Publish Official Services

Project Plan

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**Task:** Standardize and publish official feature services to ArcGIS Online of all our public facing datasets.

**Purpose:** Create a single, consolidated location of our data to be served publically within various web applications, web maps, and the Open Data Portal. This project will also create a reference list (sharepoint) to identify source data and develop a long term routine for maintaining the services with repeatable updates and other future, clean-up projects.

**Setup:**

* Query the Sharepoint table by ‘Published User’ to your name. Any record without a Published User populated will not be a dataset we are publishing at this time.
* Create a local project folder with a FGDB to store the publishing copy of your data.
* Copy the field\_cleanup\_v1.py script into your local project folder. Open the script and populate the ‘local\_fgdb’ variable with the path and name of your local FGDB

**Procedure:**

If a dataset has already been published as a clean version, you will find a URL already populated in the “New URL” column of the sharepoint table. If this is the case, complete the steps below without actually publishing (verify the source data and copy it with the other source datasets and QC that all the tags, metadata, etc. have been completed in the service; Set up the publishing MXD for the next update with the proper symbology, labels, etc.; Complete all the fields in the sharepoint table).

In QC’ing the “New URL” service, check to see if the data contains editor tracking fields. If editor tracking fields exist, let Adam know. He will transfer ownership of the service, then you will go through the publishing process but choose ‘Overwrite’ instead of publishing a new service.

If a new service needs to be published, complete all steps below.

1. Open the sharepoint table in Access or a web browser and query for services assigned to you (field “Published User”). Work through steps 2-10 for each record in the queried table.
2. Export/copy the most current feature class to your local FGDB. Best done with re-project tool. Be sure to use the new GRID Basemap and Roadway feature classes on Comanche if available.

*“Database Connections\Connection to Comanche.sde\TPP\_GIS.APP\_TPP\_GIS\_ADMIN.GRID\_Basemap”*

1. Re-project data if not yet completed. (Web Mercator Auxiliary Sphere)
2. Open the field\_cleanup\_v1.py script. Populate the ‘feature\_class\_name’ variable with the name of the Feature Class being published in your local FGDB. Run the script.
3. Create a new MXD for publishing this service. Log into AGO in the MXD using your “\_TXDOT” AGO account. Name the MXD the exact same name as the service (prefix, formatting, etc.). ex: “Texas\_County\_Boundaries.mxd”; Save the MXD to your local project folder. Add the local copy of the data to the map.
4. Format table of contents with Title Case, proper spelling, symbology (reference SPM, original service in a WebMap, or original service details). Use the symbology of the current service (if one exists) but DO NOT use any transparency at all when publishing; Transparency will be hard coded in applications, just be sure to add to the Sharepoint Notes if the service does use transparency in the SPM. **Layer name cannot be overwritten/fixed after publishing. MUST BE CORRECT**
5. Begin to publish as a Feature Service. Ensure naming convention adheres to standard. (No “\_AGO”; must have “TxDOT\_” or “Texas\_”). **Service name cannot be overwritten/fixed after publishing. MUST BE CORRECT**
6. When going through the wizard, copy metadata or complete it to best of your ability. Bare minimum should contain a summary, description, tags, and date published if you don’t know the update cycle or the original source. Use the Tags listed on the Sharepoint page as well as any additional tags which will help users search for this data. If additional tags are used, please add them back to the Sharepoint page.

**ACCESS AND USE CONSTRAINTS:**

Copyright 2016. Texas Department of Transportation. This data was produced for internal use within the Texas Department of Transportation and is made available to the public for informational purposes only. Accuracy is limited to the validity of available data as of date published.

**CREDITS:**

TxDOT – TPP – Data Management

**TAGS:**

TxDOT, TPP, Texas, *and any tags listed in the sharepoint page*

1. The published service is now in your AGO account. Open the service page and edit the name to replace the underscores with spaces.
2. Update Sharepoint page:
   1. Paste in the published service URL into the “New URL” column
   2. Verify “Tags” column with categories on Open Data Portal page.
   3. Update the “Notes” column with any differences in symbology which need to be hard coded (Polygon transparency, etc.) and any other details about the service which may be needed in future projects/service maintenance.

