



ArcGIS Data Reviewer -Implementing Ready-To-Use Rules Across the Platform

Shankar Chandrasekaran

SEE
WHAT
OTHERS
CAN'T

Agenda

- **What is ArcGIS Data Reviewer?**
- **Attribute Rules**
 - Overview
 - Types
- **Ready To Use Rules**
 - Overview
 - Supported Checks
- **Demo**
- **Summary**



ArcGIS Data Reviewer

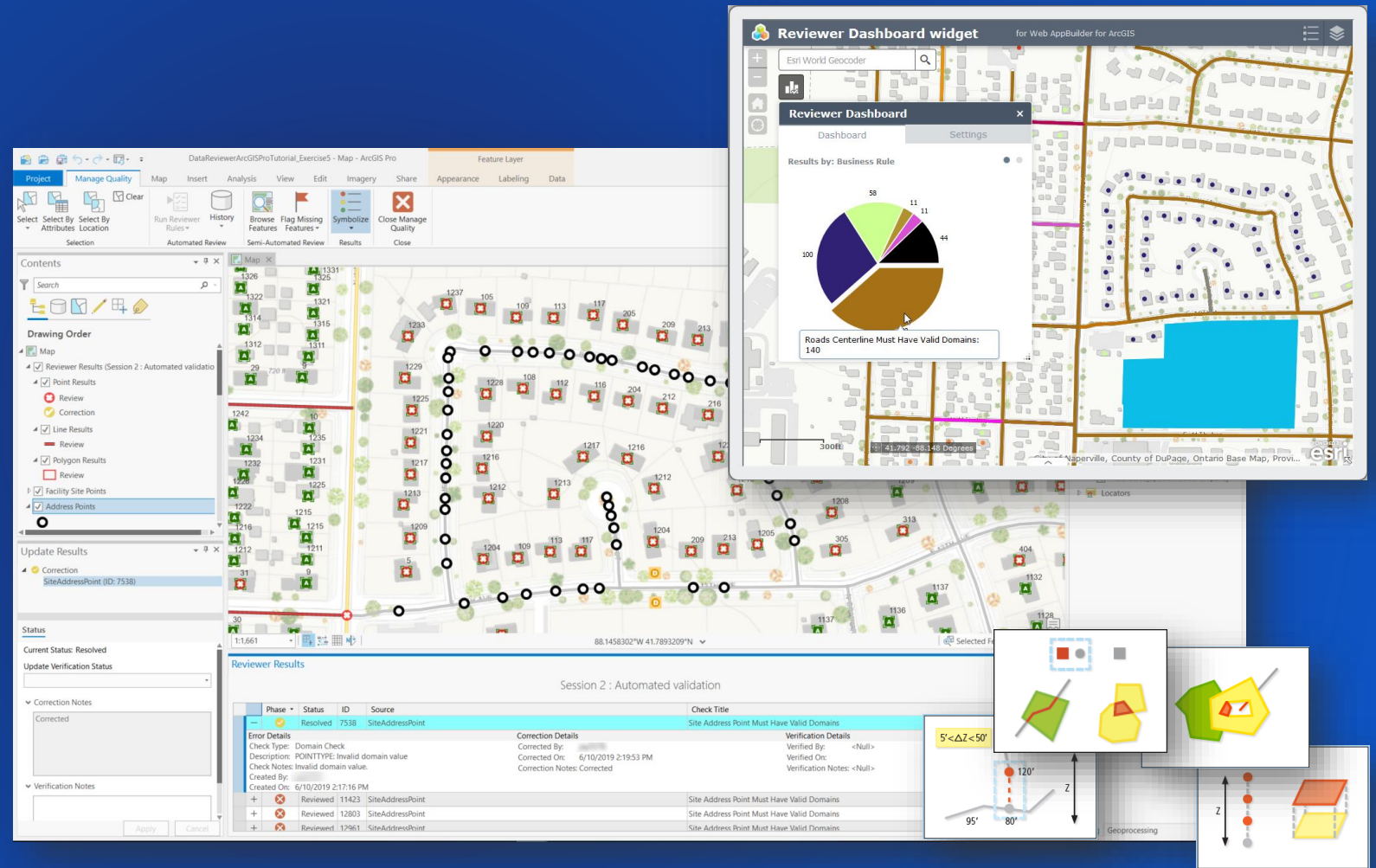
Reduce risk in decision-making

Lower data management costs

Streamline quality control workflows

Implement repeatable processes

Increase transparency

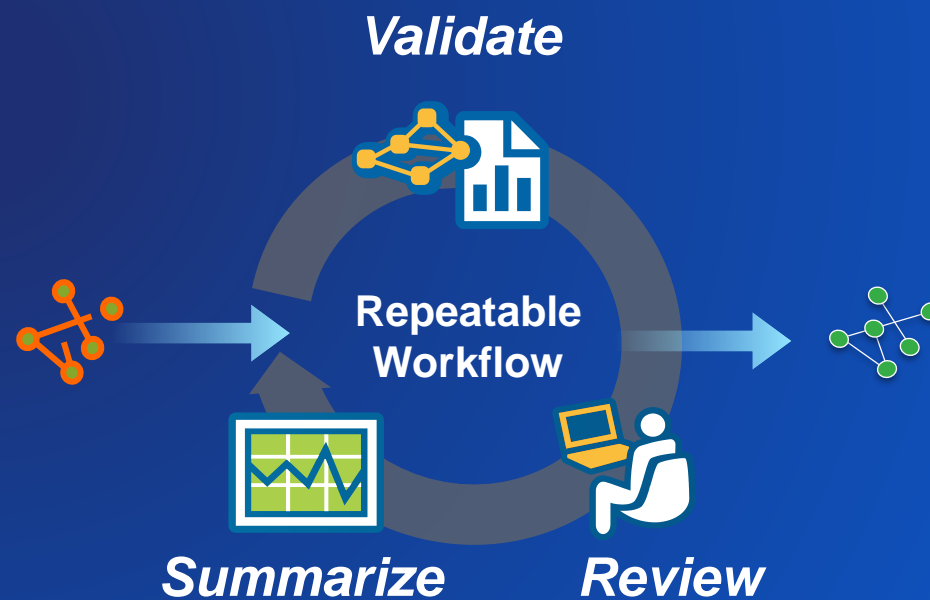


Automate, simplify, standardize and unify workflows to improve data quality

What is ArcGIS Data Reviewer?

