

ArcGIS Pro: What's New and The Road Ahead

Kory Kramer | ArcGIS Pro Product Manager

ENERGY RESOURCES GIS CONFERENCE 2022

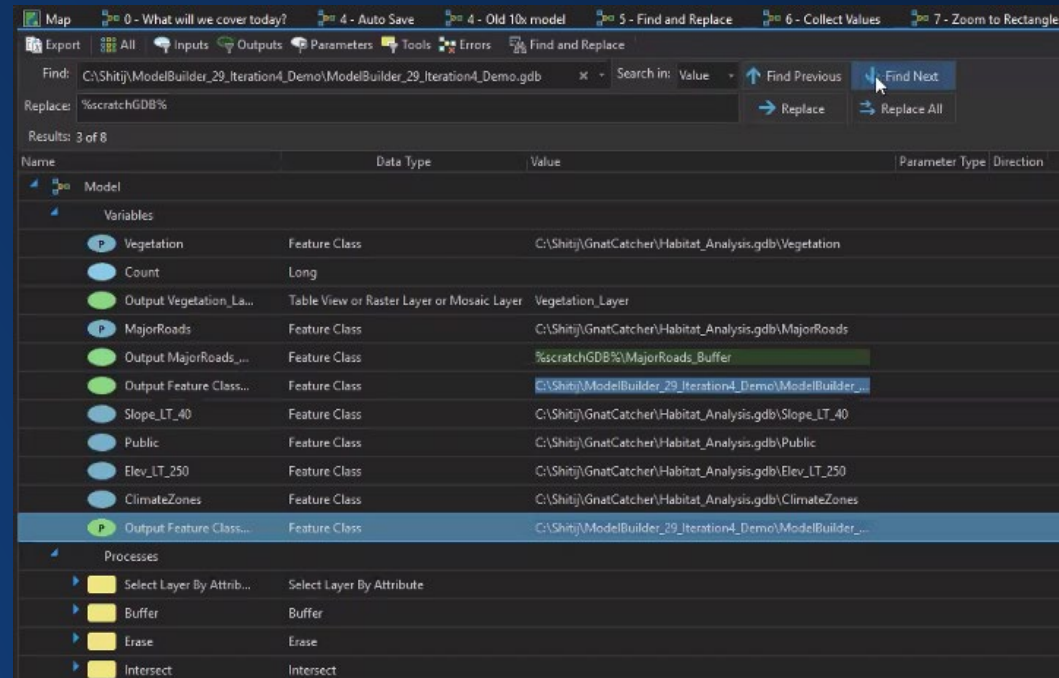


ArcGIS Pro 2.9 Highlights



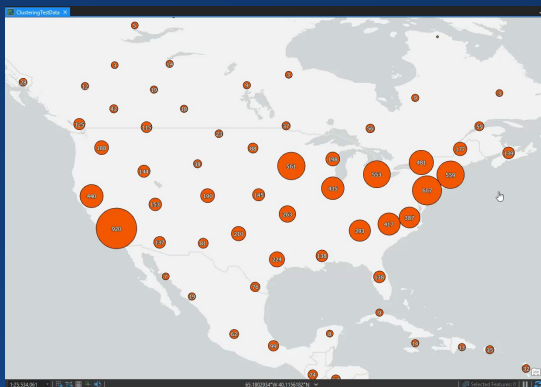
Performance and Productivity Enhancements

- Application
- CAD/BIM
- Geodatabase
- Sharing
- Geoprocessing
- Annotation/Labeling
- Content Management



