



ArcGIS Experience Builder: Introduction

Chase Fisher – Solution Engineer Local Government

2022 ESRI MIDWEST USER CONFERENCE

agenda





Southeast AK Herring Surveys 2021

ADF&G Commercial Fisheries Southeast AK - Region 1 herring survey data collected using Esri Field Maps app are shown in these interactive maps.



Is My River Fit to Play in?

The Rivers Trust has released this interactive map which aims to help shed the light on the reality of sewage pollution and allow river users to weigh up the risks before taking to the water.



Power Plants and Neighboring Communities Mapping Tool

The map identifies the locations of power plants and highlights the key demographics of people living within three miles of those plants.



ASEAN Biodiversity Dashboard

The ASEAN Centre for Biodiversity and NatureServe created the ASEAN Biodiversity Dashboard to provide access to an interactive, online platform for visualizing trends and geographic variation in biodiversity indicators.



RenewMI Project Viewer

This project viewer contains past and present projects from the Remediation and Redevelopment Division (RRD). These are state-funded environmental remediation projects, as well as a few non-state funded remediation sites of interest.



Kansas Situation Report

The Kansas Situation Report brings together data from Emergency Management, Weather and Mapping organizations to provide the most up-to-date and accurate information possible in support of emergency response, situational awareness and preparedness across the State of Kansas.



Heinz Field Explorer

Built by Houseal Lavigne Associates, LLC., this app explores seating and beer distribution at Heinz Field in Pittsburgh, PA.



Empowering Photogrammetry with SURE Software

SURE software, along with ArcGIS, enables users to seamlessly capture, process, and analyze high-quality 3D data from imagery and LiDAR data.



Mars2020 Perseverance Rover

This web app tracks the progress of Perseverance Rover and Ingenuity Helicopter on the surface of Mars in both space and time.



Ohio Sentry Hazard Awareness

Hazard awareness maps for the watch office, including current and severe weather outlook, flooding potential, hurricane tracker, drought, earthquakes and wildfires.



Gray's Reef National Marine Sanctuary

Help conserve the incredible marine resources of Gray's Reef National Marine Sanctuary with this virtual fishing guide.



PhotoMappers Public Portal

NAPSG Foundation hosts a volunteer-powered platform for quickly finding, mapping, and sharing the location of disaster photos found in news stories and social media platforms.



Citywide Garage Sale

Thank you for supporting your neighbors!

Browse sales and sale items

Use this site to browse and search for sale items at 90 different sales throughout our community! Choose one or more sale items or days, then click search to see a list of matching sales.

Sale days

Toggle each switch to search for sales open on those days.

Thursday	<input type="checkbox"/>
Friday	<input type="checkbox"/>
Saturday	<input type="checkbox"/>

Sale items

Toggle each switch to see sales selling those items.

Adult clothes	<input type="checkbox"/>
Antiques and collectibles	<input type="checkbox"/>
Baby clothes and items	<input type="checkbox"/>
Books and movies	<input type="checkbox"/>
	<input type="checkbox"/>

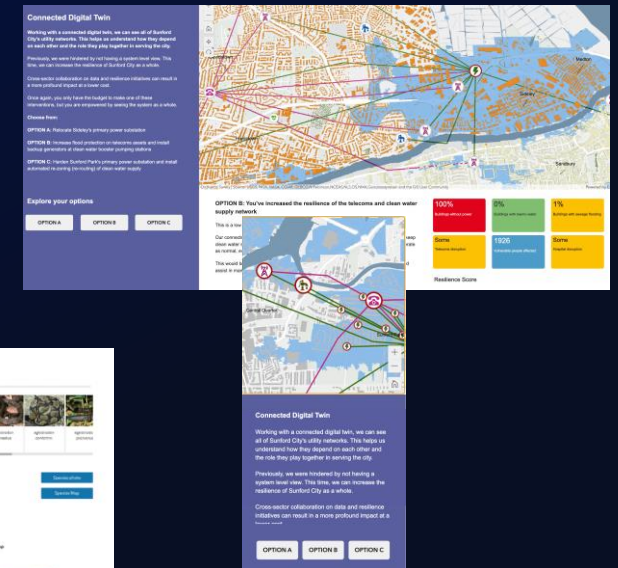
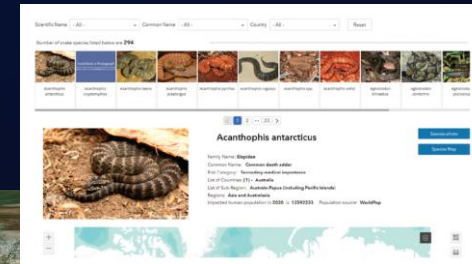
What is ArcGIS Experience Builder

- Build web apps and pages with no-low code
 - Explore design decisions with templates
 - Access ready-to-use tools
 - build custom tools
- Data driven
- Built on JSAPI 4.x



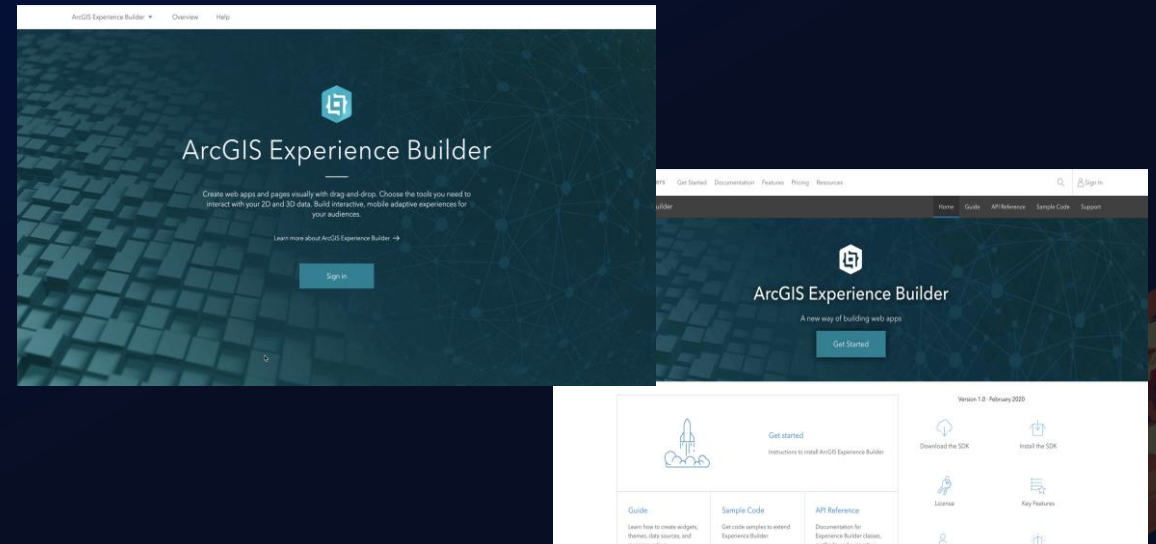
ArcGIS Experience Builder Key Features

- Flexible layouts
- Mobile optimization
- 2D and 3D integration
- Interconnection between widgets
- Extensibility



ArcGIS Experience Builder Editions

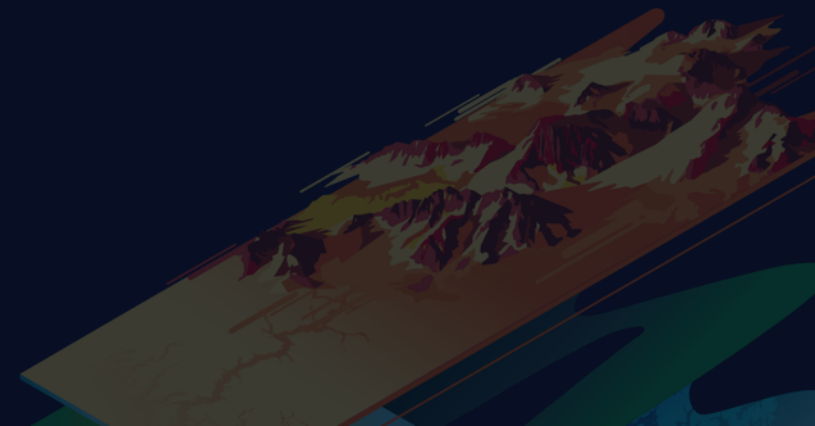
- Online and Enterprise Editions
 - ArcGIS Online URL: <https://experience.arcgis.com/>
 - ArcGIS Enterprise 10.8.1 and up
- Developer Edition
 - Download and install locally
 - Sign in ArcGIS Online or ArcGIS Enterprise



ArcGIS Experience Builder Licensing



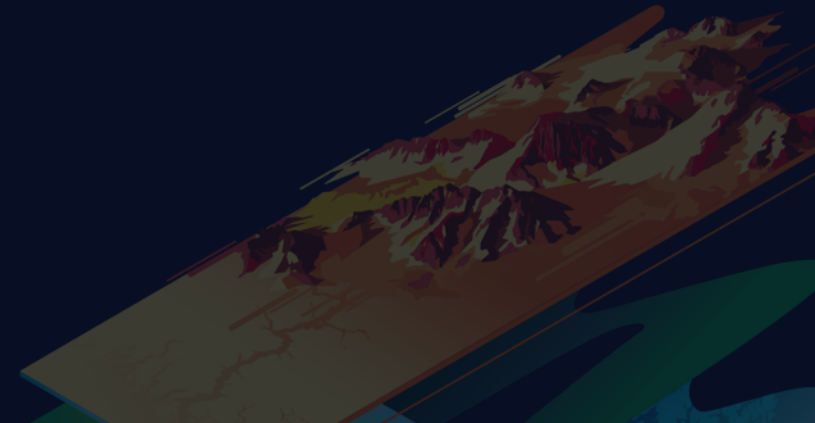
- Essential Apps Bundle
 - Must have a Creator or GIS Professional user type to create experiences
- ArcGIS Developer subscription
 - For developers who are not part of an ArcGIS organization to use Developer Edition

