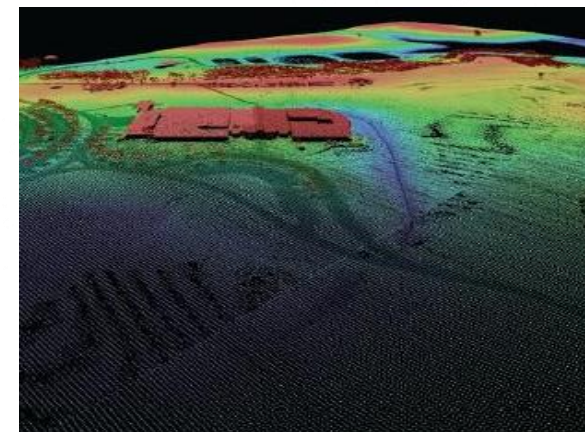
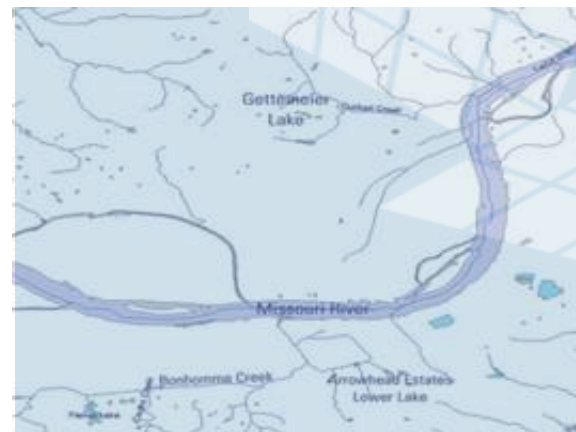
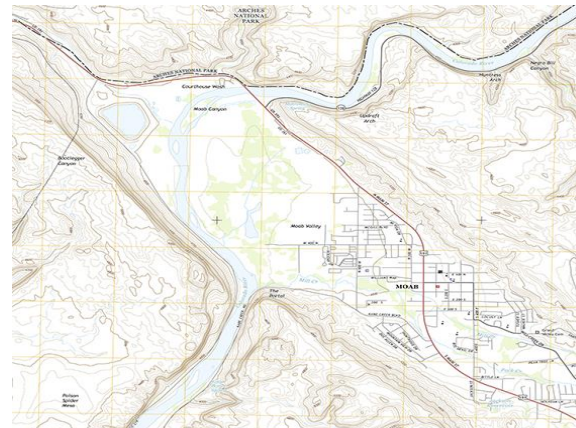




ArcGIS Online 3DEP Contractor Acquisition and Production Status Application Overview



Geospatial Planning and Services Contractors

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March 7, 2024



Outline

- ArcGIS Online 3DEP Contractor Acquisition and Production Status Application
- Account Set Up
- Understanding the Data Layers
- Data Entry
- Common Errors
- Demonstration of the Dashboard and Data Entry