Model Builder Find & Replace

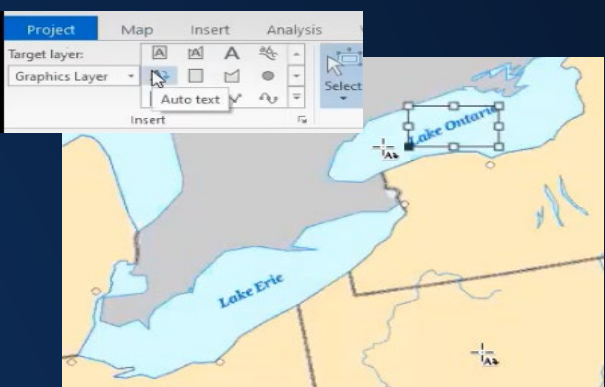
ArcGIS Pro 2.9 Highlights



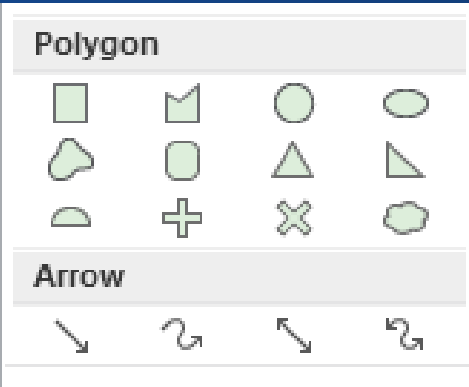
Dynamic Feature Clustering



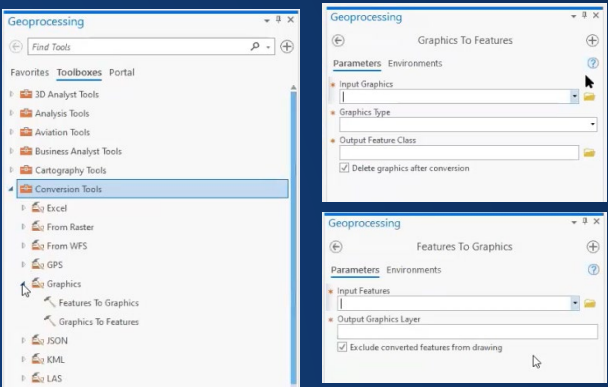
Animated Symbolology



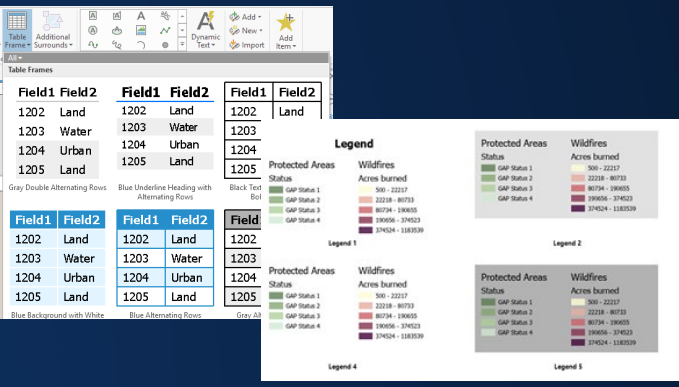
Auto Text Tool



Insert Graphic Shapes

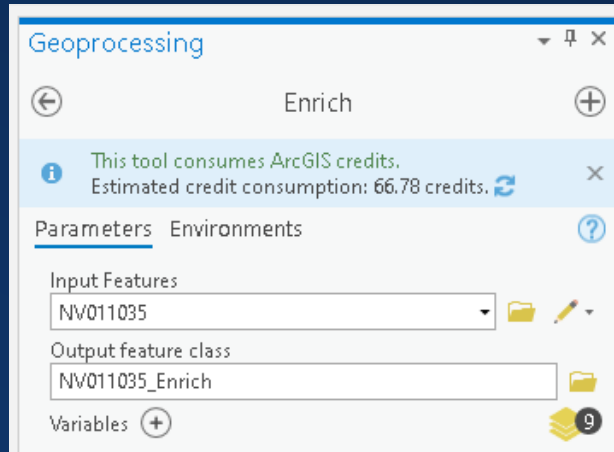


Graphics to Features /
Features to Graphics

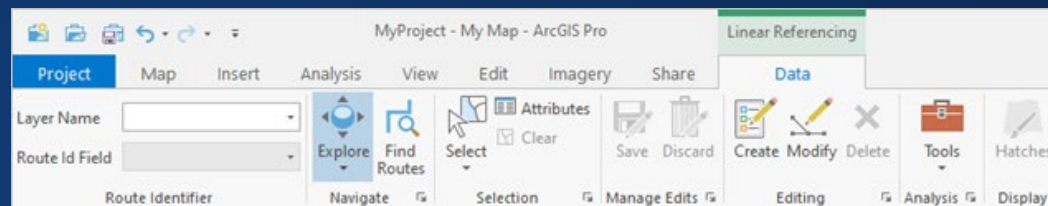


Legend & Table Styles

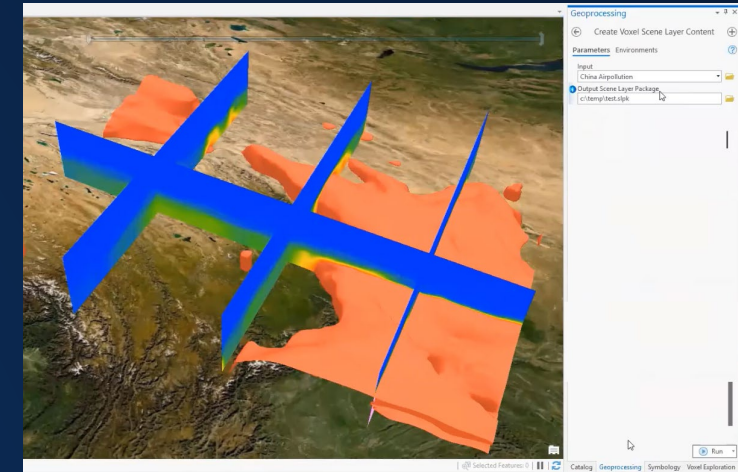
ArcGIS Pro 2.9 Highlights



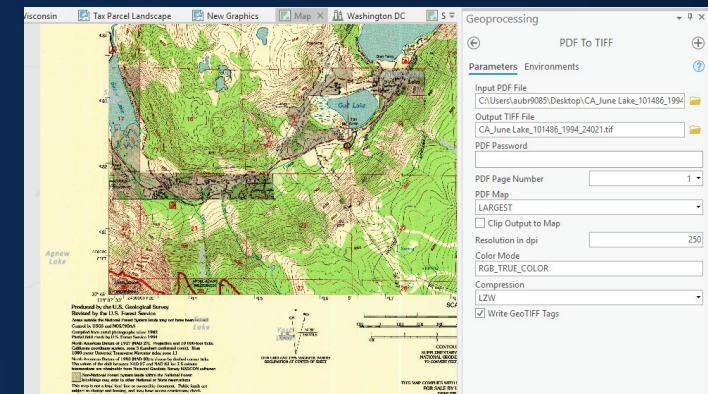
Credit Estimation
Enrich Layer, Summary Reports,
Drive Times