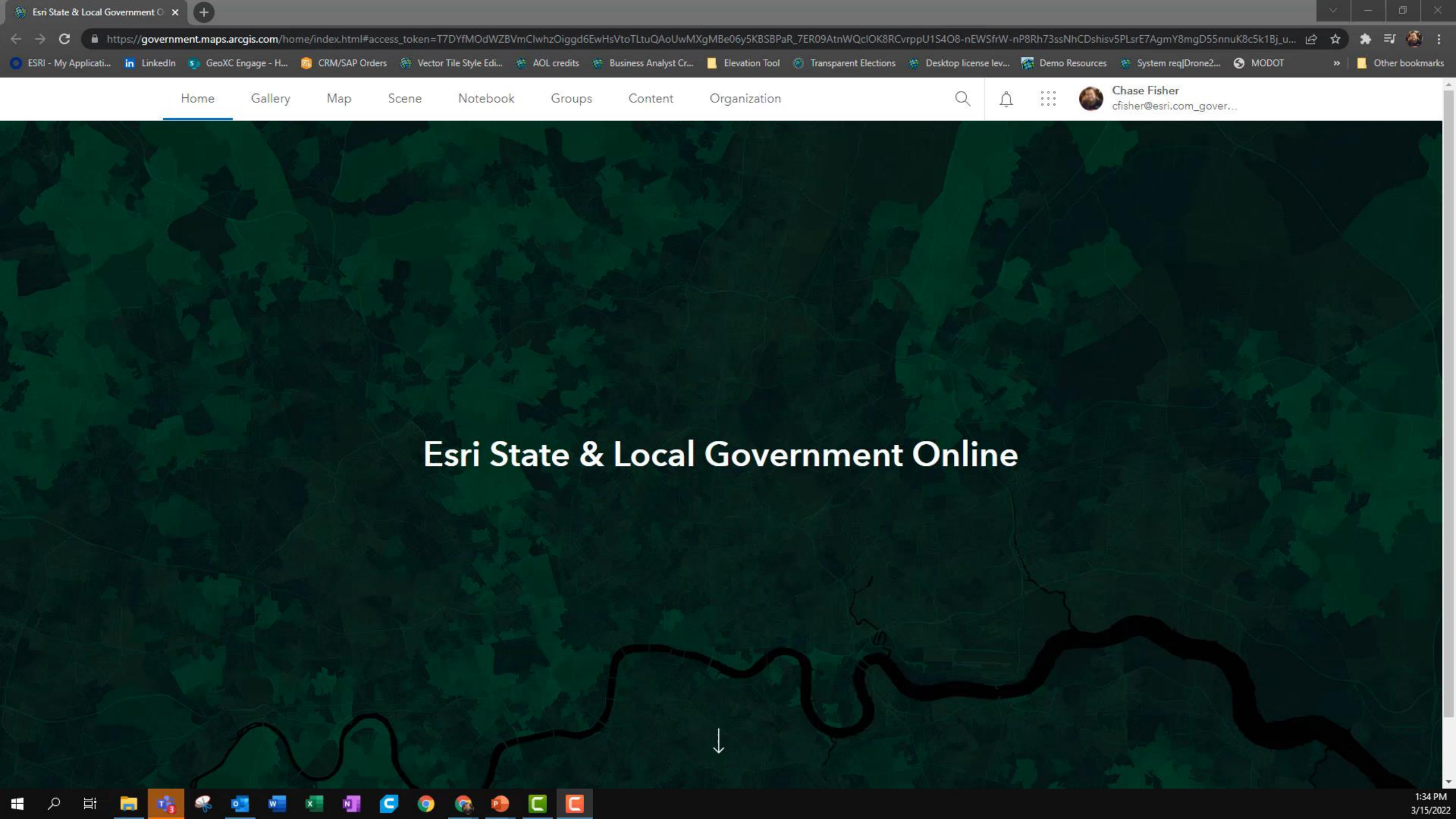




Quick Introduction Demo

Chase Fisher





Esri State & Local Government Online

An
experience

Design/
config

GUI builder



Templates

1



Widgets

2



Data sources

3



Themes

4

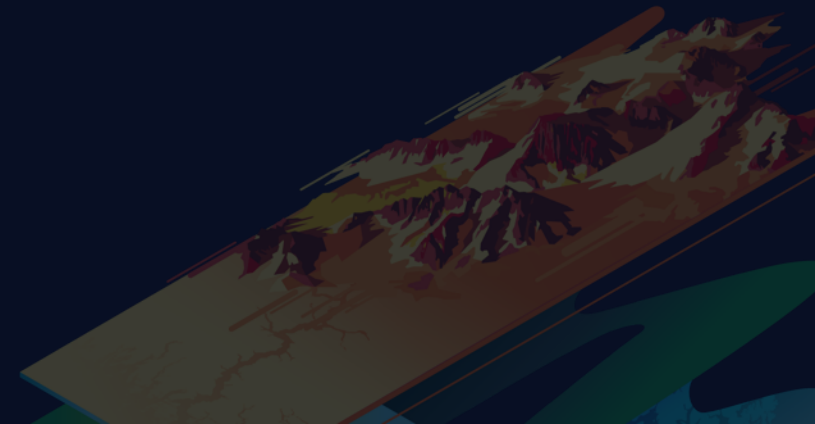


Extensibility

5

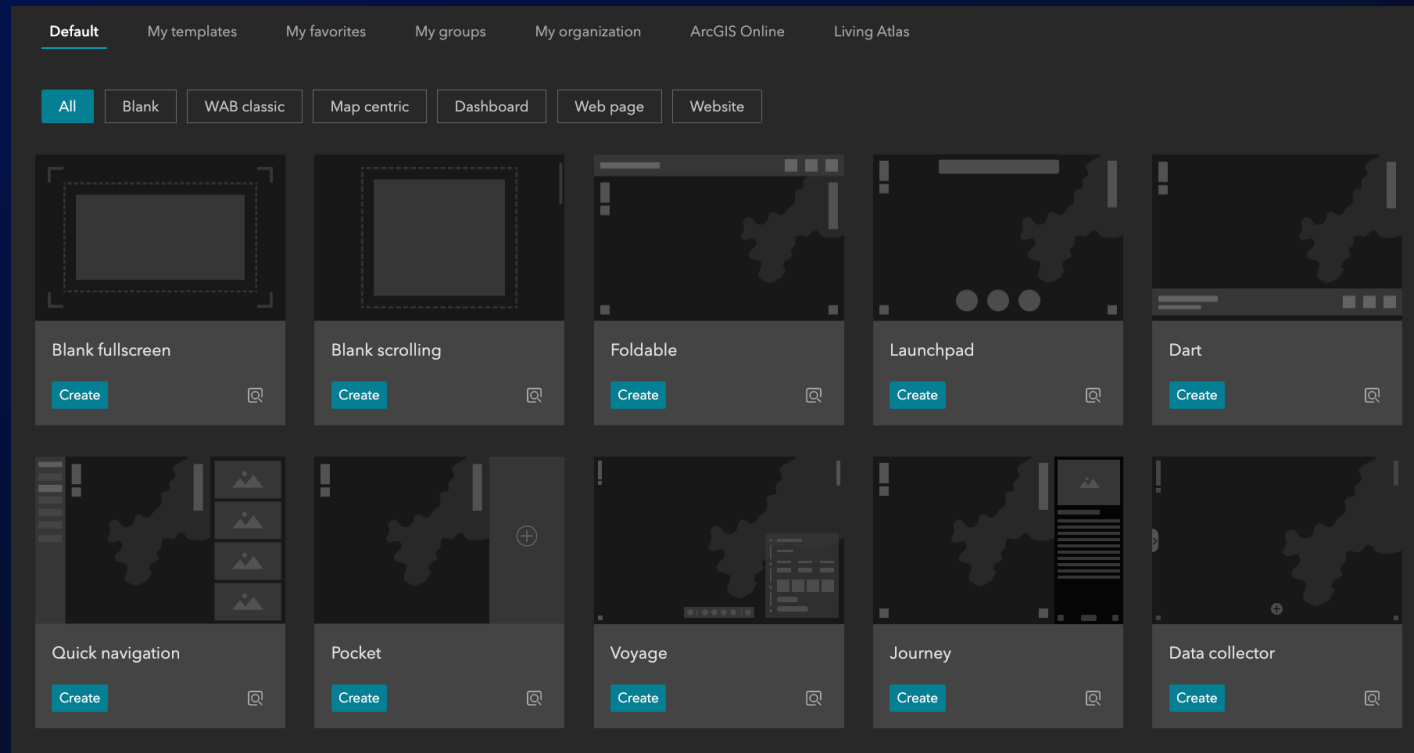
Template

Building Block

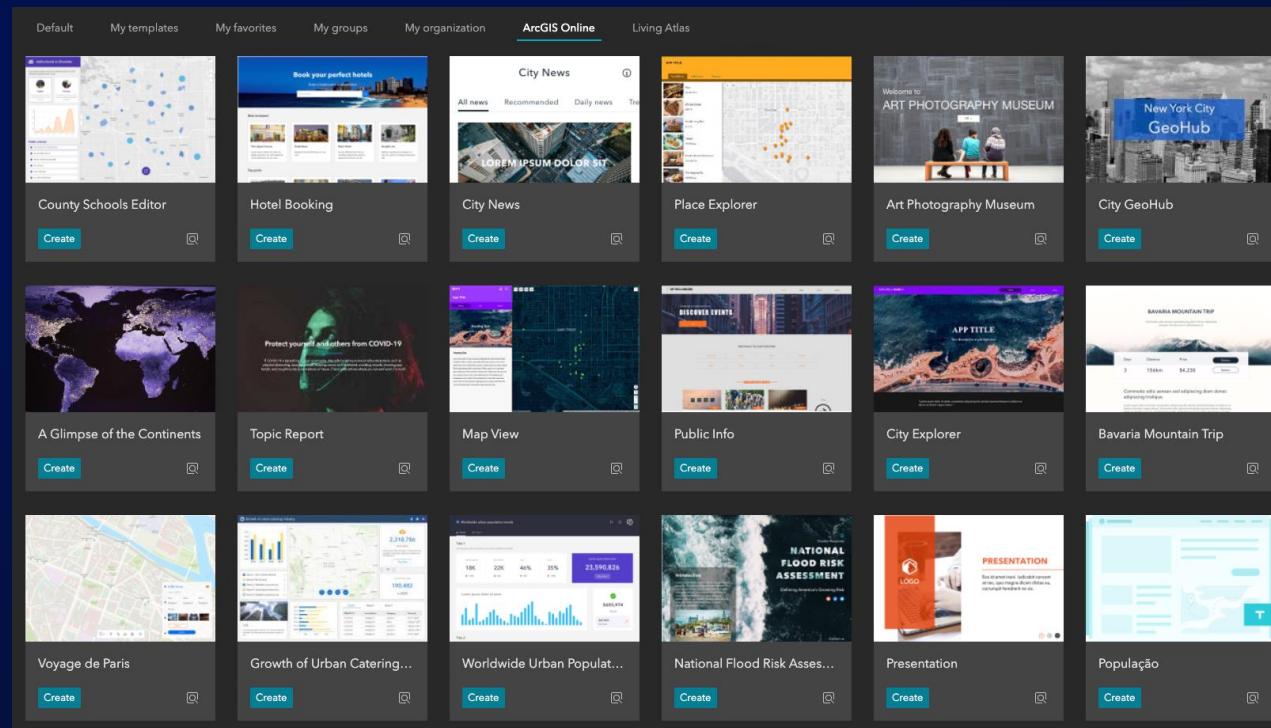


Templates

- Fullscreen
- Scrolling

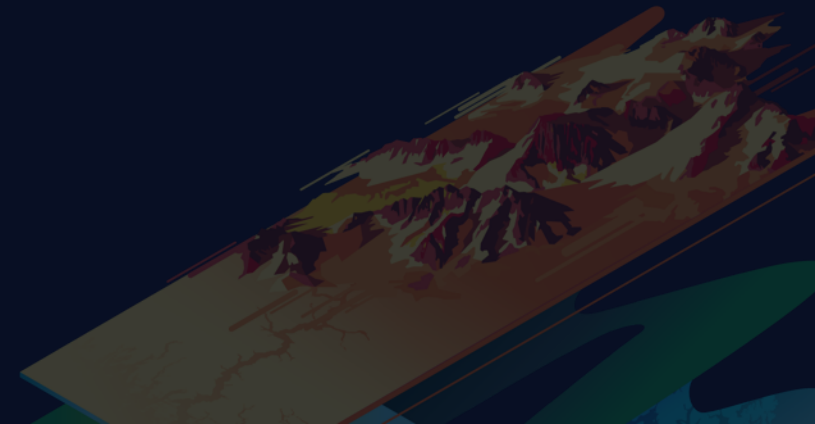


Public Templates



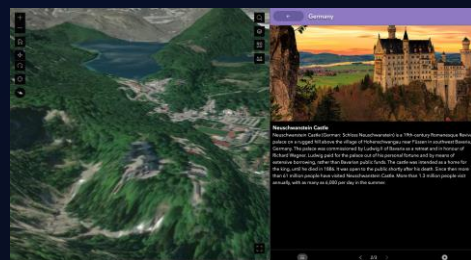
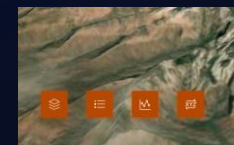
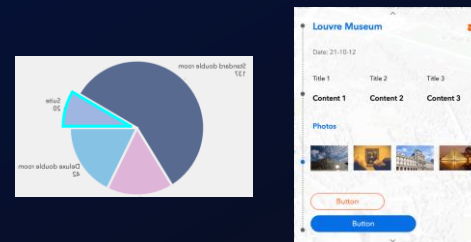
Widget

Building Blocks



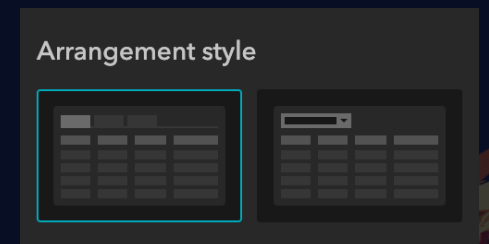
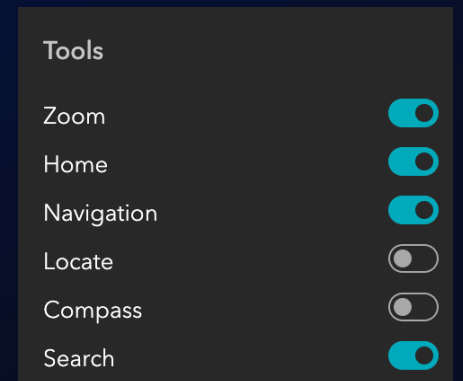
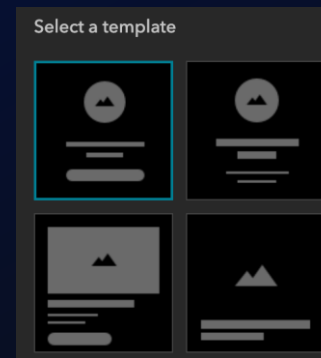
Types of Widgets

- Map centric
- Data centric
- Page elements
- Menu and toolbars
- Layout
- Section



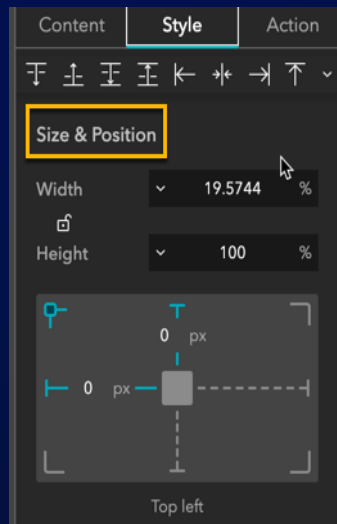
Widget Content

- Select data
- Tools, arrangement, templates, advanced options

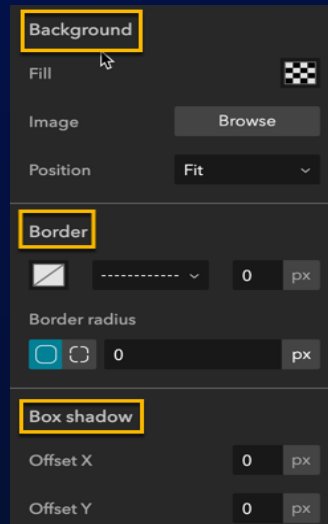


Widget Style

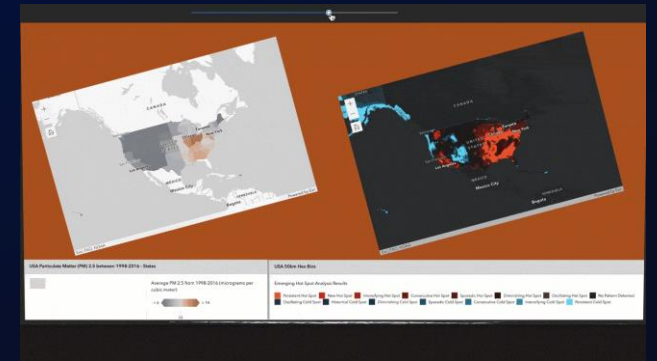
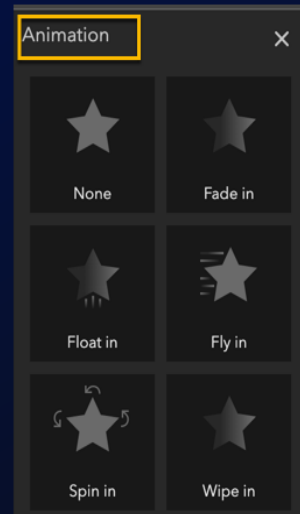
Size & Position