Data Quality Management for ArcGIS

- Provides
 - Rule-based automated validation
 - Semi-automated workflows
 - Track and report quality
- For individuals and enterprise
 - Saves time/money
 - Less rework
- For multiple domains
 - Configurable
 - Extendable



Attribute Rules



Overview



User defined rules for simple features using Arcade scripting



Ensures data quality during data collection and maintenance



Enforces data integrity

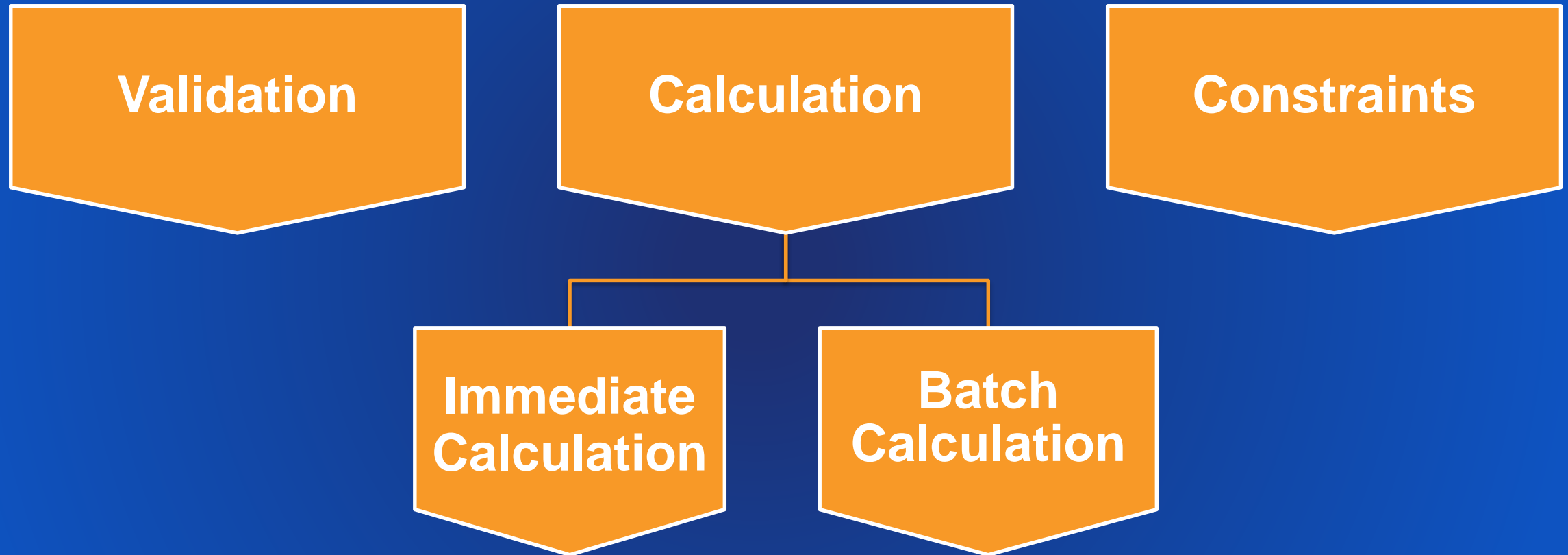


Defined in feature classes or tables

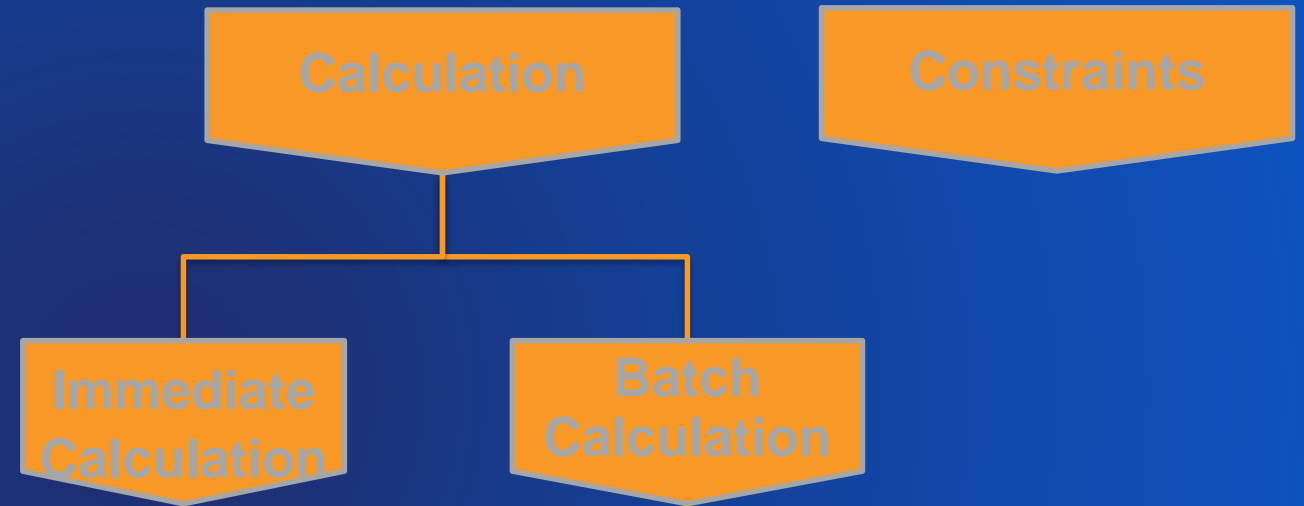
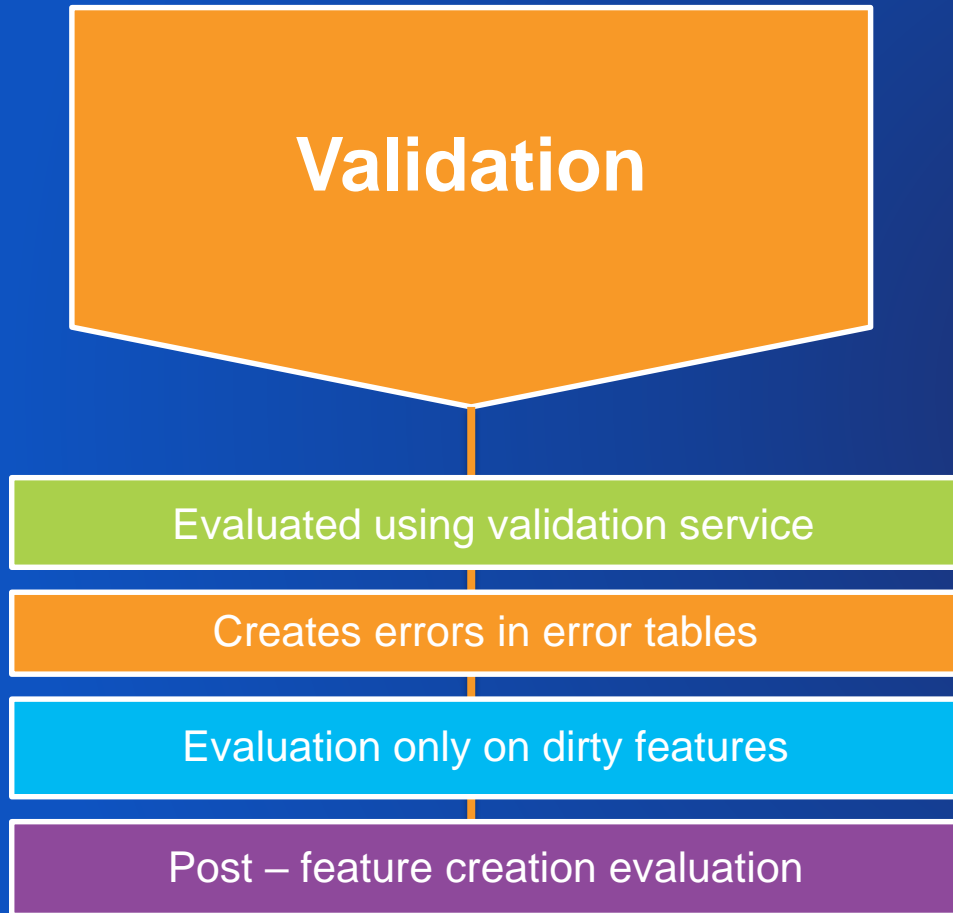