Linear Referencing UI



Share Voxel Scene Layers
Online 2.9 | Enterprise 3.0



PDF to TIFF Tool

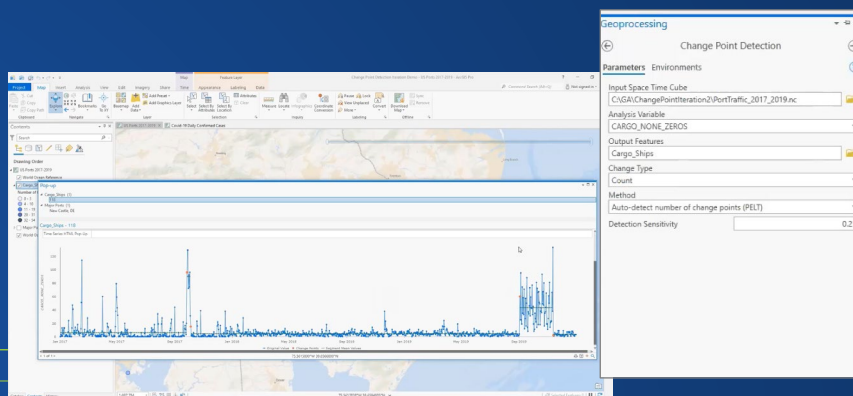
ArcGIS Pro 2.9 Highlights



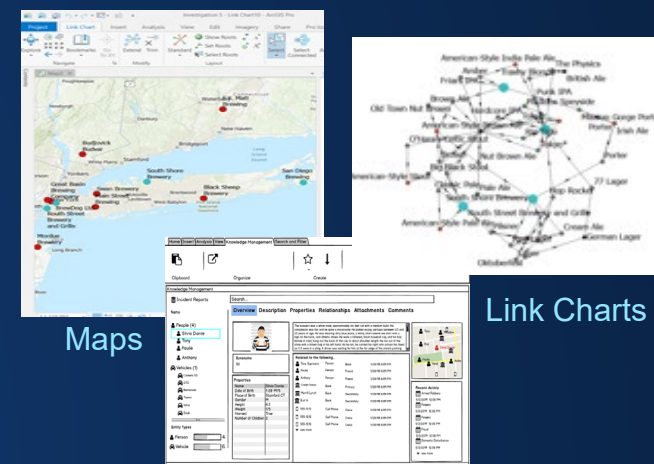
Presence-only Prediction



Cloud Data Warehouses



Change Point Detection
Mean shift, Std Dev, Count 2.9 |
Slope 3.0



Maps

Link Charts

Entity cards

Knowledge Graphs



What's New in ArcGIS Pro 2.9 Demo

What's Coming in ArcGIS Pro 3.0



Semantic Versioning

- ArcGIS Pro version numbers use the semantic versioning specification
- Given a version number MAJOR.MINOR.PATCH, increment the:
 - MAJOR version when you make incompatible API changes,
 - MINOR version when you add functionality in a backwards compatible manner, and
 - PATCH version when you make backwards compatible bug fixes.

Example

2.9.2

The next release of ArcGIS Pro is...

3.0.0

This is a breaking change release

ArcGIS Pro 3.0

At 3.0 ArcGIS Pro is moving to .NET 6 (formerly known as .NET Core)

- 4.8 was the last release of the .NET Framework
- .NET 6 is the current Long Term Support release of the new .NET line

This will result in breaking changes to the Pro APIs

- Add-ins will need to be converted to .NET 6
- Recompiled to work with Pro 3.0 and breaking changes fixed



API Breaking Changes

Breaking changes are related to:

Changes required to accommodate .NET 6 (minor)

- Classes and methods deprecated in 2.x will be deleted. Add-ins must switch to their replacements
- Object ID APIs will be 64-bit
- Changes to the APIs to improve consistency and quality

ArcGIS Pro SDK is also moving to Visual Studio 2022

- Support .NET 6
- Visual Studio 2019 and 2017 are not supported



Projects in 3.0

ArcGIS Pro projects are a zip archive

- 1.x and 2.x projects contained CIM objects persisted as XML

At 3.0, the CIM objects in the zip archive move to JSON

- Smaller size
- Faster
- Matches lyrx, mapx, pagx, files and styles
- Matches the use of the CIM on web and mobile
- We document the CIM spec as JSON at <https://github.com/esri/cim-spec>
- This will expand to include JSON Schema