Background, Border & Box shadow



Animation



Widget Action

- Enables widgets talk with each other
- Data action allows end users to click on
- Message action applies automatically at runtime

Interior Landmarks

BoroughID		...	Export to JSON	Export all
BX			Export to CSV	Export selected >
MN			Export to GeoJSON	Zoom to
MN		LP-01635		Pan to
MN		LP-01746		Show on map
MN		LP-01096		IRT Subway System

Data action

Table 1

Content Style Action

Message action Data action

Enable data action ⓘ

Please choose the following data actions

- ☒ ☒ Pan to
- ☒ ☒ Show on map
- ☒ ☒ Zoom to
- ☐ Export

Message action

Map 2

Content Style Action

Message action Data action

Add a trigger

Extent Changes

Map 1

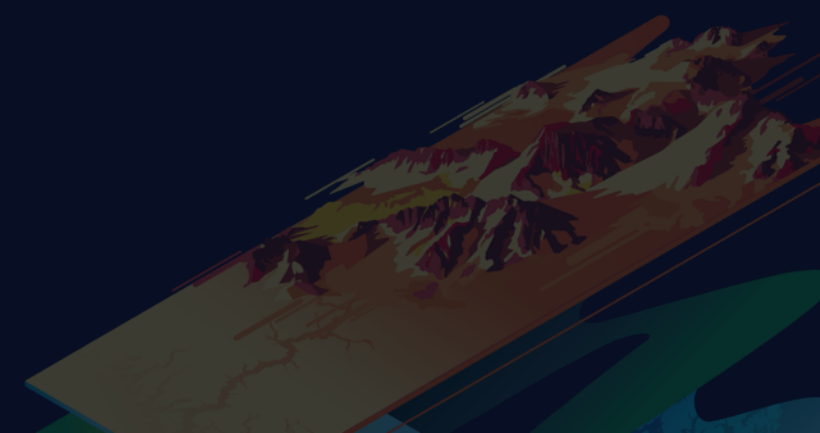
Zoom to

+ Add action

Message Action

- A trigger (source widget) broadcasts a message
- Targets listen to the message, including widgets and the app framework (data)
- Targets response with actions

Trigger	Target	Action
Extent Changes from Map 1	Map 2	Zoom to the same extent as Map 1
	Framework (data)	Filter Data Records For example, List 1 displays only features within the current map extent