ArcGIS Online 3DEP Contractor Acquisition and Production Status Application

Overview

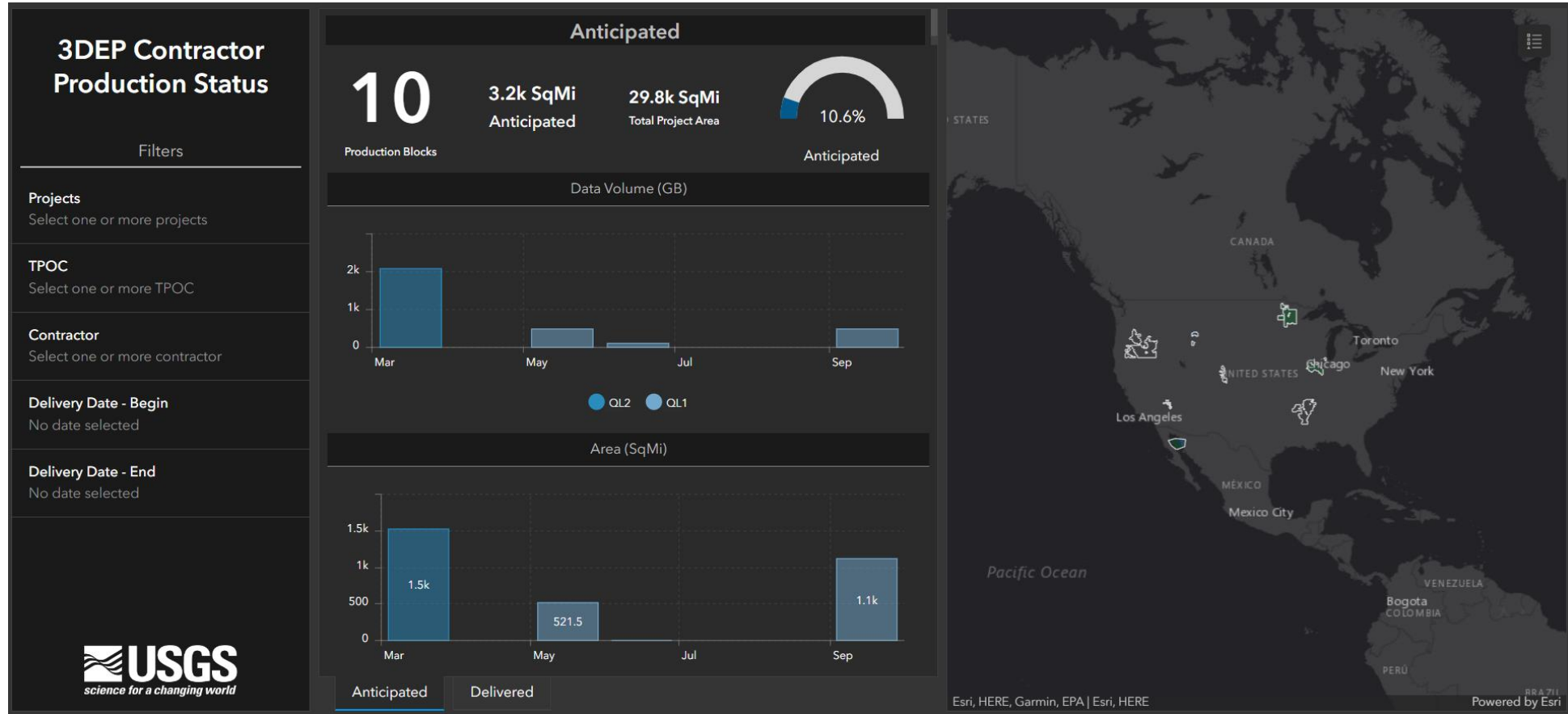
- Esri ArcGIS Online (AGOL) web application
- Intended to convey the status of 3DEP acquisition and data production to USGS stakeholders
- Contractors working on 3DEP projects add content to an Esri Geodatabase
- USGS users access this content using AGOL dashboards or with ArcGIS Pro
- Primary layers are:
 - Projects – the defined project area (DPA) with a unique PTS ID
 - Flight Lines – convey the status of aerial acquisition
 - Data Extent polygons – represent the spatial extents of production blocks of data



What is the ArcGIS Online 3DEP Contractor Acquisition and Production Status Application