Sharing

Use packages to share 3.x content with 2.x deployments

- Contain 3.x and 2.x versions of content

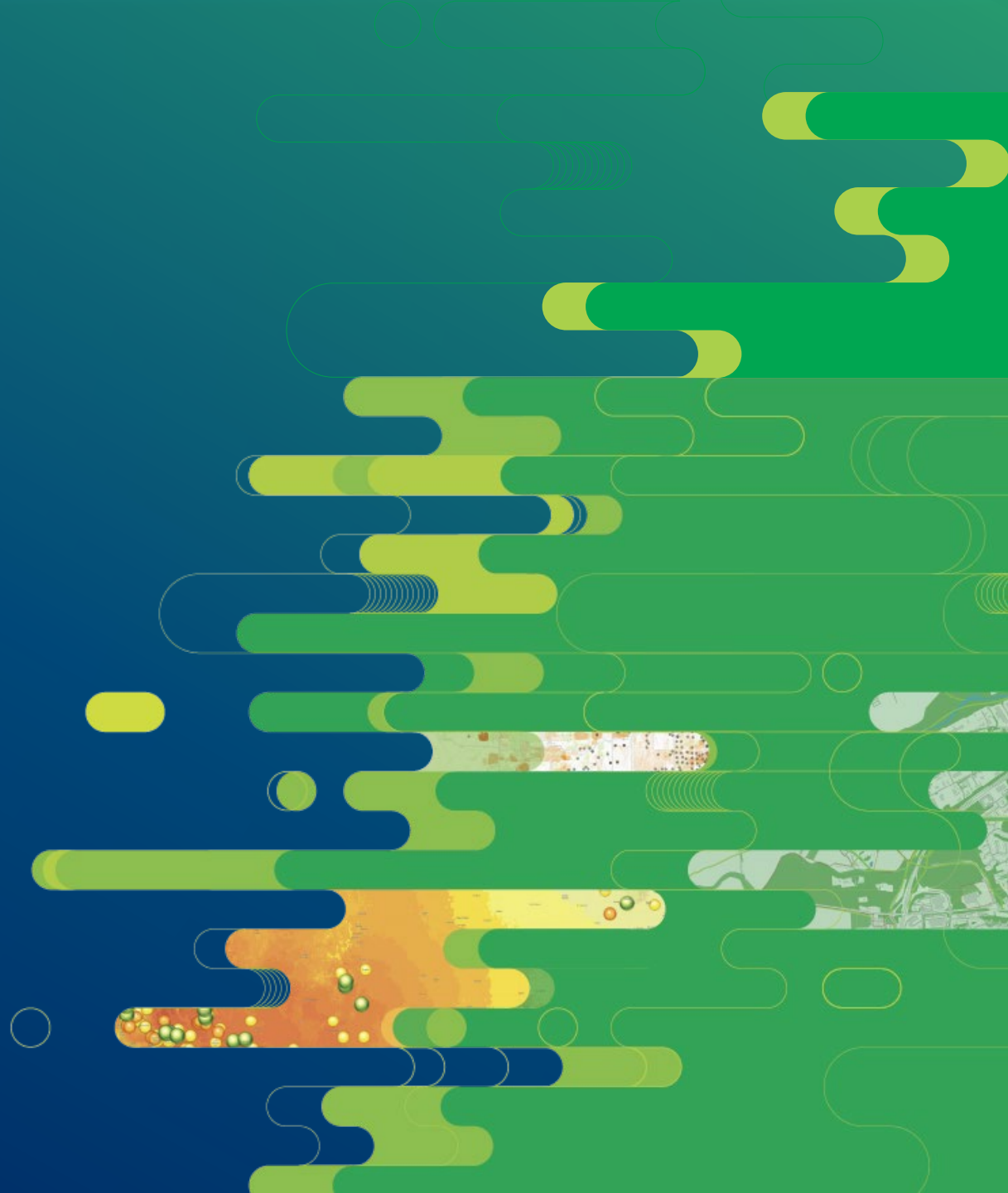
Service sharing will create 2.x content for older Enterprise versions

- e.g. ArcGIS Pro 3.0 sharing to Enterprise 10.9.1 will write 2.9 content

ArcGIS API for JavaScript and ArcGIS Runtime are prepared to handle 3.0 CIM objects

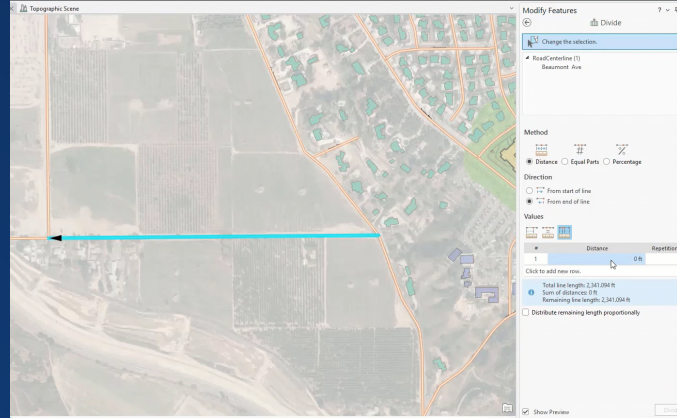
- Very few changes in the CIM symbol model

