (small license cost for App Studio)
- Professional quality print maps from within apps
- Instant Scalability(!!!!!!)
- No outside maintenance needed
- Added several advanced custom tools for small cost