Initial Data Delivery Dashboard

- Shows the square mileage and data volume anticipated and delivered by month

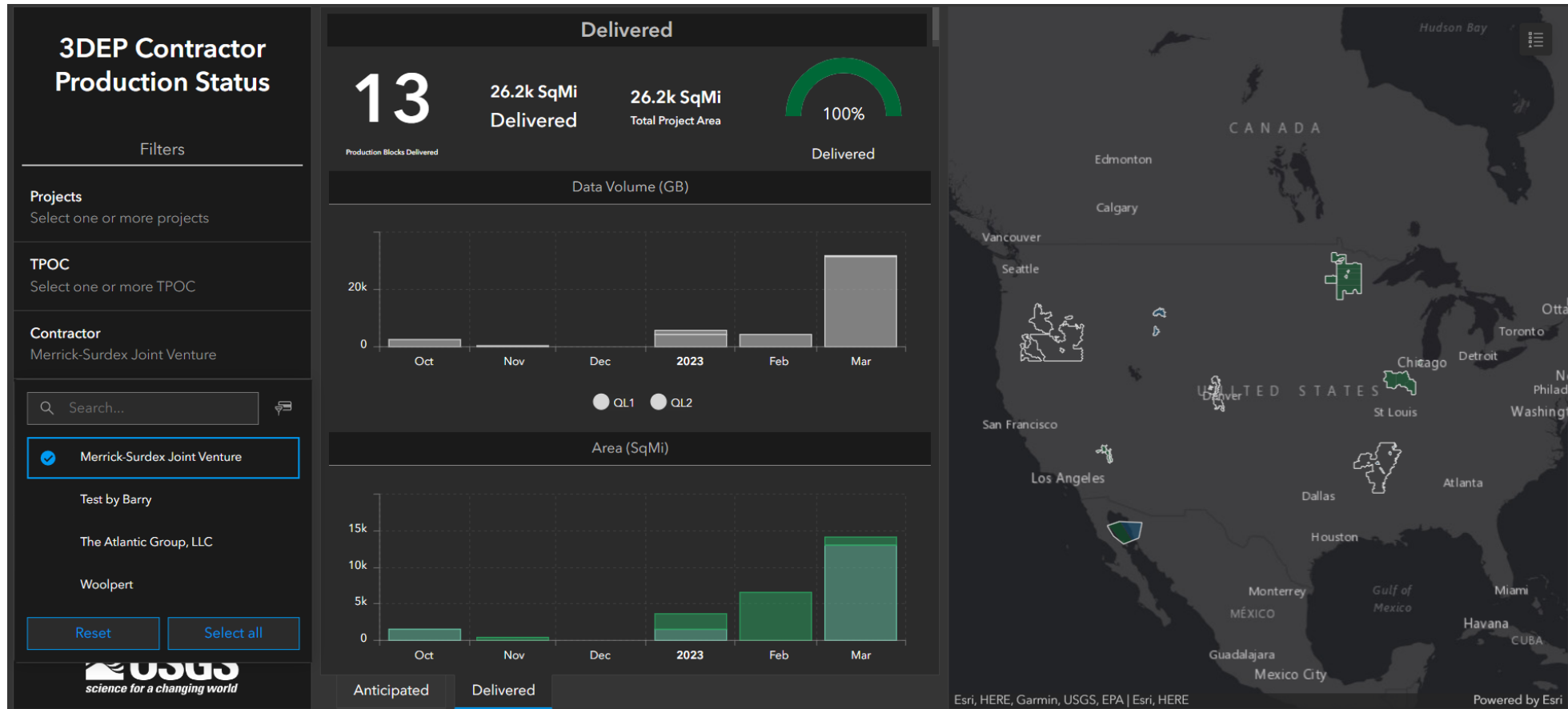




What is the ArcGIS Online 3DEP Contractor Acquisition and Production Status Application