Layout Widgets

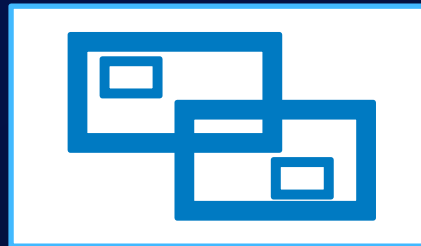
Row



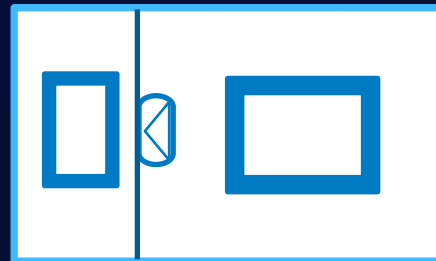
Column



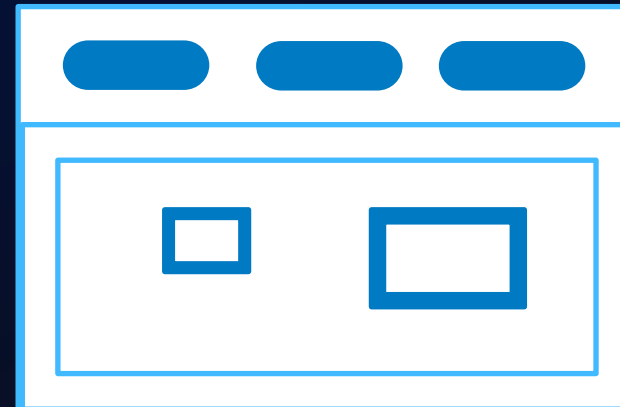
Fixed Panel



Sidebar



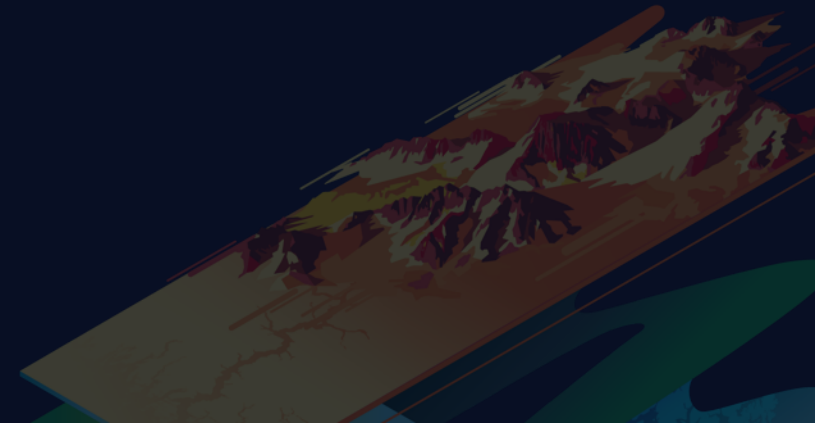
Section & View Navigation

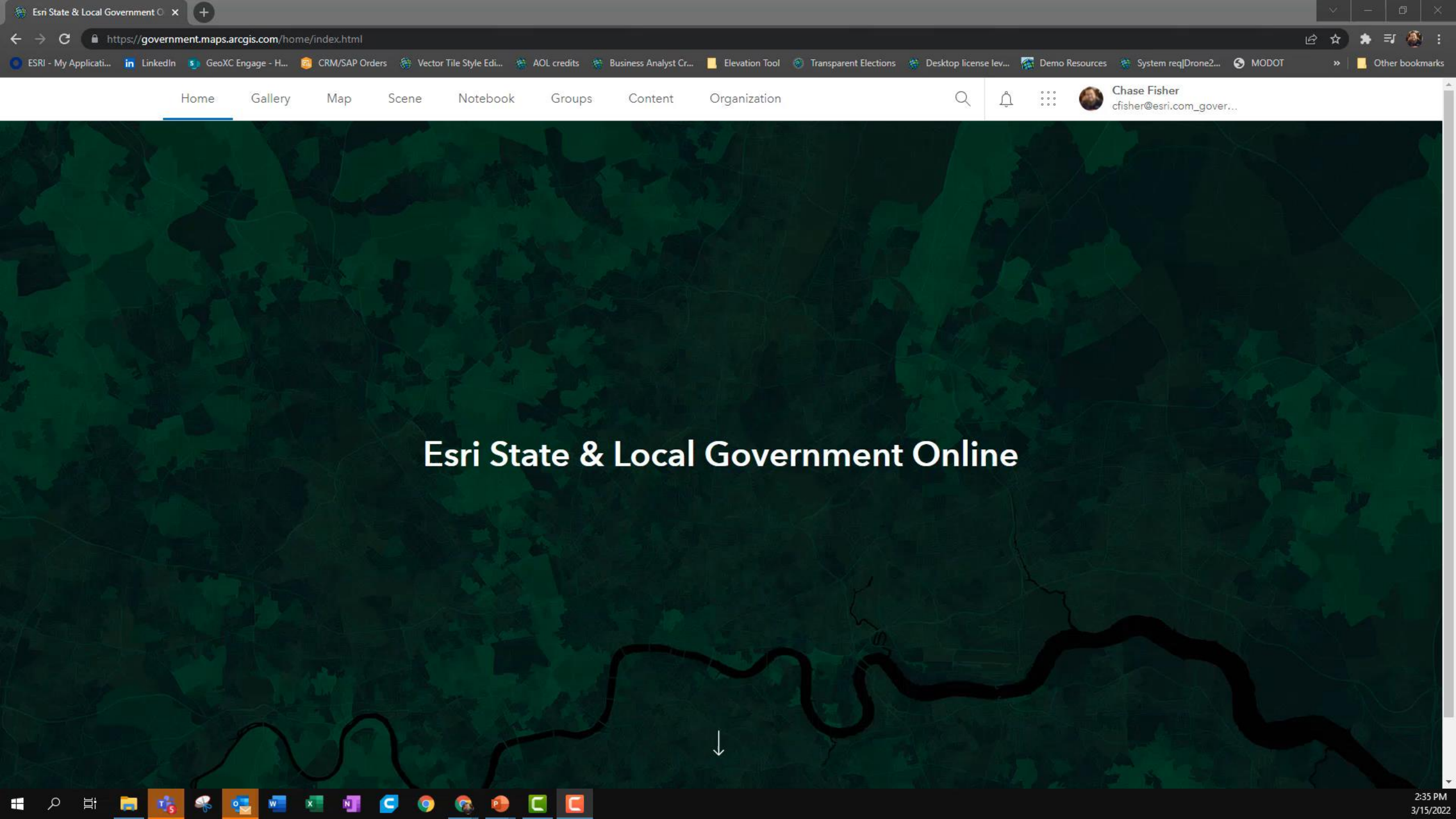




Widget Demo

Chase Fisher

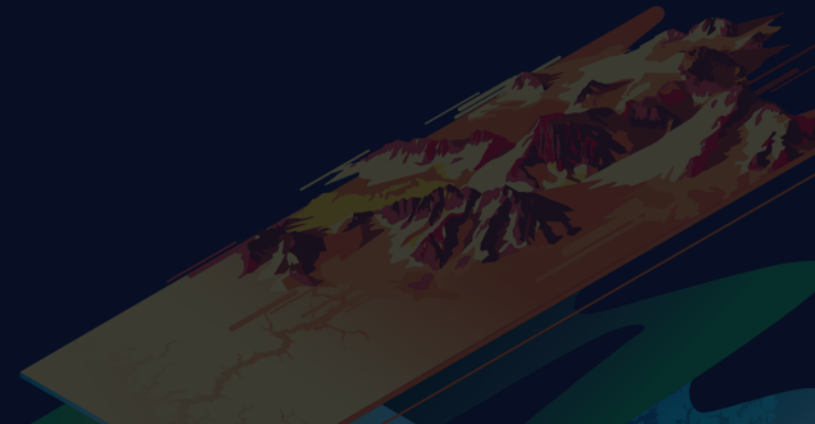




Esri State & Local Government Online

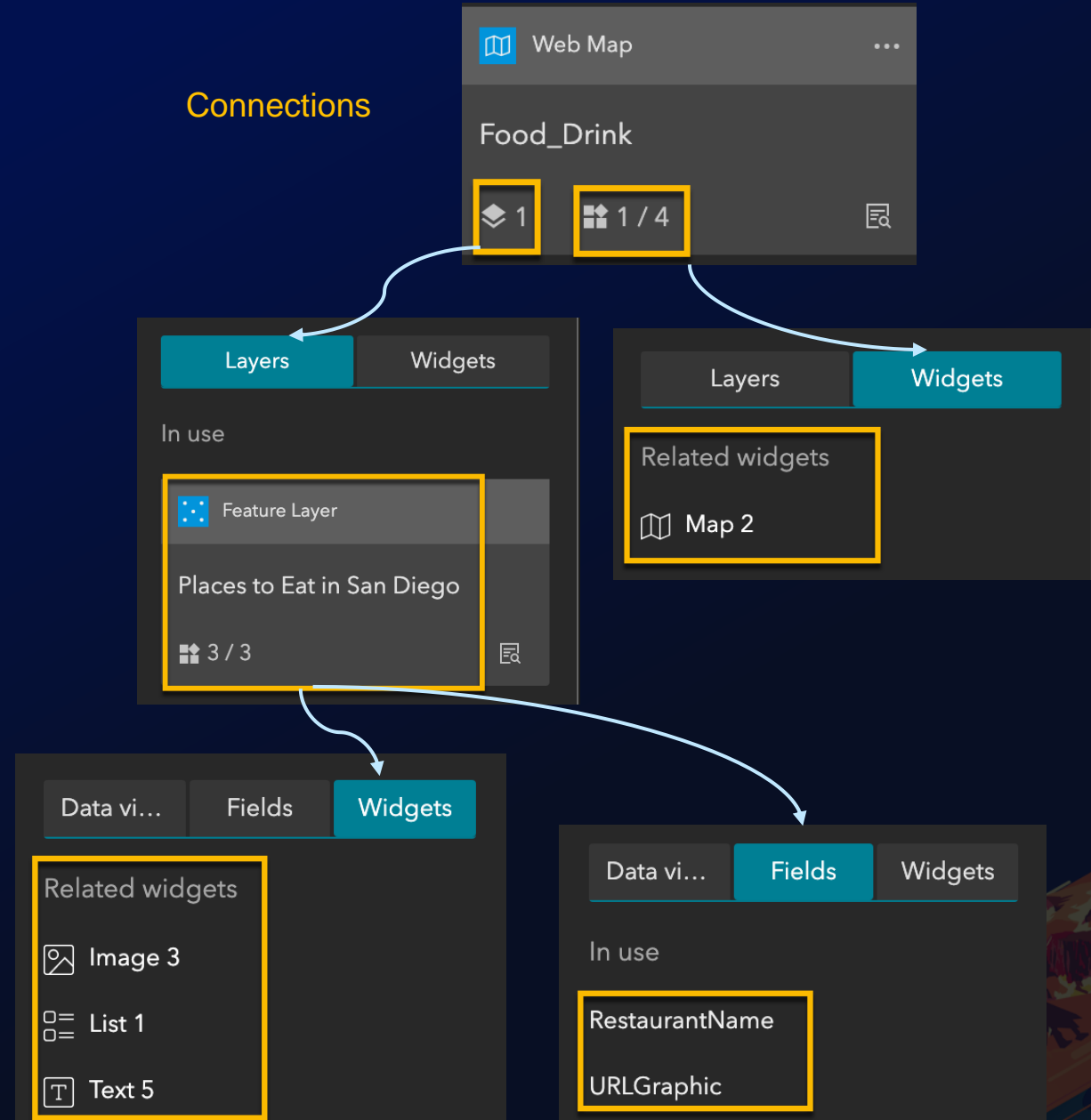
Data Source

Building Block



Data Source

