

Field to Office and Back Again

Michael Miller

Asset Status

Inspections

Emergencies

Maintenance & Replacement

Data Corrections

Safety Issue

Inventory

General Mapping

New Construction

GIS data in the Field

Many ways that GIS data is needed in the field

Capabilities

- Create
- Update
- Delete
- View

Deployment Options

- Production
- Publication View
- Inventory, Redline, Inspection & Change Request
- Related Inspection or Change Schema

10.3 is used for all these scenarios

Note

Software Version

Examples

- Changing attribute of asset
- Viewing most current network

Options

- ArcGIS Server Feature Service
- ArcGIS Server Map Service

Benefits & Considerations

- Exposing production to field
- DMZ required
- Always viewing most current data
- Edits directly against version of master
- Could cause Multi editor Conflict
- Limited capabilities with the GN
 - No Offline, Updates Only

- **ArcGIS Server Features Service**
 - Water Hydrants, Valves and Mains
 - Query, Sync and Update
 - Allow Geometry Updates – Off
- **ArcGIS Server Map Service**
 - Other data
 - View and ID only
 - Not required, just eye candy
- **Apps – Collector for ArcGIS**

Examples

- Weekly view of Network

Options

- Feature Or Map Service
 - Pointing to “Replica” from Production
 - Cached or Dynamic

Benefits and Considerations

- No affect of production
- Hosted or On Premises
- Some lag between posting to default and when they appear in network
- If editing is allow, edit tracking to determine changes features, but complex conflation process

- **ArcGIS Online Tiled Map Service**
 - **Utility Network**
 - **Pop ups provided by ArcGIS Online Feature Service(online only)**
- **App – Explorer for ArcGIS**

Examples

- Adding a valves, outfalls, culverts
- Sketching a Redline
- Logging a Map Change Request
- Adding an inspection record

Options

- Feature Service

Benefits & Considerations

- No affect of production
- Streamline attribute for field collection
- Hosted or On Premises
- Desktop editors manage edits
- Record of Changes

* Used in conjunction with Production or Publication view of the network

- **Features Service**
 - **Storm Map Change Request and Manholes and Inlet Change layers**
 - **Create Delete, Query, Sync and Update**
- **ArcGIS Online Tile Map Service**
 - **Existing Network**
 - **View and ID only**
- **Apps**
 - **Collector for ArcGIS**
 - **ArcGIS for Desktop**

Examples

- Inspecting a
 - Valve
 - Outfall
 - Manhole

Options

- Feature Service

Benefits & Considerations

- No affect of production
- Streamline attribute for field collection
- Hosted or On Premises
- May have to move data into another system of record

* Used in conjunction with Production or Publication network

- **Features Service**

- **Manholes and Manhole Inspection Table**
- **Create Delete, Query, Sync and Update**
 - **Allow Geometry Updates – off for AGS**

- **Apps**

- **Collector for ArcGIS**

*** Editing disable on the manholes in the web map**

- **Manually**
- **Scripts**
- **GeoEvent Extension**
 - **Joe's session tomorrow**

Summary

- Try out each scenario
- Find the right one that fits your organization
- Use hosted when you can



esri

Understanding our world.