Initial Data Delivery Dashboard

- Can filter based on project name, TPOC, contractor, or dates

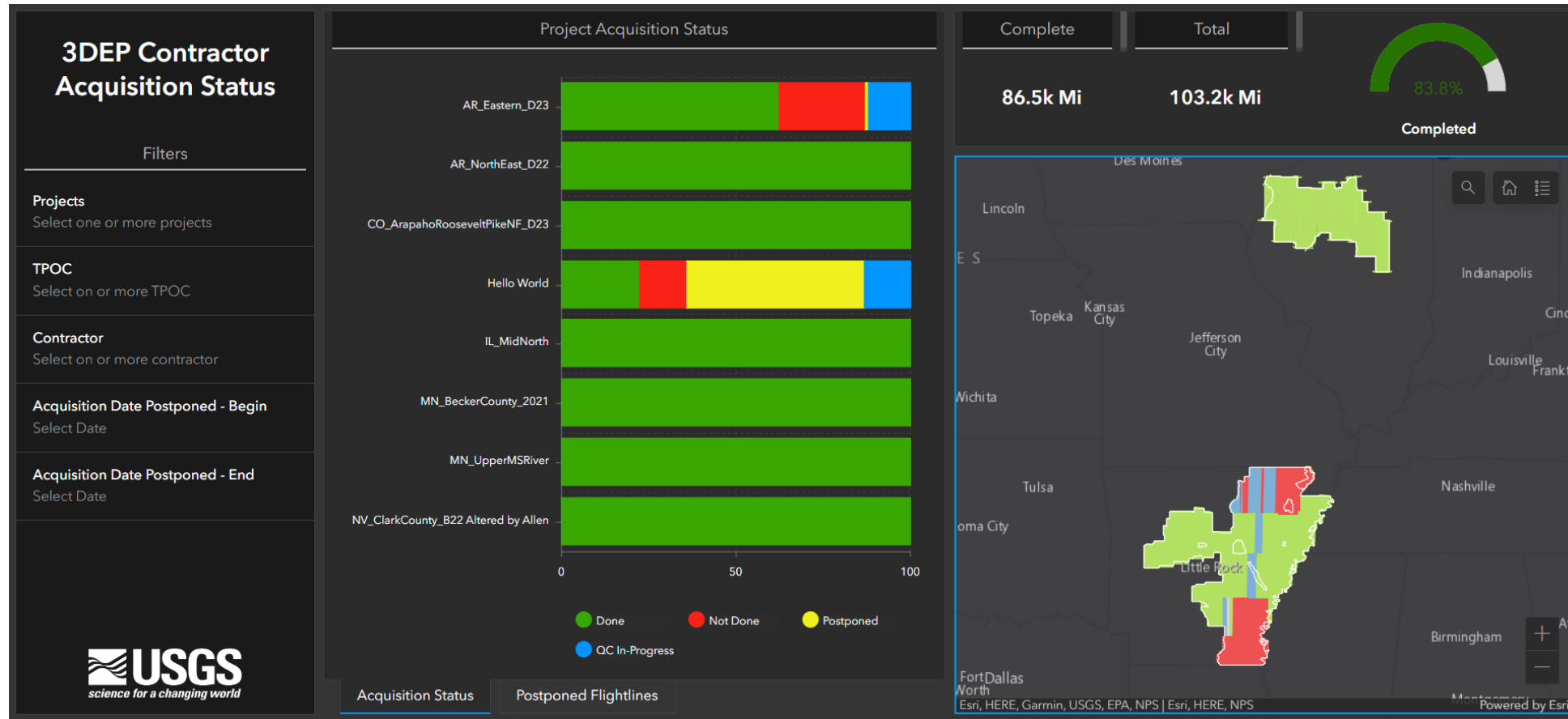




What is the ArcGIS Online 3DEP Contractor Acquisition and Production Status Application

Data Acquisition Dashboard

- Shows the status of aerial flight line acquisition

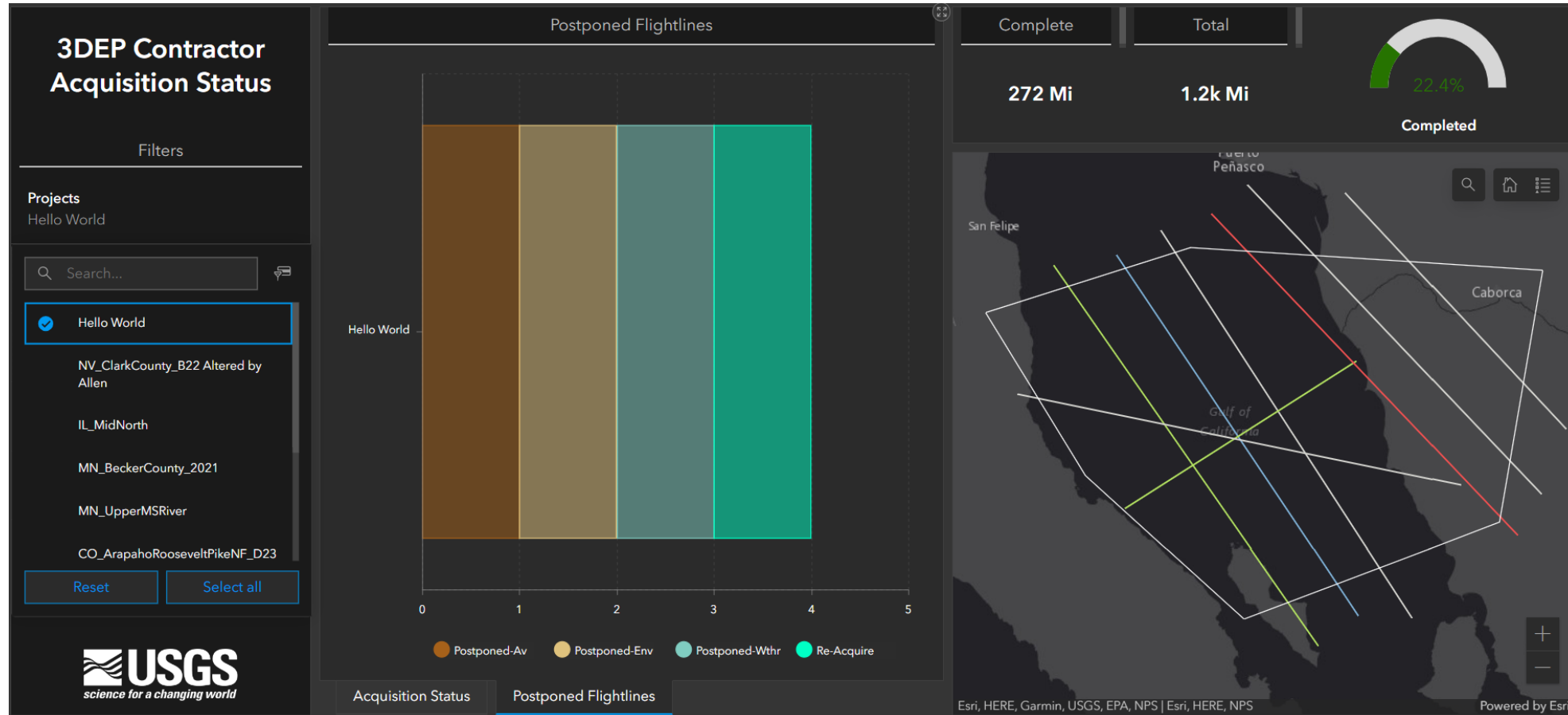




What is the ArcGIS Online 3DEP Contractor Acquisition and Production Status Application