Supported across the ArcGIS platform

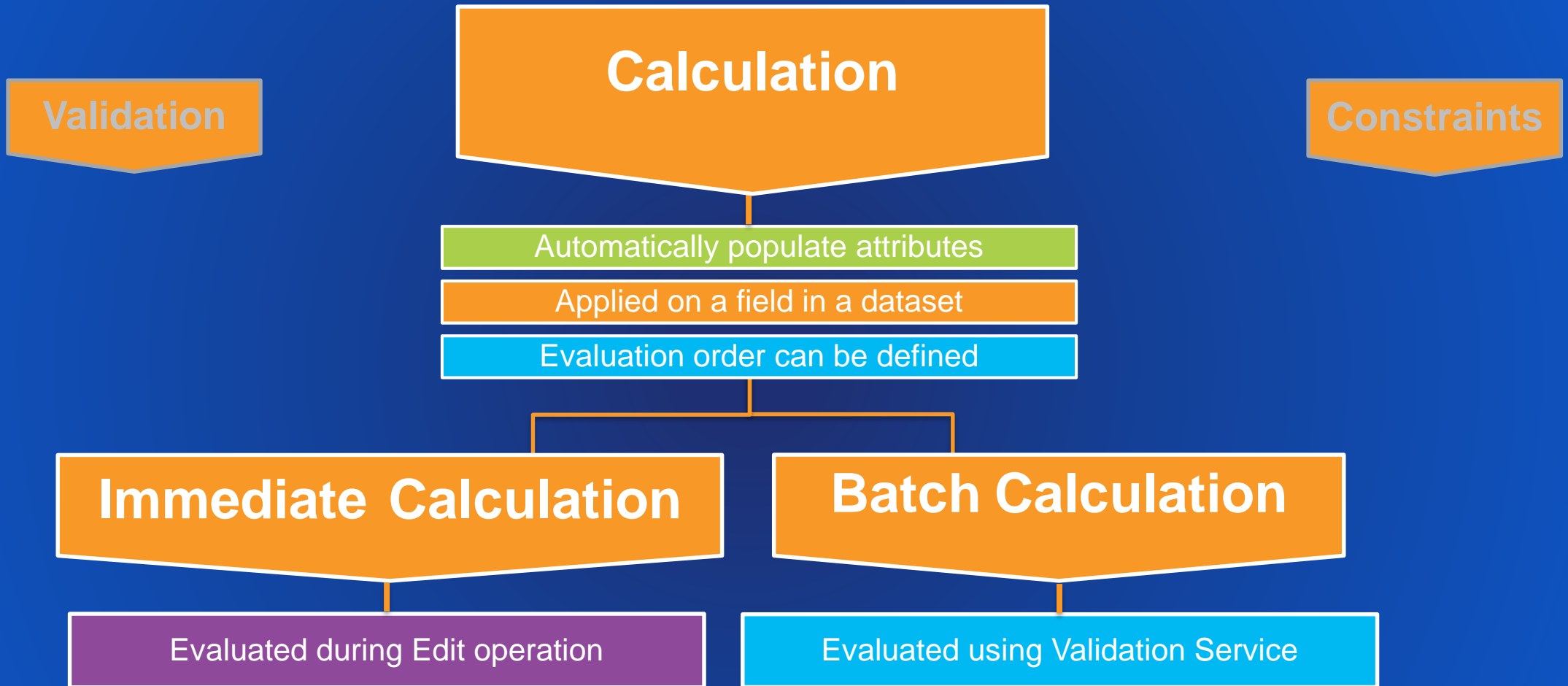
Types - Overview



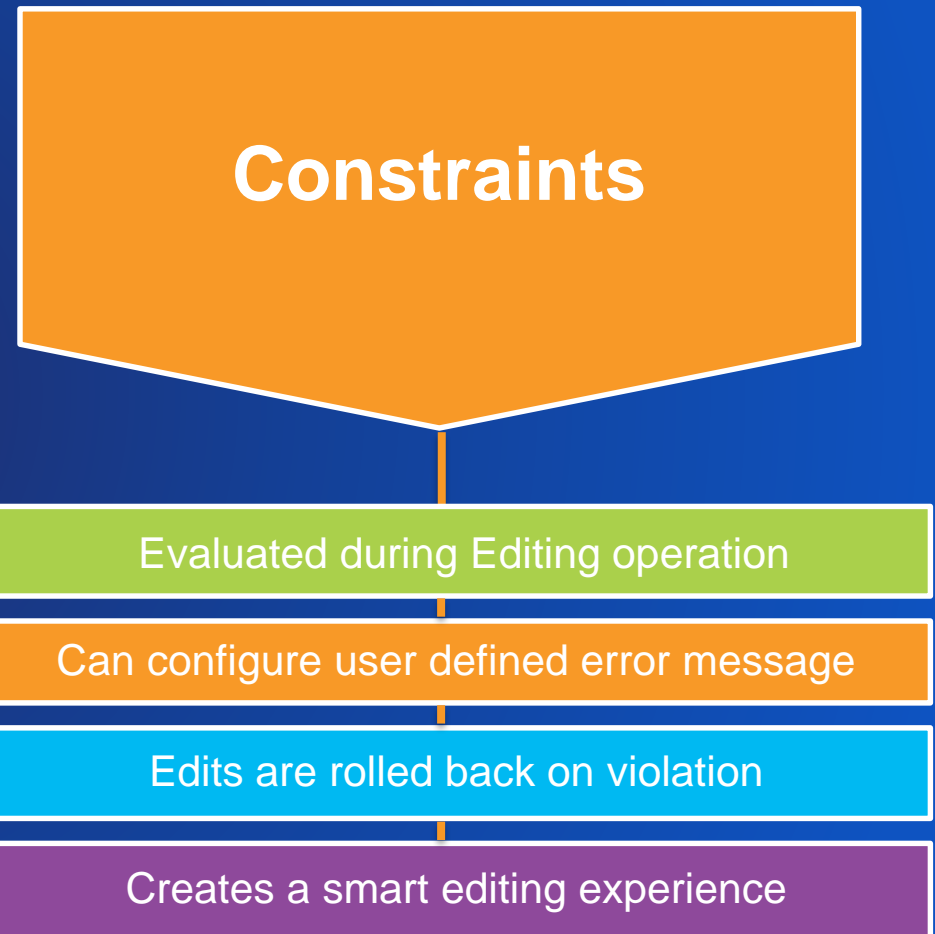
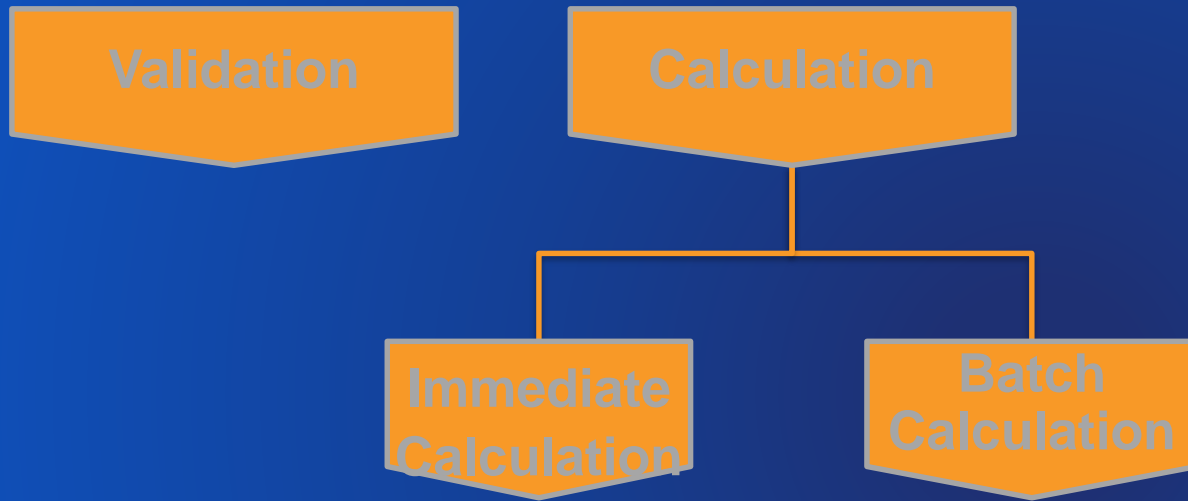
Types - Validation