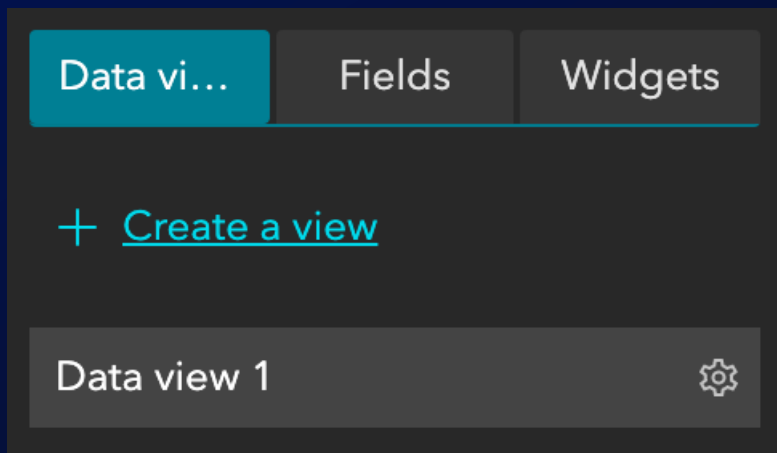
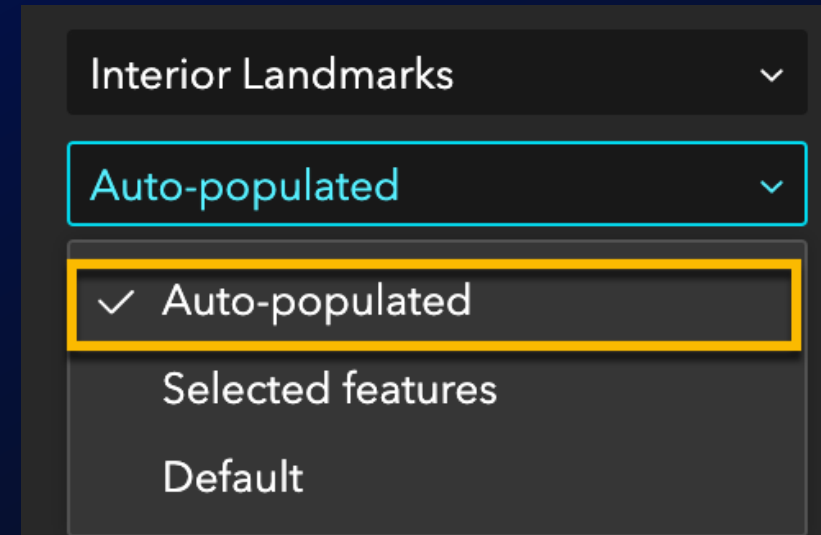
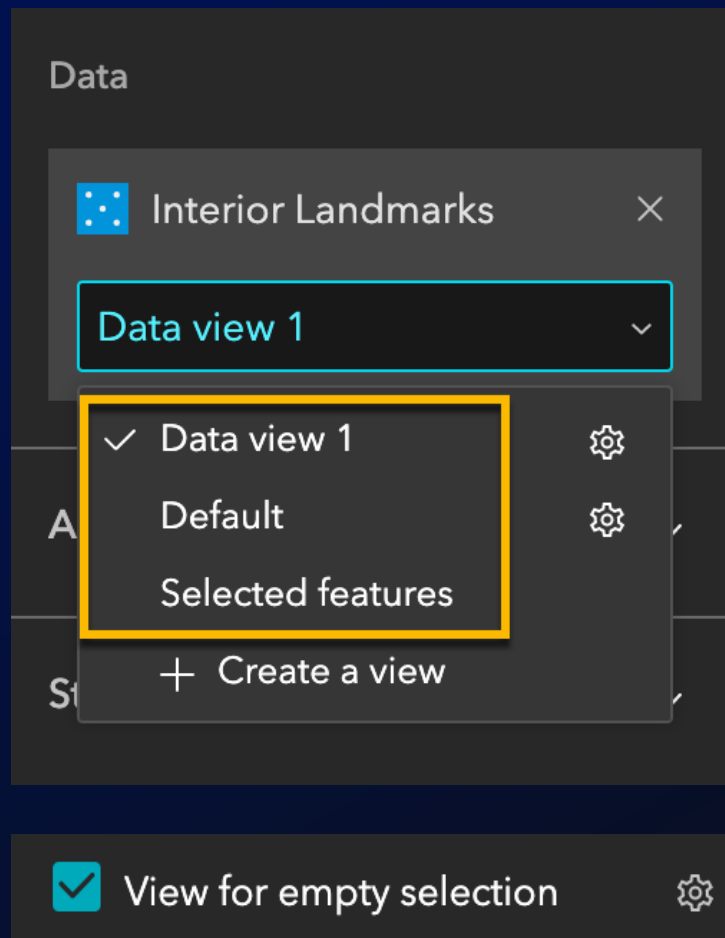
- Shared at the app (framework) Level
- Show connections between
 - layers
 - widgets
 - fields



Data Source Views

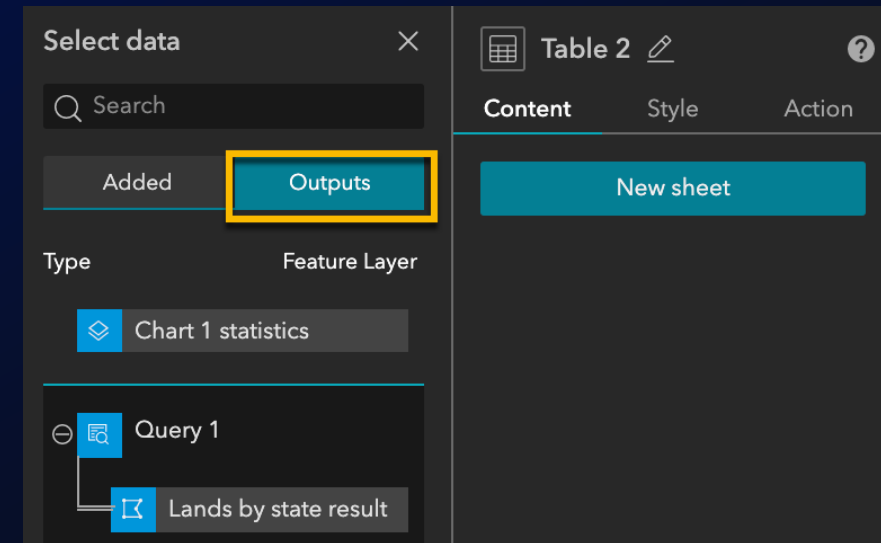
1. Default
2. Selected features
3. Auto-populated

4. Data view



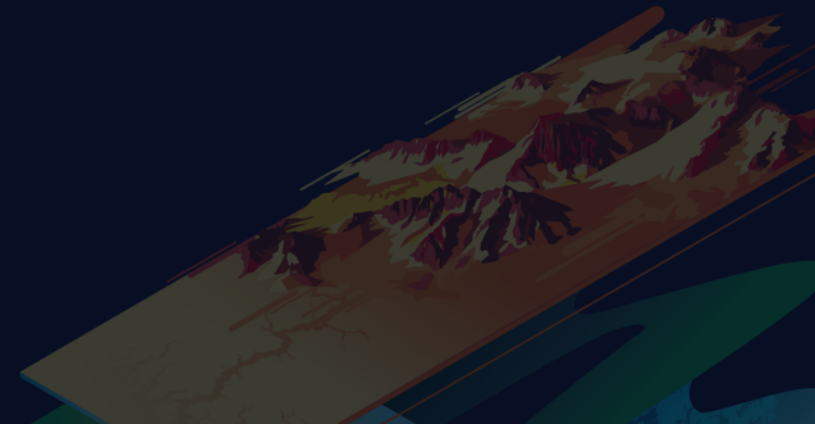
Output Data Source

- Generated by widgets at runtime
 - Chart, Query
- Can be other widget's data source
 - Table, Text