Data Acquisition Dashboard

- Will show postponed flight line status as well





Account Set Up

3DEP Contractors Group

- USGS will send an Esri ArcGIS Online (AGOL) invitation to join the “3DEP Contractors” group
- Recommend each company set up one group account for all project managers to use
- Otherwise, an individual can only see and edit their own features

<input type="checkbox"/>	Name	Group role	Affiliation	Joined
<input type="checkbox"/>	RD Robert Dollison rdollison@usgs.gov_USGS	Member	My Organization	Dec 26, 2023
<input type="checkbox"/>	AJ Allyson Jason ajason@usgs.gov_USGS	Member	My Organization	Dec 20, 2023
<input type="checkbox"/>	BM Barry Miller bymiller@usgs.gov_USGS	Member	My Organization	Dec 19, 2023
<input type="checkbox"/>	WG WGI Geospatial WGI_Geospatial	Member	Other	Oct 3, 2023



Account Set Up

Join External Groups

- Ensure your ArcGIS Online administrator sets your account to be able to join external groups

"Join organizational groups" and "View groups shared with organization" should be enabled.

In the Groups privileges enable "Join external groups"

Create role

View View and edit View, edit, create and manage

Compatible with Advanced user type and 3 others

Role privileges Set from existing role Expand all

General privileges Enabled: 9/27 Enable all

Members Enabled: 1/1 Disable all

Groups Enabled: 2/4 Enable all

Create, update, and delete Allow member to create, edit, and delete their own groups.

Join organizational groups Allow member to join groups within your organization.

Join external groups Allow member to join groups external to your organization.

View groups shared with organization Allow member to view groups shared with the organization.

Save Cancel

Create role

View View and edit View, edit, create and manage

Compatible with Advanced user type and 3 others

Role privileges Set from existing role Expand all

General privileges Enabled: 10/27 Enable all

Members Enabled: 1/1 Disable all

Groups Enabled: 3/4 Disable all

Create, update, and delete Allow member to create, edit, and delete their own groups.

Join organizational groups Allow member to join groups within your organization.

Join external groups Allow member to join groups external to your organization.

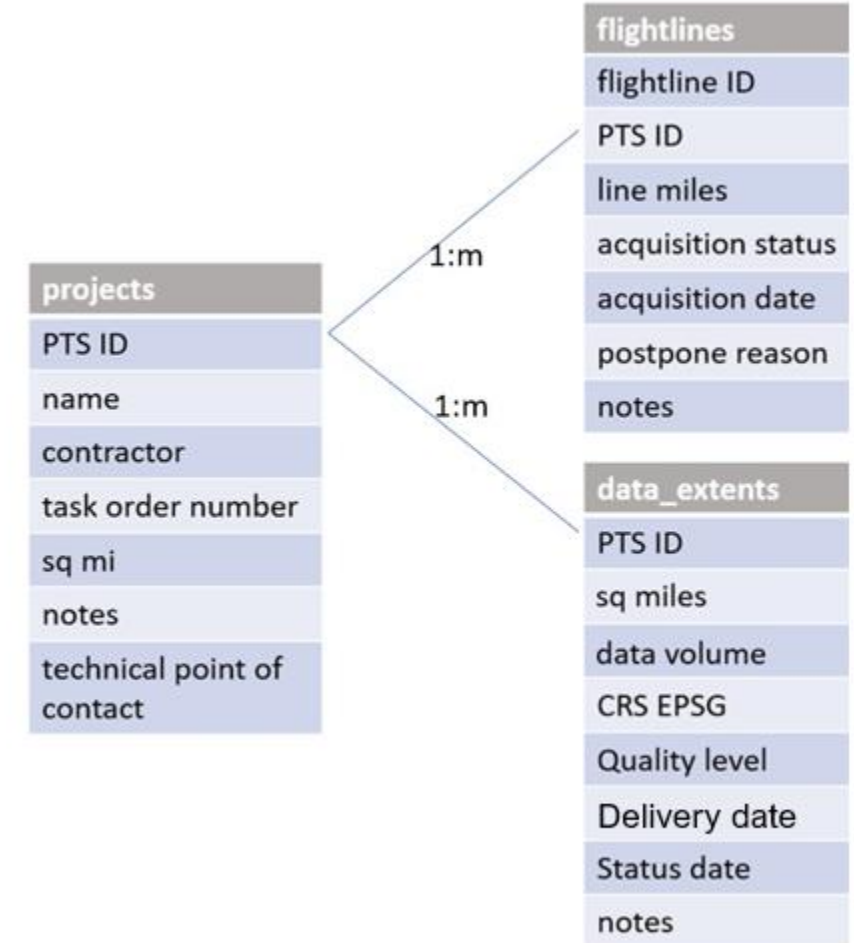
View groups shared with organization Allow member to view groups shared with the organization.