Types - Calculation



Attribute Rules - Types



Ready To Use Rules

Reviewer Configurable Attribute Rules

Overview

Ready To Use Rules - Attribute Constraint Rules



Easily Configurable Attribute Rules (no scripting required)



Templated Arcade scripts with parameters



Assess feature's Integrity and geometric properties



Evaluate Spatial relationship across feature classes



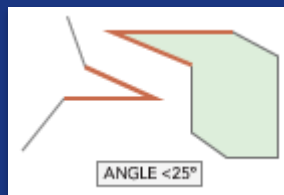
GIS Data Editor Demo

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Supported Checks

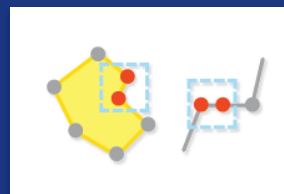
Ready To Use Rules

- Supported as part of constraints
- Assess a feature's
 - Integrity
 - Spatial relationships
 - Geometric properties



Cutbacks

Finds segments where the angle between segments in a polygon or polyline is below a specified minimum value.



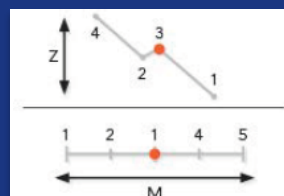
Duplicate Vertex

Finds vertices from the same feature that are collocated or within a specified tolerance of one another.



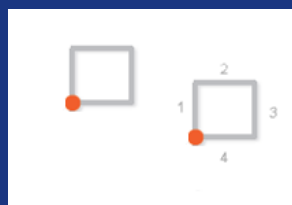
Feature on Feature

Finds features that have a specific relationship, either from two different feature layers or within the same feature layer.



Monotonicity

Searches Z or M-enabled polylines for vertices that are not strictly increasing or decreasing in value or are trending based on specified conditions.



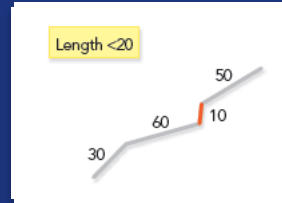
Polyline or Path Closes on Self

Finds paths or lines in polyline features that close themselves.

Supported Checks (Contd.)

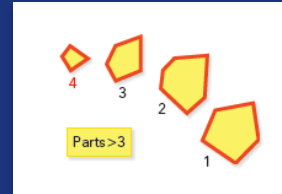
Ready To Use Rules

- Supported as part of constraints
- Assess a feature's
 - Allowed Geometric properties like Length, vertices, area or perimeter



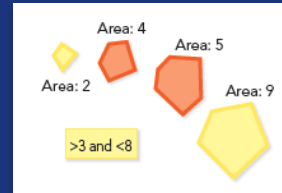
Evaluate Polyline Length

Finds polyline segments, parts or features that have a line length within a specified tolerance.



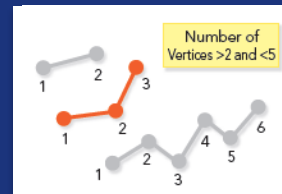
Evaluate Part Count

Finds features with a part count that is within a specified value.