ArcGIS Pro 3.0 Highlights

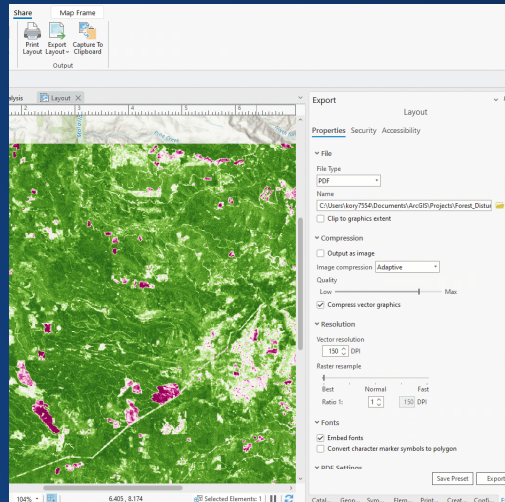


Performance and Productivity Enhancements

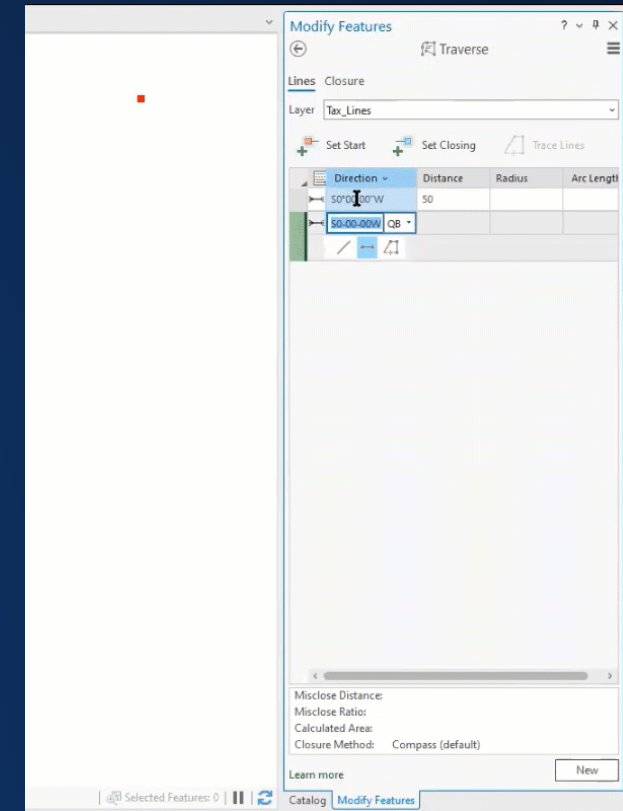
- Content Management
- Editing
- Display
- Geodatabase
- Geoprocessing
- Layout
- Map Authoring
- Parcel Fabric
- Scene Layers



Repetitions for distances - Divide tool

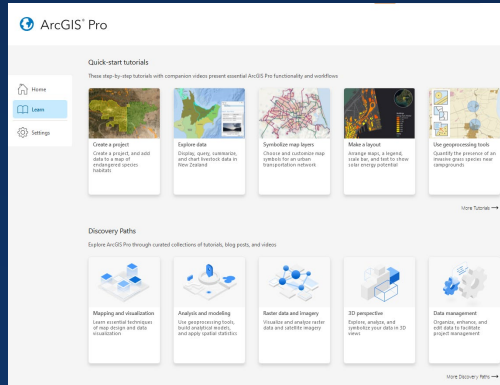


Export presets

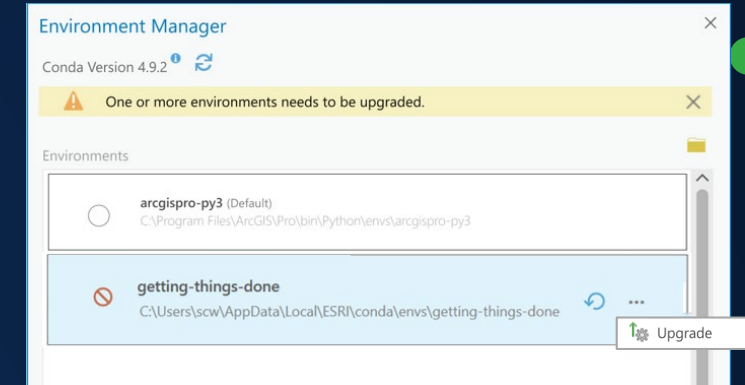


Traverse entry grid performance

ArcGIS Pro 3.0 Highlights



Dedicated Learn Page



Update Cloned Python Environments

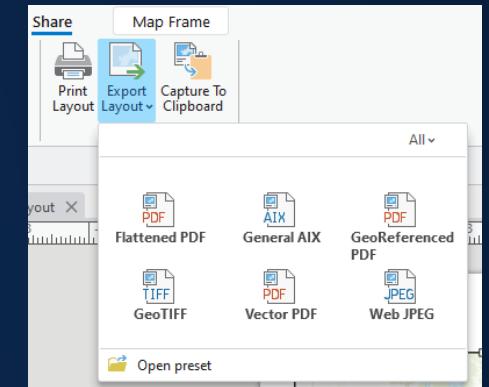
A screenshot of the 'Catalog' window in ArcGIS Pro, showing a table of files. The table has columns for 'Name', 'Type', 'Date Modified', and 'Size'. The 'Date Modified' and 'Size' columns are highlighted with an orange border.