Save Cancel

+ Understanding the Data Layers

Overview

- Data is entered by contractors
- Each contractor organization should use one AGOL account
- Each contractor can only see and edit their own data
- USGS can see all data and certain USGS power users can edit
- Refer to the feature template provided by the USGS Commercial Partnerships Team (CPT)



+ Understanding the Data Layers

Projects feature class

- Use the defined project area geometry
- All fields except Notes must be populated
- PTS ID should be provided by the USGS CPT Project Manager (TPOC)
- Use the official name for the project as specified in the task order
- The Notes field can hold 1,000 characters and is where USGS will put edit updates

projects
PTS ID
name
contractor
task order number
sq mi
notes
technical point of contact

Field: Add Calculate								
Selection: Select By Attributes Zoom To Switch Clear Delete Copy								
	OBJECTID *	PTS ID *	Name	Contractor	Task Order Number	SqMi	Notes	Technical Point of Co...
1	65	231598	AR_NorthEast_D22	The Atlantic Group, LLC	140G0222F0247-AR_NorthEast_D22	749.5635	Barry added the PTS ID	Leslie Lansbery
2	64	300128	CO_ArapahoRooseveltPikeNF_D23	Woolpert	140G0221D0013-CO_ArapahoRooseveltPikeNF_D23	3379	Barry corrected the con...	Dan Vincent

+ Understanding the Data Layers

Flight Lines feature class

- The PTS ID is still required for this dataset as it is joined to other layers in the dashboards
- Populate a unique flightline_id and calculate the line_miles
- Refer to the acquisition status and postpone reasons table below

Field:	Add	Calculate	Selection:					Select By Attributes	Zoom To	Switch	Clear	Delete	Copy
OBJECTID *	flightline_id *	pts_id_prj *	line_miles	acq_status	acq_date	postpone_reason ▾	notes						
44	5422	549	300147	46.95227	Postponed	1/7/2024	Re-Acquire	Barry calculated the line miles					
45	5430	541	300147	46.95418	Postponed	1/7/2024	Re-Acquire	Barry calculated the line miles					

flightlines
flightline ID
PTS ID
line miles
acquisition status
acquisition date
postpone reason
notes

Flightlines:

acq_status			postpone_reason	
Actual code value	Display		Actual code same as display value	
done	Done		-	Postponed-HW [hardware-related]
qc_ip	QC In-Progress		-	Postponed-Av [aviation-related]
not_done	Not Done		-	Postponed-Wthr [weather-related]
postponed	Postponed		-	Postponed-Env [environmental conditions-related]
			-	Re-Acquire

+ Understanding the Data Layers

Data Extents feature class

- This feature is intended to convey the extent of production blocks of data in work and does not necessarily equate to USGS-defined work units
- USGS prefers the data extents be split by crs_epsg and quality_level where possible
- Please populate the data volume (an estimate is fine) and the anticipated or actual delivery date (you can change these later, if necessary, be conservative +/- 2 weeks)

data_extents
PTS ID
sq miles
data volume
CRS EPSG
Quality level
Delivery date
Status date
notes

Field:	Add	Calculate	Selection:						
			Select By Attributes	Zoom To	Switch	Clear	Delete	Copy	
OBJECTID *	pts_id_prj *	sq_mi	data_volume	crs_epsg	quality_level	delivery_status	delivery_date	notes	
15	170	223407	1474.2	2650	6344	QL1	Actual	11/1/2022	<Null>
16	179	231598	228.04	<Null>	6344	QL2	Anticipated	<Null>	<Null>

Data Extents:

pts_id_prj [pts id provided by USGS]		delivery_status
sq_mi [sq mi of data extent]		Actual code value same as display value
data_volume [total of tiled LAZ in GB]		- Anticipated [initial selection]
crs_epsg [- epsg code of grid projection and reference frame]		- Actual [change to 'Actual' when delivery is imminent]
quality_level		
Actual code value same as display value		
- QL0	- QL2	
- QL1	- QL3	



Data Entry

Add the 3DEP_project_features_Contractor_View into ArcGIS Pro

- Log into the named user account in usgs.maps.arcgis.com and make this your active portal

ArcGIS Sign In

ArcGIS Pro wants to access your ArcGIS Online account information ?