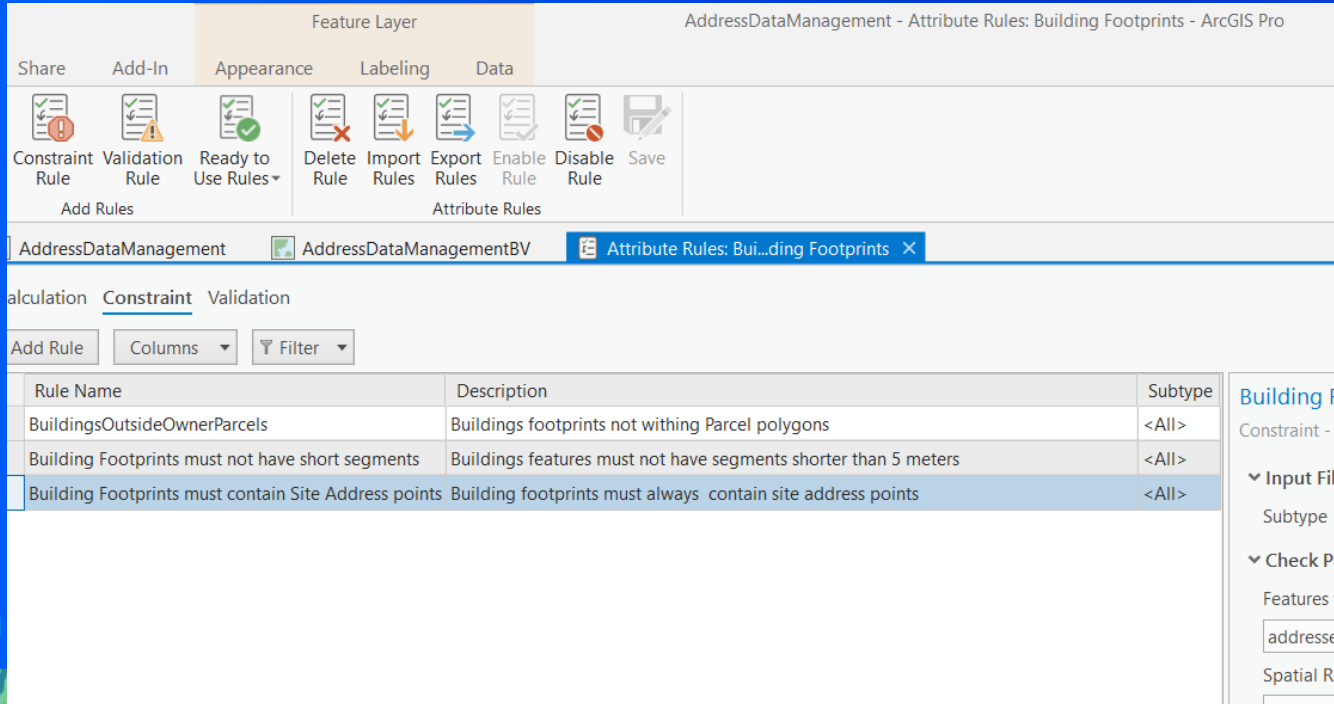
Evaluate Polygon Perimeter and Area

Finds polyline segments, parts, or features that have a line length within a specified tolerance.



Evaluate Vertex Count

Finds polyline or polygon features that have a vertex count within a specified tolerance.