Name	Type	Date Modified	Size
Active_Volcanoes	File Geodatabase Feature Class	3/4/2022 5:24:45 AM	217 KB
FlowLinePoints	File Geodatabase Feature Class	3/4/2022 5:24:43 AM	15 KB

Date Modified & Size in Catalog View

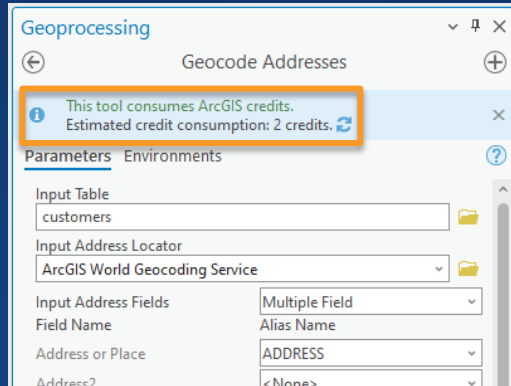


OpenStreetMap 3D Layers

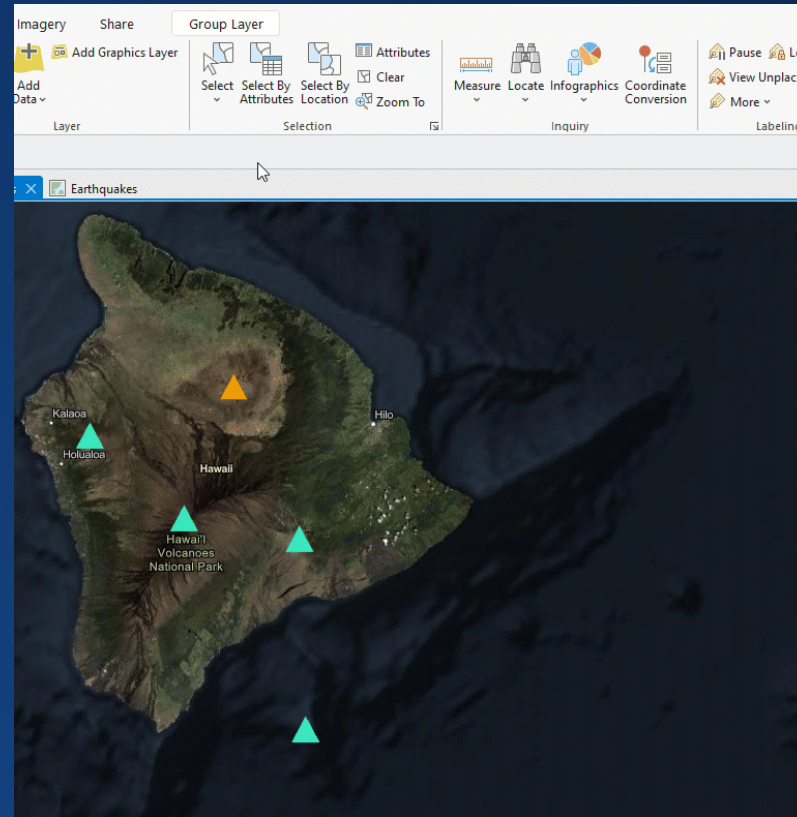


Export Presets

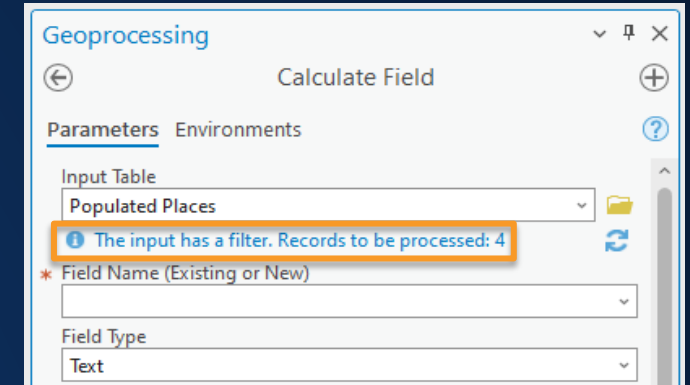
ArcGIS Pro 3.0 Highlights



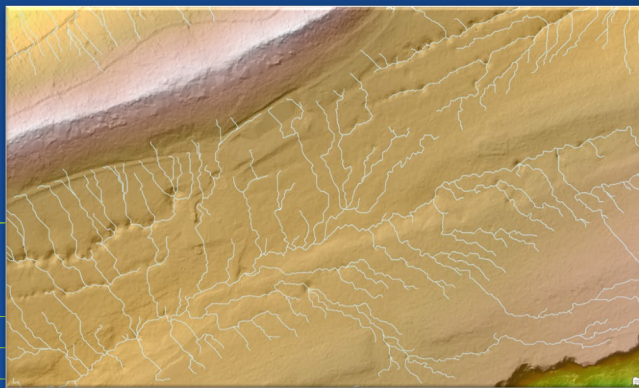
Geocoding Credit Estimation



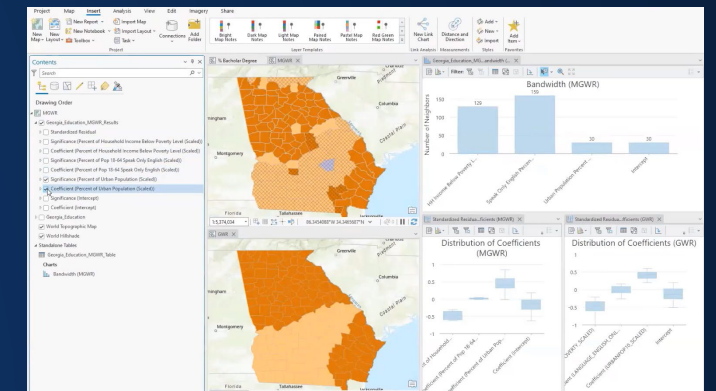
Tool parameter memory/autofill



Selection and filtered input notification

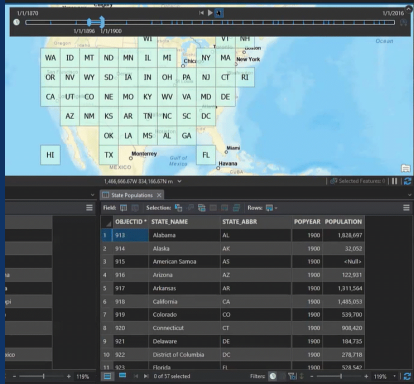


New Hydrology Analysis Tools

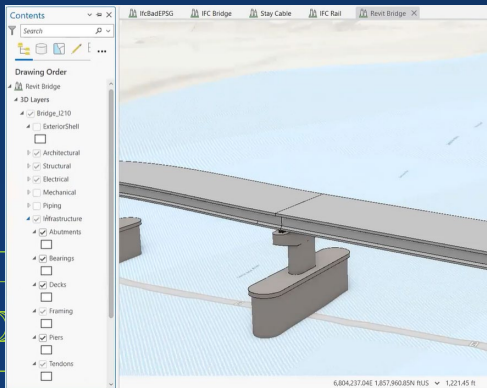


Multiscale Geographically Weighted Regression (MGWR)