Sign in

ArcGIS login

Your ArcGIS organization's URL

usgs .maps.arcgis.com

Remember this URL

Continue

[Privacy](#)

Sign in automatically [Sign In Using Browser](#)

ArcGIS Sign In

ArcGIS Pro wants to access your ArcGIS Online account information ?

Sign in to U.S. Geological Survey

ArcGIS login

Username

Password

Sign In Cancel

[Forgot username?](#) or [Forgot password?](#)

USGS PIV Login
U.S. Geological Survey

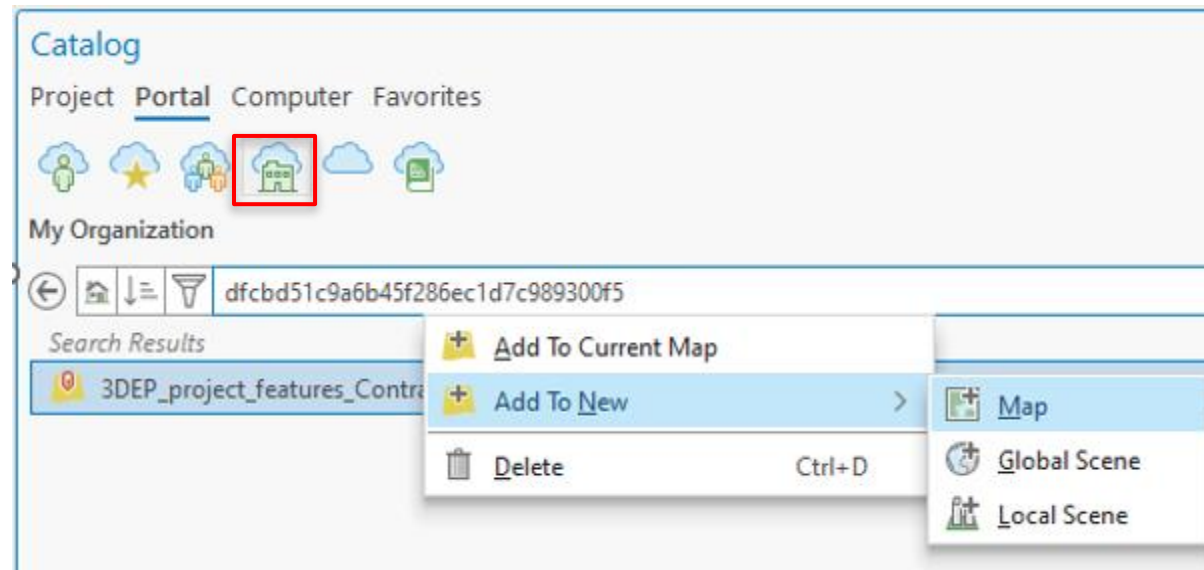
[Privacy](#)

Sign in automatically [Sign In Using Browser](#)

+ Data Entry

Add the 3DEP_project_features_Contractor_View into ArcGIS Pro

- In the Catalog pane, click on the Portal tab >> My Organization and search for **dfcbd51c9a6b45f286ec1d7c989300f5**
- In the search results, right-click on the 3DEP_project_features layer and add it to a new map