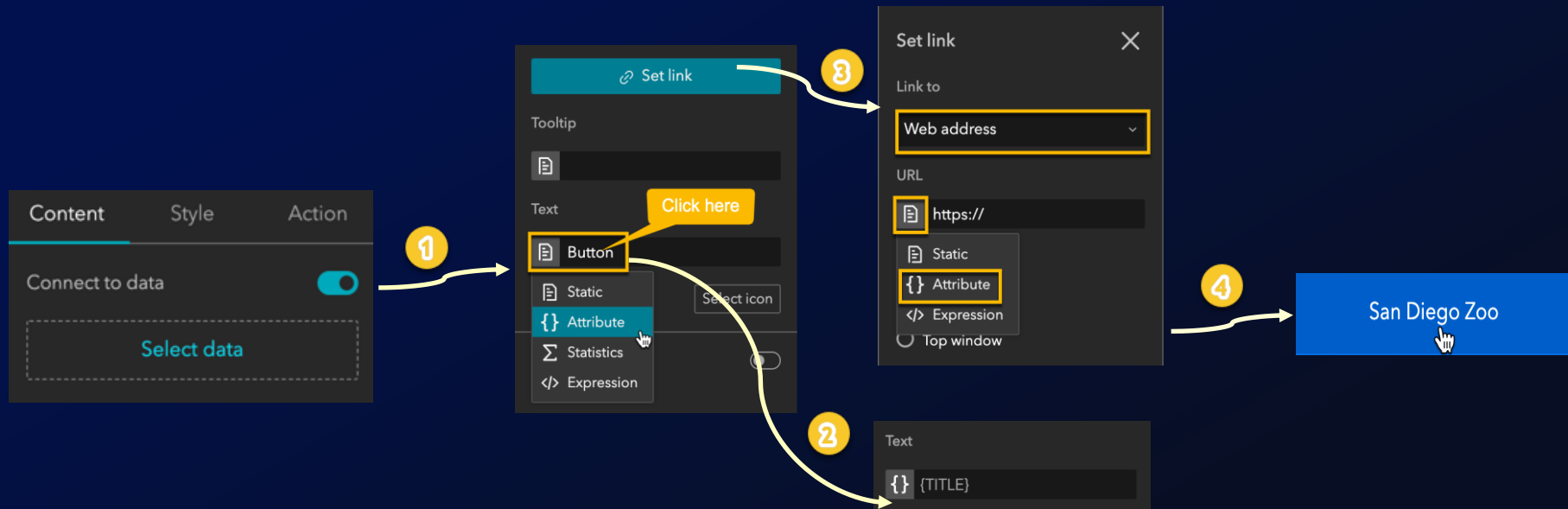


Dynamic Content

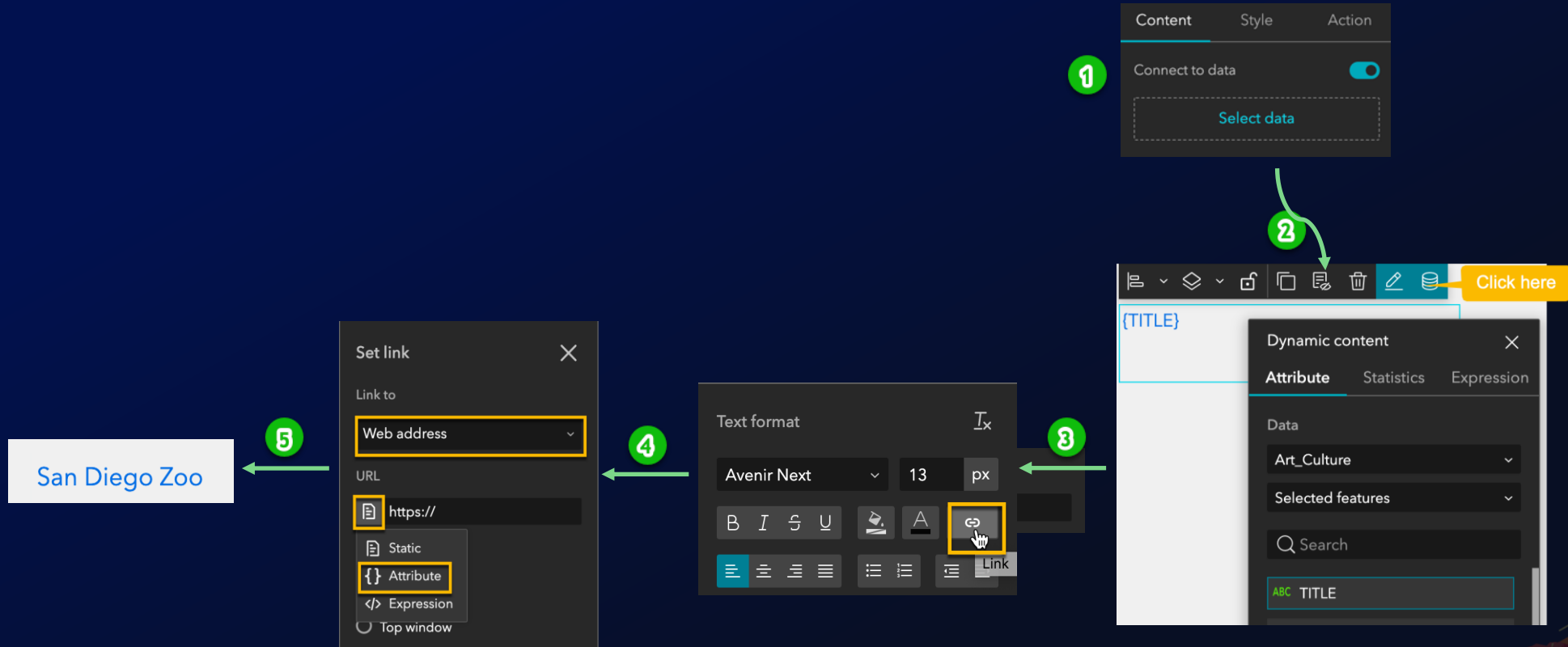
- Dynamically display attribute values, statistics or expressions
- Use Image, Text, Button, List, Card, and Embed
- Connect to data
- Choose a view from data source



Dynamic Linked Button

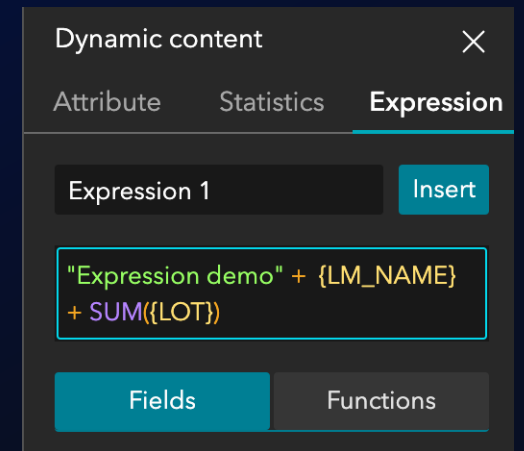
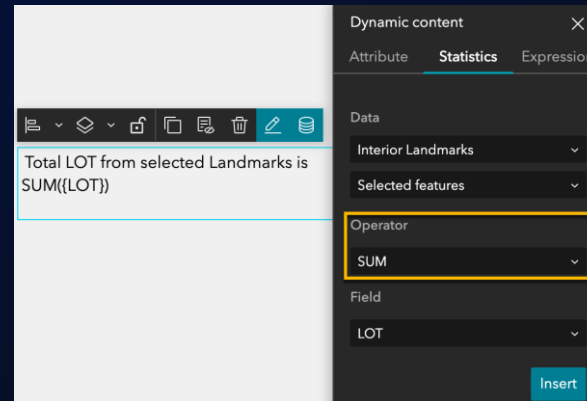


Dynamic Linked Text



Dynamic Expression

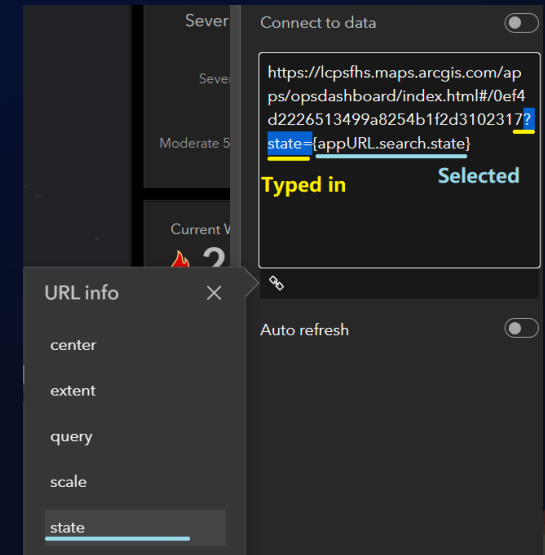
- Get the statistic result of a numeric field
- Use the expression editor to input text, numbers, fields, and functions



Apps Integration

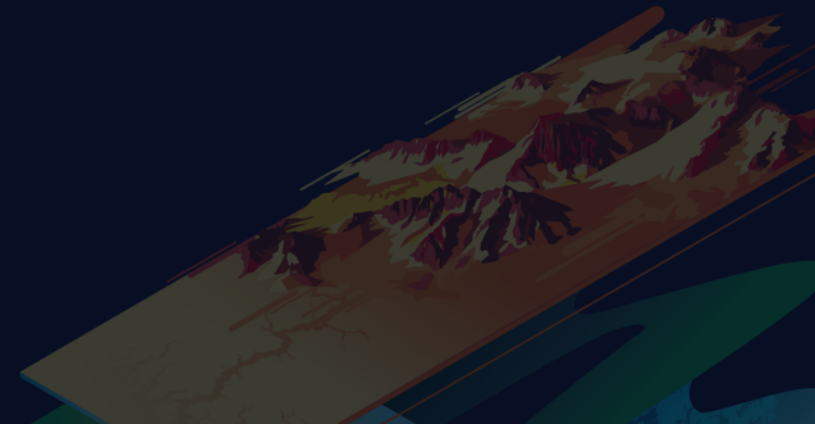
- Survey widget for ArcGIS Survey123
 - Embed widget
 - ArcGIS Dashboards, Storymaps, Web AppBuilder
 - Display Dashboards or WAB apps with URL parameters
- <https://experience.arcgis.com/experience/9b69e6e7a6984952944d0410ac9b1872/?state=California>
- See the [blog](#)

Dynamic URLs



Theme

Building Block



Theme

- Define a set of color and font
- Customized options
 - Color
 - Font style
 - Font size

Default

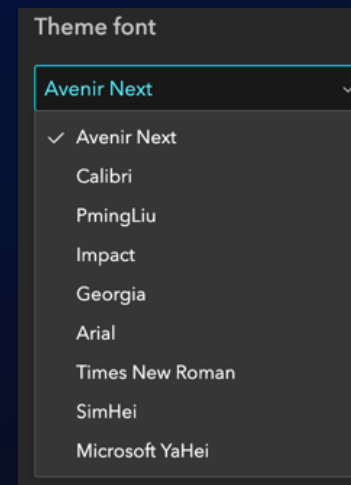
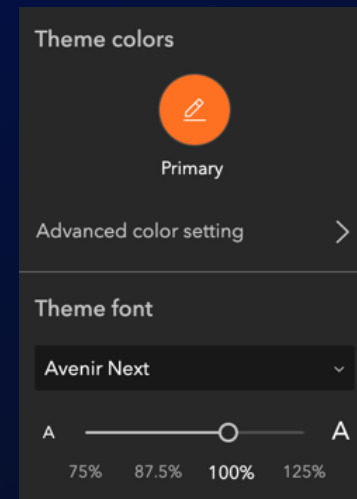
Dark

Vivid

Ink

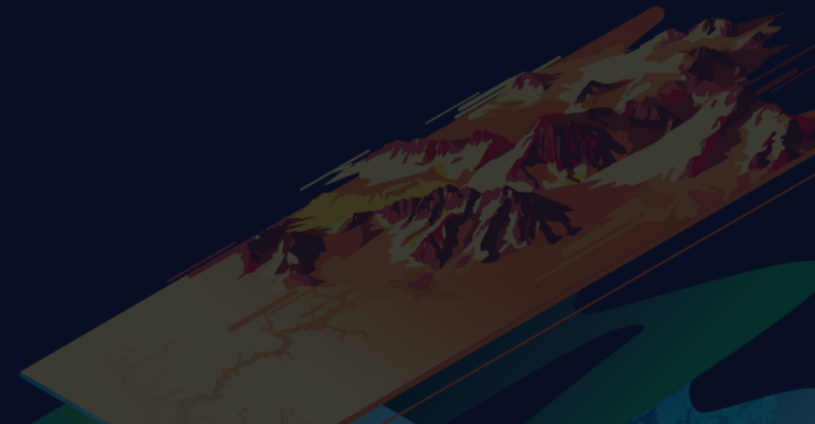
Mysterious

Shared



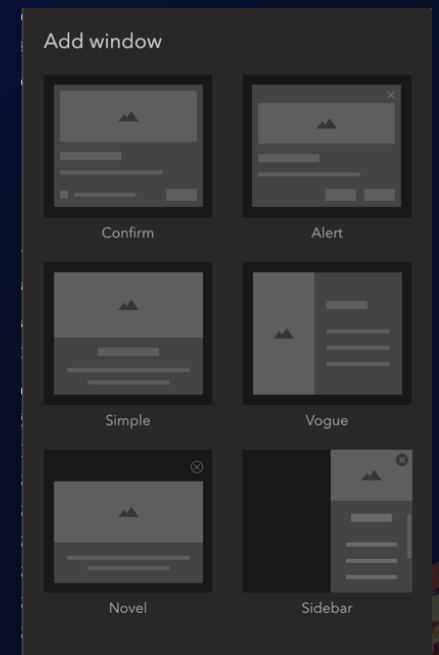
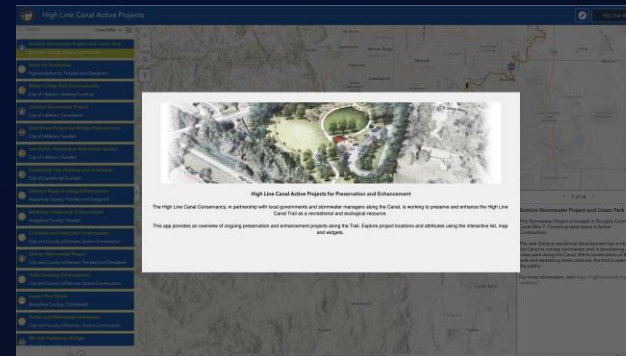
Page, Window, Screen Group