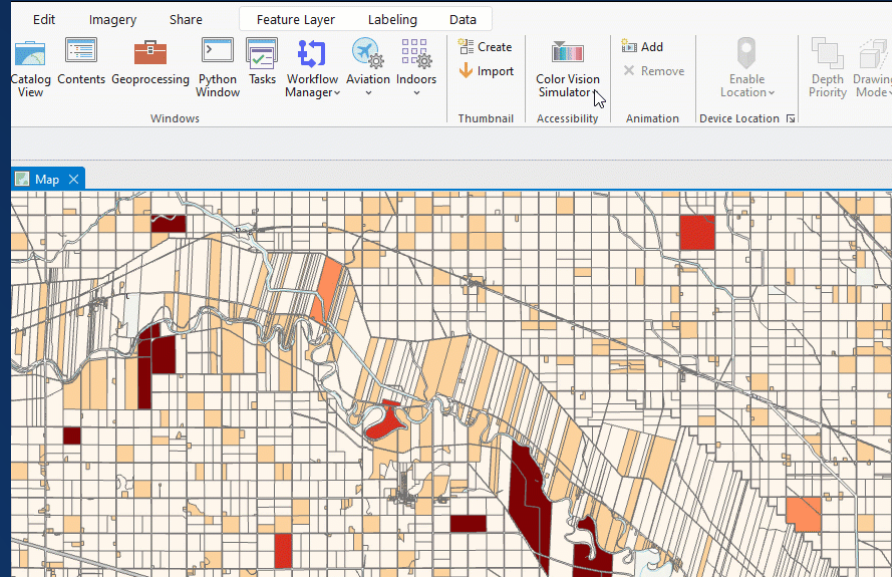
ArcGIS Pro 3.0 Highlights



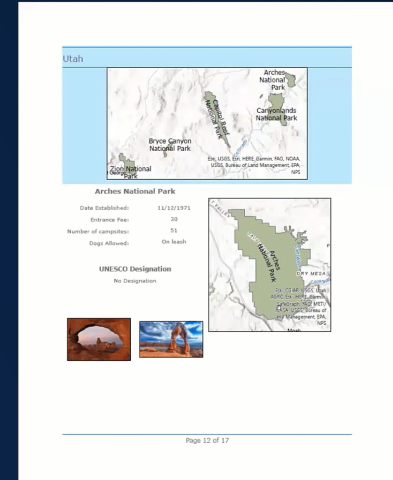
Time aware stand-alone tables



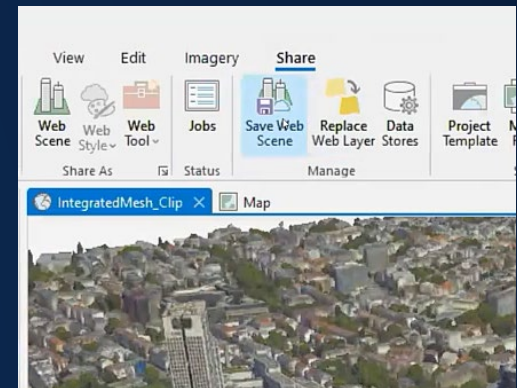
IFC Infrastructure Discipline Support



Color Vision Deficiency Simulator



Maps in Reports



Save Web Scene

Version 3.0 Beta



ArcGIS® Pro

Initializing



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What's Coming in ArcGIS Pro 3.0 Demo

Ideas in ArcGIS Pro 3.0

Welcome to ArcGIS Ideas


NewestRecently Updated

Sort/Filter: New Ideas

Field Mapping: Add new output field more easily in GP tools

Let's say I want to merge two datasets together. Both datasets have a huge number of fields, but I only want a handfu...

In Product Plan

by [rburke-bsrc](#) • Occasional Contributor III


in [ArcGIS Pro Ideas](#) • Last Updated 02-28-2022

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Update Python version

Hello, It could be great to increase the supported Python version of the future Arcgis Pro version.Indeed a lot of ma...

In Product Plan

by [RémiBRAUN](#) • New Contributor II


in [ArcGIS Pro Ideas](#) • Last Updated 01-19-2022

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Fully implement shift-clicking in symbology to select multiple symbol classes

In your symbol class tab on the symbology pane, you can shift-click to select multiple symbol classes. The most frequ...

In Product Plan

by [rburke-bsrc](#) • Occasional Contributor III


in [ArcGIS Pro Ideas](#) • Last Updated 01-27-2022

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Mobile Geodatabase as Default

Allow option to use Mobile Geodatabase as default database for projects instead of file geodatabase.

In Product Plan

by [feralcetcolonist](#) • Occasional Contributor


in [ArcGIS Pro Ideas](#) • Last Updated 03-22-2022

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Enable metadata support for the new atbx toolbox file format

With the release of ArcPro 2.9 a new toolbox format appeared (atbx). It does not allow users to create metadata for a...

In Product Plan

by [DuncanHornby](#) • MVP • MVP Frequent Contributor

in [ArcGIS Pro Ideas](#) • Last Updated 03-08-2022