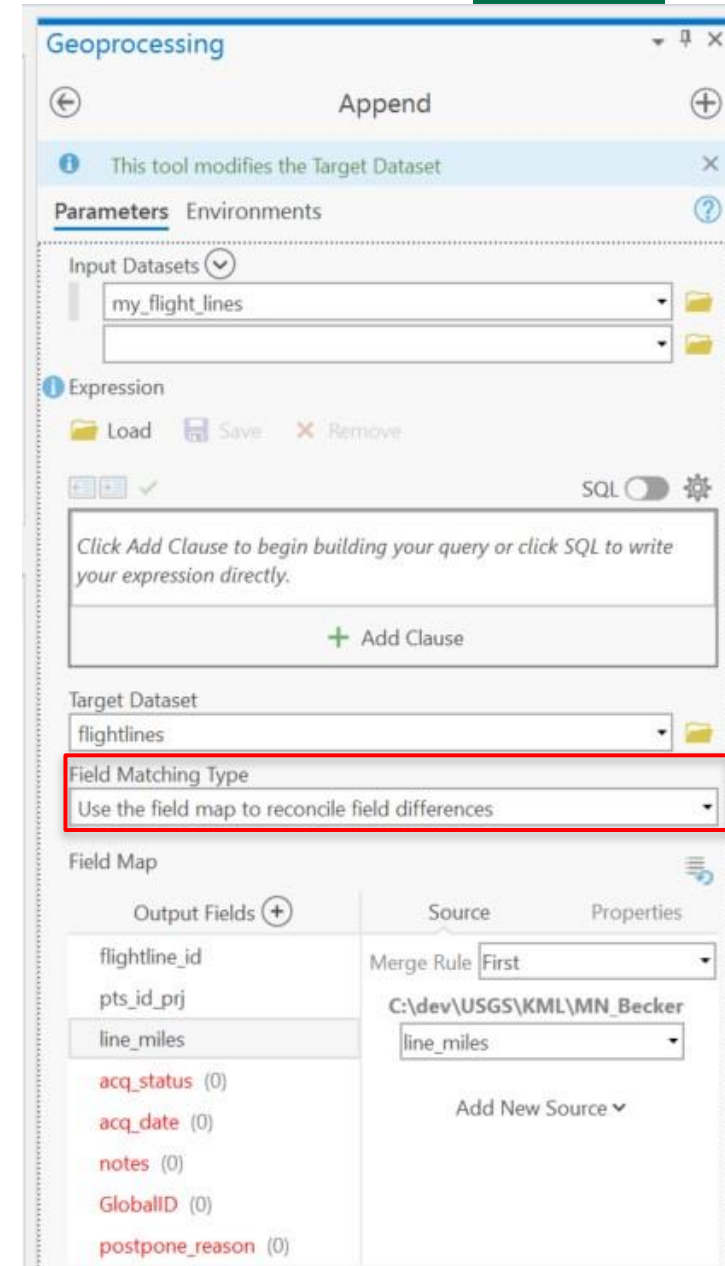




Data Entry

Manually edit the three layers or Append

- You can manually edit the three layers: projects, flightlines, and data extents
 - Better for small updates to existing projects
- We recommend you create an empty feature class with the same schema as the template
- Append your data into this feature, make sure everything looks good and is populated correctly
- Then append this copy to the corresponding feature in the 3DEP_project_features_Contractor_View layer
 - For Field Matching Type, choose: “Use the field map to reconcile differences”
 - If you have a lot of flight lines, you may want to break the feature into smaller subsets
- You can fix attributes after the append but cannot delete the record
 - Contact USGS if you need us to delete a record loaded in error





Common Errors

Don't forget to fill in all attributes!

■ Missing PTS ID or square miles in the Projects

OBJECTID *	PTS ID *	Name	Contractor	Task Order Number	SqMi
1	0	Hello World	Test by Barry	12345	<Null>
2	222194	OR_SouthEast_D22	Woolpert	140G0222F0211 - OR_SouthEast_D22	32887.1

■ Missing PTS ID, line miles, or acquisition date in the Flight Lines

OBJECTID *	flightline_id *	pts_id_prj *	line_miles	acq_status	acq_date ^	postpone_reason
1	106	0	56.36314	Not Done	<Null>	<Null>
2	46	300147	55.52122	Not Done	<Null>	<Null>

■ Missing PTS ID, data volume, delivery date, or geometry in the Data Extents

OBJECTID *	pts_id_prj * ^	sq_mi	data_volume	crs_epsg	quality_level	delivery_status	delivery_date
1	0	400	0	6342	QL2	Actual	<Null>
2	10001	385	1000	6343	QL2	Anticipated	4/1/2024



Demonstration of the Dashboard and Data Entry

The screenshot displays a GIS application interface. On the left is the 'Contents' panel, which includes a search bar, drawing order controls, and a list of layers. The 'Map' layer is expanded to show '3DEP_project_features' and 'flightlines'. The 'flightlines' layer is further expanded to show 'Not Done' (red), 'Done' (green), 'Postponed' (yellow), and 'QC In-Progress' (blue). Below this are 'Charts' and other layers like 'data_extents', 'projects', '3DEP_project_features_Contractor_View', 'Template', and 'World Imagery'. The main map area shows an aerial view with vertical flightlines colored according to their status. A scale bar at the bottom of the map shows 1:322,731 and 92.2442061. Below the map is a toolbar with options like 'Add', 'Calculate', 'Selection', 'Zoom To', 'Switch', 'Clear', and 'Delete'. At the bottom is a data table with the following columns and data:

	OBJECTID *	flightline_id *	pts_id_prj *	line_miles	acq_status	acq_date	postpone_reason
1	5419	552	300147	46.95129	Not Done	<Null>	<Null>

+ Summary

- ArcGIS Online 3DEP Contractor Acquisition and Production Status Application
- Account Set Up
- Understanding the Data Layers
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- Common Errors
- Demonstration of the Dashboard and Data Entry

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Questions?



- Barry Miller – USGS NGTOC Senior Elevation Applied Researcher (bymiller@usgs.gov)
- Martha Bearskin – USGS NGTOC Applied Researcher (mbearskin@usgs.gov)

THANK YOU!