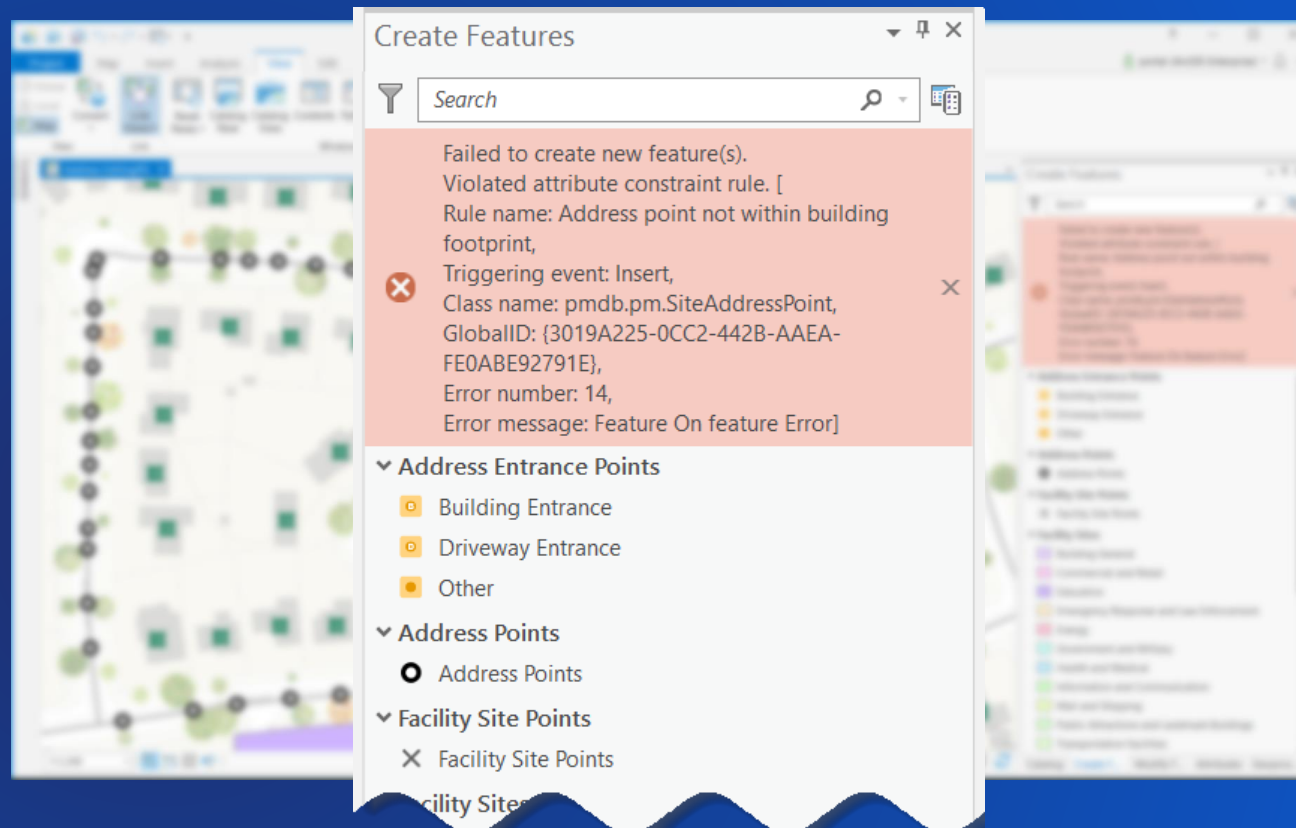
GIS Data Analyst - Configure Rules

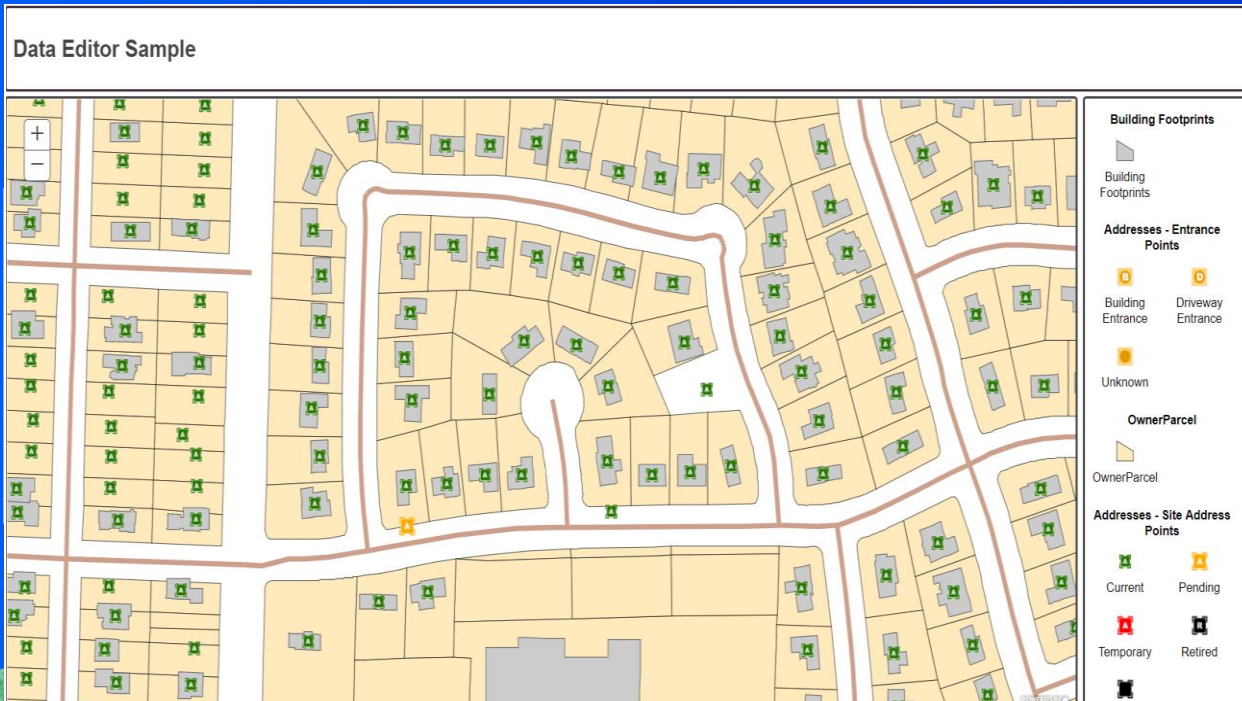
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Evaluation

Ready To Use Rules

- Supported as part of constraints
- Triggered during
 - Creation
 - Modification
 - Deletion of a feature





Smart Editor - Demo

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Summary

- **What is ArcGIS Data Reviewer?**
- **Attribute Rules**
 - Overview
 - Types
- **Ready To Use Rules**
 - Overview
 - Supported Checks
- **Demo**
- **Summary**



See Us Here

Tuesday

ArcGIS Data Reviewer: An Introduction (Offering #1)	Room 30 C	08:30 am - 09:30 am