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Idea Submission Guidelines

We love hearing from you about how to improve our products. To learn how to submit a valid idea, please review the [Submission Guidelines](#)

Suggest an idea

Idea Labels

Sort By: Top Ideas

Map Authoring	390
Geodatabase	354
Layout	285
Geoprocessing	224
Map Exploration	221
Content Management	180
Editing	155
Annotation & Labeling	123
Application Framework	106

How it works

1 Search

There are a number of Idea Exchanges representing different products and capabilities. Save time by searching the community to see if your idea already exists.

2 Participate

If you find an existing idea, vote by giving kudos and add your use case to the comments!

3 Create

If you can't find an existing idea, create your own. Follow these [Submission Guidelines](#) to submit your idea for the community to vote on!

Get Started - Find the right Idea Exchange

50+

Search, participate, and create at ideas.arcgis.com

Roadmap

[Go.esri.com/ProRoadmap](https://go.esri.com/ProRoadmap)



ArcGIS Pro | Release Plans

2021 Q4 |

2022 Q2

NOV

JAN

MAR

MAY 10th*

JUN 16th*

ArcGIS Pro 2.9

2.9.1

2.9.2

2.9.3

ArcGIS Pro 3.0

*Subject to change

ArcGIS® Pro Roadmap

go.esri.com/ProRoadmap

Near-term

- Upgrade Python Environment
- Reality Mapping Extension
- Projects in the Enterprise
- Export Presets
- Provenance in Knowledge Graphs
- Indoor Positioning
- Suitability Modeler Additional Weighting
- Parcel metes and Bounds Visualization
- Roof Editing
- Enhanced Radar Data Support
- Hydrologic Analysis
- Multiscale GWR
- Scene Layer Performance
- OSM Streetmap 3D Layers
- Maps in Reports

Mid-term

- Simulation Modeling
- Catalog Layers
- Point Cloud Scene Layer Data Management
- Non-versioned Editing
- Presentations
- Spatio-temporal Density Analysis
- Scientific Data (DSG) Ingestion
- Managed Indoor Data Pipeline
- Roof Editing in Stereo
- ENC Chart Viewing
- 64-Bit Object ID

Long-term

- Terrain Editing
- Materials Authoring
- High Fidelity Rendering
- 3D Mesh as Ground
- Integrated Mesh Scene Layer Data Management
- New Data Types (BigInteger, Timestamp with Time zone)

December 2021



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