Building Block



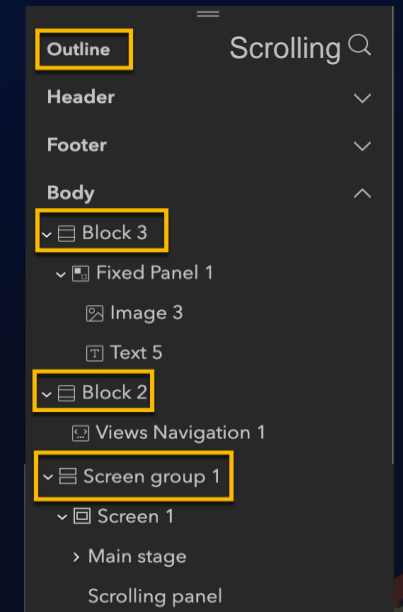
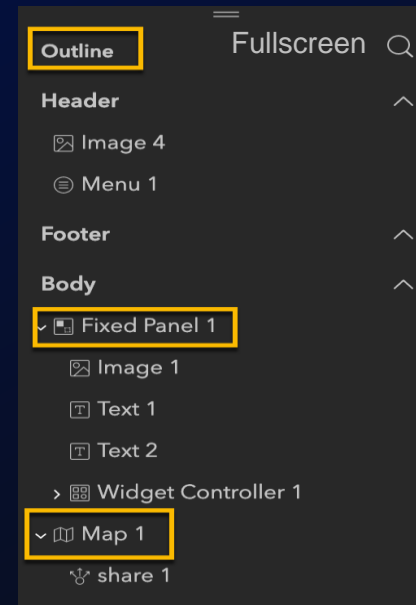
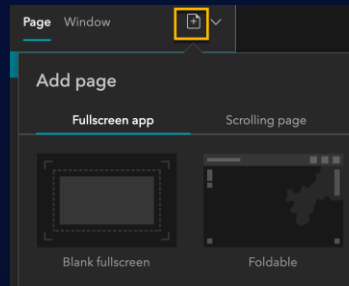
Window

- Display Splash screens, information, or confirmation
- Fixed mode - shown in a fixed position like a splash screen
- Anchored mode - shown around the widget that triggers it
- Window templates



Page

- Header, Footer, Open with window
- **Outline** helps navigate widgets on the page
- Page templates



Screen Group

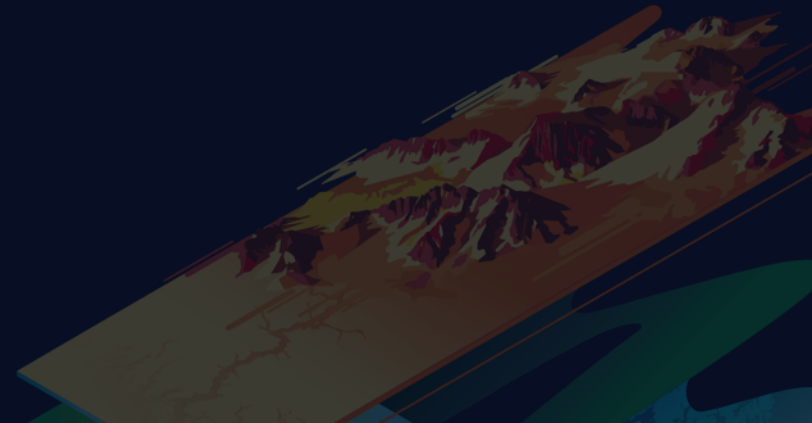
Engaging
Modern
Web experience





Mobile Optimization

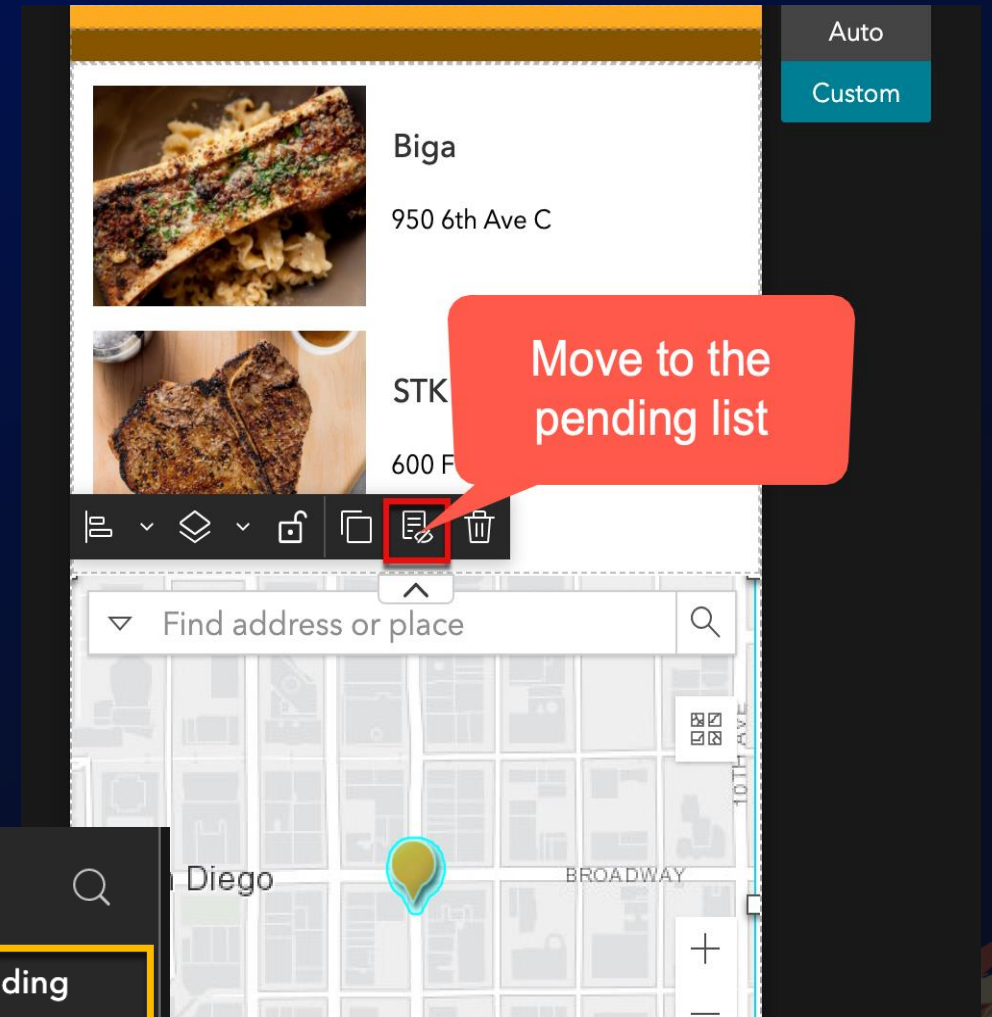
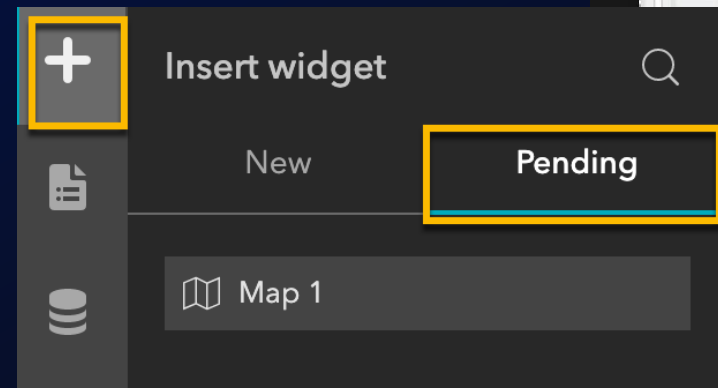
Chase Fisher



Mobile Optimization



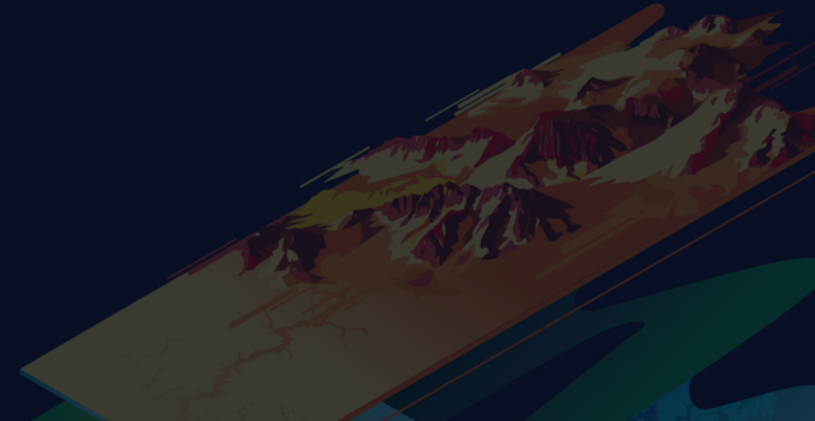
- Configure the app on the mobile differently from that on the desktop
- Move widgets to the pending list if you want to
 - Make content changes
 - Use less or different widgets
 - Change the layout