**\*\*Don’t delete the original URL if populated in the Notes column**

* 1. Check off ‘Published’ column
  2. Copy the original data path into the “Source Data” column (location on Comanche)
  3. Make sure the “Host Location” column is marked as AGO
  4. List any known applications in the “Applications” column if not already listed
  5. Complete the “Update Frequency” and “Update Method” columns to the best of your knowledge as to how the data *should* be updated

1. Repeat this procedure for all assigned records in Sharepoint. When all services have been published, copy your local FGDB into the ‘Data’ folder in the project directory on the T drive. Also, copy all MXDs into the ‘Service\_MXDs’ folder in the project directory on the T drive.

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When all services published (Chris/Adam):

1. Clean out all services currently in the Open Data Group.
2. Create new column in Sharepoint, checkbox for “Added to Open Data”.
3. QC and move newly published services into the Open Data Group from individual accounts checking off new column in Sharepoint as each is moved.
4. Transfer ownership to the TPP\_GIS account.
5. Consolidate all personal FGDBs in T drive project folder into a single project, FGDB.
6. Re-source MXDs to new, consolidated FGDB feature classes.

**Progress Tracking:** “New URL” & “Published” columns in the Sharepoint Site listed in the Resources section of this project plan. As these columns are populated, a record is considered complete.

**Project Start Date**: June 22, 2016

**Project Length:** 7 business days

**Completion Date:** July 1, 2016

**Work Assignments:**

|  |  |
| --- | --- |
| **Number of Services to be Published** | 48 |
| **Number of Analysts Doing Work** | 6 |
| **Number of Days to Complete Project** | 7 |
| **Number of Updates Completed per Day** | 2 |

**Analyst Responsibilities:**

|  |  |
| --- | --- |
| **Analyst** | **Records** |
| Bardash | 8 |
| Brez | 8 |
| Ferrell | 6 |
| Neville | 8 |
| Rogers | 8 |
| Scruggs | 6 |
| Kleinert | 4 |

**Resources:**

Open Data Site: [www.txdot.gov/opendata](http://www.txdot.gov/opendata)

Sharepoint Site: <https://txdot.sharepoint.com/sites/division-tpp/district_GIS/Lists/GIS%20Services/AllItems.aspx>

Project Directory: T:\DATAMGT\MAPPING\Mapping Products\GIS\_Services\

Scripts: T:\DATAMGT\MAPPING\Mapping Products\GIS\_Services\Scripts\

Dump local FGDBs here: T:\DATAMGT\MAPPING\Mapping Products\GIS\_Services\Data\

Dump publishing MXDs here: T:\DATAMGT\MAPPING\Mapping Products\GIS\_Services\Service\_MXDs\

How to publish services SOP: T:\DATAMGT\\_SOP\Mapping\_SOPs\Publishing GIS Services\_SOP.pdf

**Notes:**

* Do this project in MXDs, Adam will consolidate in ArcPro for long term maintenance.
* Polygon Transparency on Fill only
* LRTP Routes (energy Sector, evacuation, port routes, trunk) and ports
* SPM Railroad Crossings service exists currently in AGO. Delete in Phase 2!
* Jeremy – addInventoryData() - TxDOT\_Roadway\_Inventory\_OnSystem\_2014???
* Investigate these Services: TxDOT\_Roadway\_Inventory\_OnSystem (published 2014) & TxDOT\_Roadway\_Inventory (in description 2013)????

**Future:**

* Additional New Services:
  + Control Sections (Off System)
  + Routed IRI
  + County Mapbook Layers since we no longer produce this mapping product (schools, military, historical markers, etc.)
  + L.R.S. Readout/pull measures (DFO, Ref. Marker, CS)
  + Contraflow Routes
* Consolidate all original publishing MXDs into an ArcPro project with service overwrite task (full process, pull data, publishing, etc.). *Investigate ArcPro’s ability to apply transparency only to the fill.*
* Overwrite GRID basemap services with updated data (Adam’s Local Machine, data done for Comanche cleanup project)
* Update SPM to point to new services, hard code symbology override (polygon fill transparency)
* Fix Search to work with new services in SPM
* Remove old services listed in the ‘URL’ column, the original services (URLs found in the Notes column), and Search Services
* Add the non-TPP disclaimer to the descriptions of non-TPP services
* Script any automated update processes
* Top 100 service – update JJ’s app or have app deleted so we just use SPM
* Update Grace’s Project Services (Update process and any other related programs)