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Wednesday

ArcGIS Data Reviewer: An Introduction (Offering #2)	Room 30 E	08:30 am - 09:30 am
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ArcGIS Data Reviewer: Implementing Ready-to-Use Rules across the platform	Demo Theater 4	10:00 am - 10:45 am
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ArcGIS Data Reviewer: Deploying Data Quality Web Services	Demo Theater 5	11:15 am - 12:00 pm
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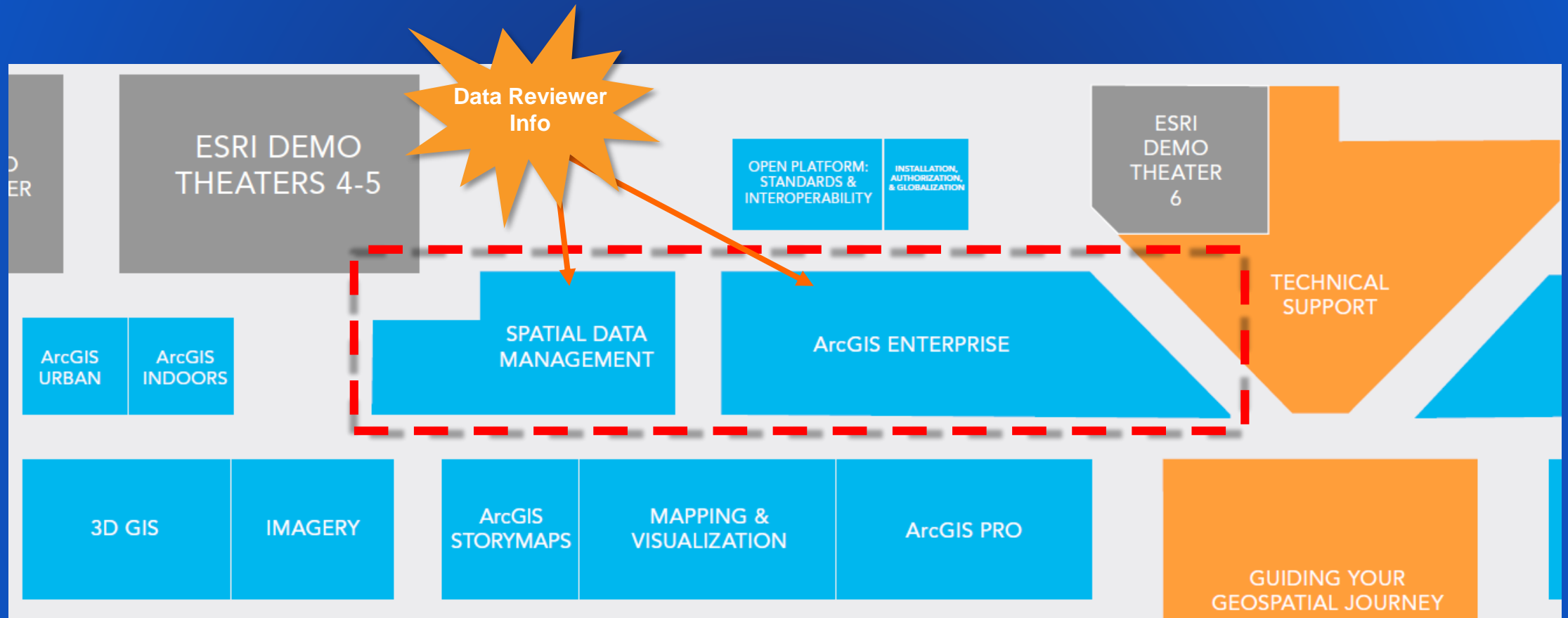
ArcGIS Data Reviewer: Validating linear-referenced events	Demo Theater 4	11:15 am - 12:00 pm
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Thursday