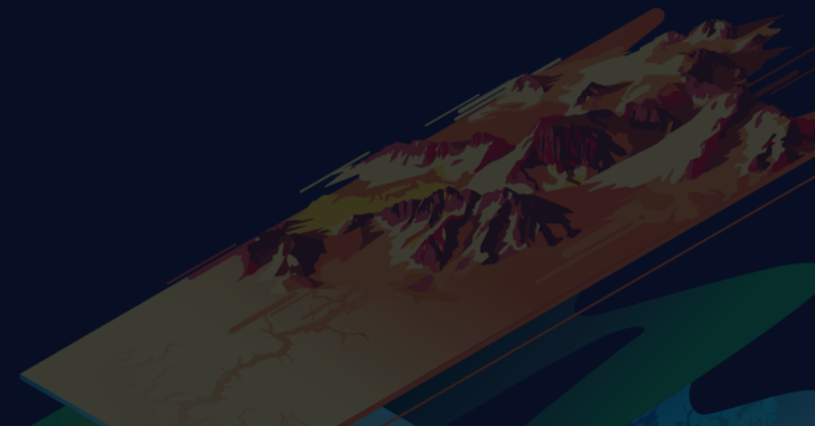


Dynamic Content / Mobile Optimization Demo

Chase Fisher



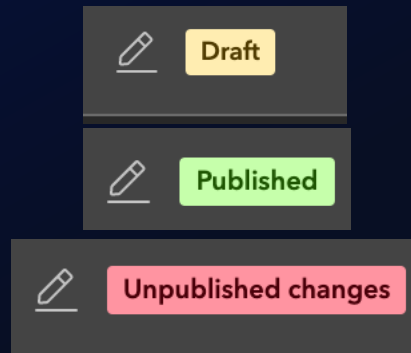
Publish Apps



Publish Apps



Draft
Published
Unpublished changes



Subscriber Content

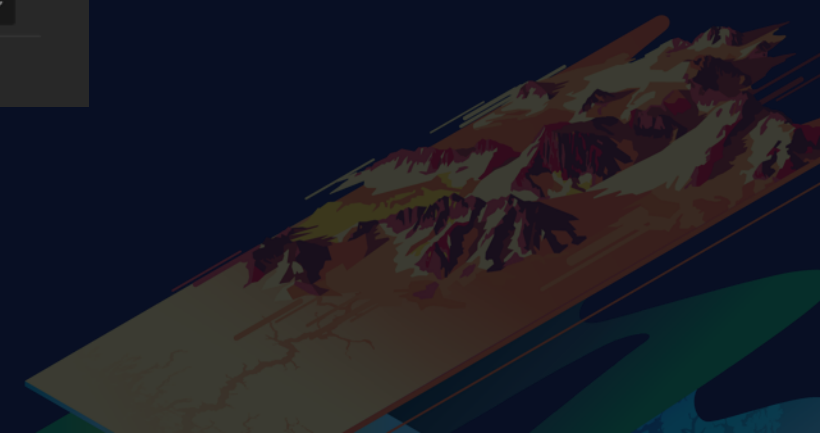
- Authorize access from your account, so end users are not asked to sign in
- The popup shows when you publish the app

Subscriber contents

Certain resources used in this experience require an ArcGIS subscription. Enable public access by authoring with your subscription. Be aware that some content will consume credits.

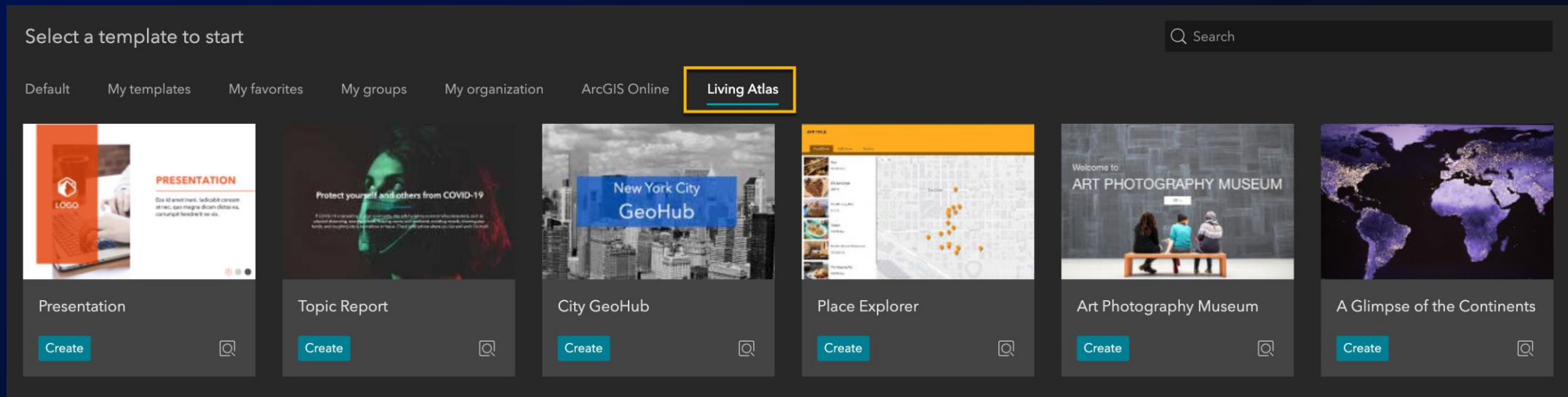
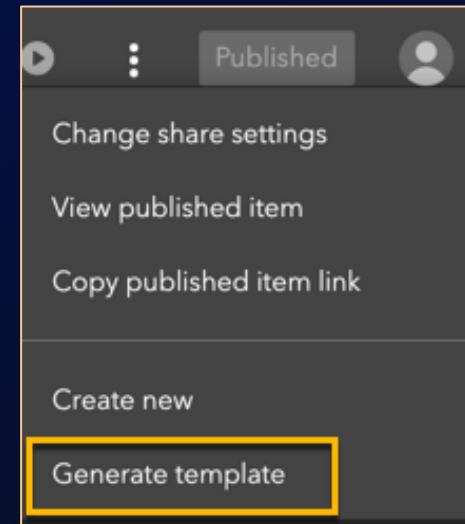
Data

Authorized	Subscriber content	Credits	Request limit	Interval
<input checked="" type="checkbox"/>	USA Railroads	✓	<div><div></div><div></div></div>	None <div></div>

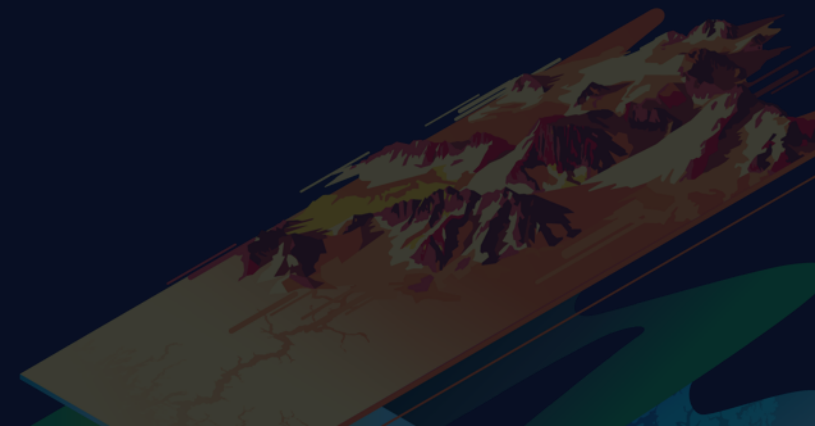


Generate templates

- Create your own starters for reuse and branding
- Shared with others



Road Map



2022 Road Map And Beyond

Q1

- Draw
- Directions
- Utility Network Trace (beta)
- Business Analyst Infographic (beta)
- Floor Filter (beta)

Q2

- Print
- Timeline (Time Slider in WAB)
- Visibility (3D, includes Daylight, Shadow cast, and Line of sight tools)

Q3, Q4, and beyond

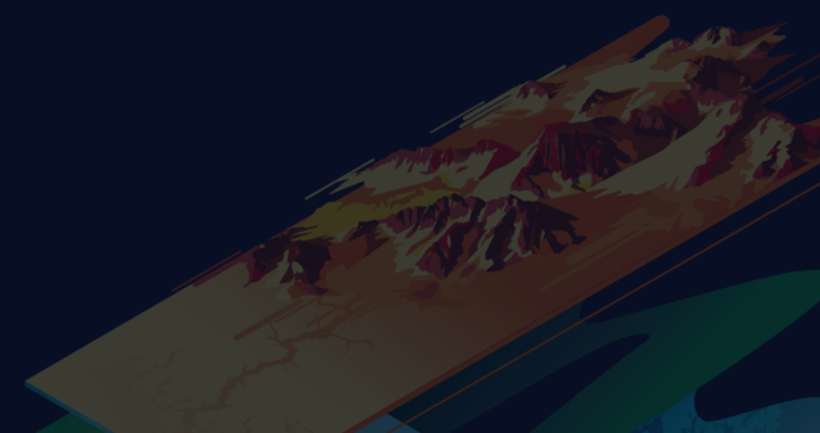
- Add custom widgets in ArcGIS Enterprise
- Accessibility
- Add Data
- Swipe
- Basemap Gallery
- Geoprocessing

Helpful Resources

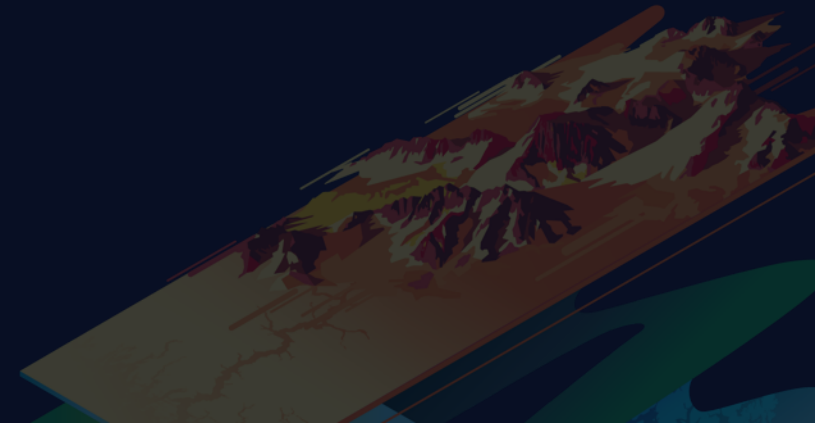


- [Experience Builder Developer Edition](#)
- [Experience Builder Online Edition](#)
- [Gallery](#)
- [Product page](#)
- [Community](#)
- [Blog](#)

- [Learn lessons](#)
- [YouTube Playlist \(full video\)](#)
- [YouTube Playlist \(short video\)](#)
- [YouTube Release Playlist](#)



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OF
WHERE®