ArcGIS Data Reviewer: Advanced Data Validation	Room 30 E	08:30 am - 09:30 am
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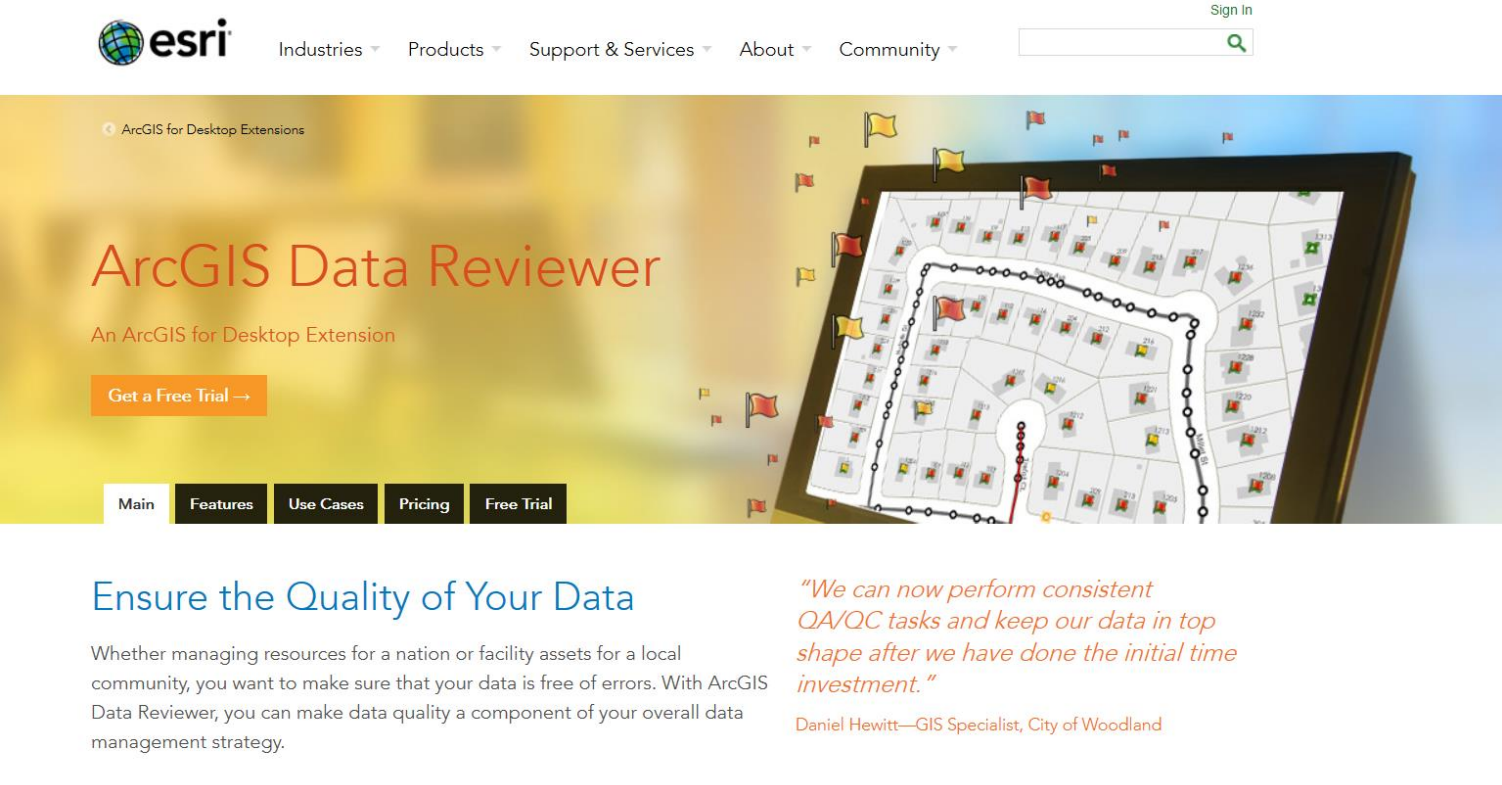
See Us Here



Want to learn more?

- Product page

www.esri.com/datareviewer



The screenshot shows the ArcGIS Data Reviewer product page. At the top is the Esri logo and a navigation menu with links for Industries, Products, Support & Services, About, and Community. A search bar is located on the right. The main heading is 'ArcGIS Data Reviewer' with the subtitle 'An ArcGIS for Desktop Extension'. Below this is a 'Get a Free Trial' button. A navigation bar at the bottom of the main section includes links for Main, Features, Use Cases, Pricing, and Free Trial. The right side of the page features a large image of a tablet displaying a map with various colored flags and a path. Below the image is a quote from Daniel Hewitt, GIS Specialist at the City of Woodland, stating: 'We can now perform consistent QA/QC tasks and keep our data in top shape after we have done the initial time investment.'

esri Industries Products Support & Services About Community

Sign in

ArcGIS for Desktop Extensions

ArcGIS Data Reviewer

An ArcGIS for Desktop Extension

Get a Free Trial →

Main Features Use Cases Pricing Free Trial

Ensure the Quality of Your Data

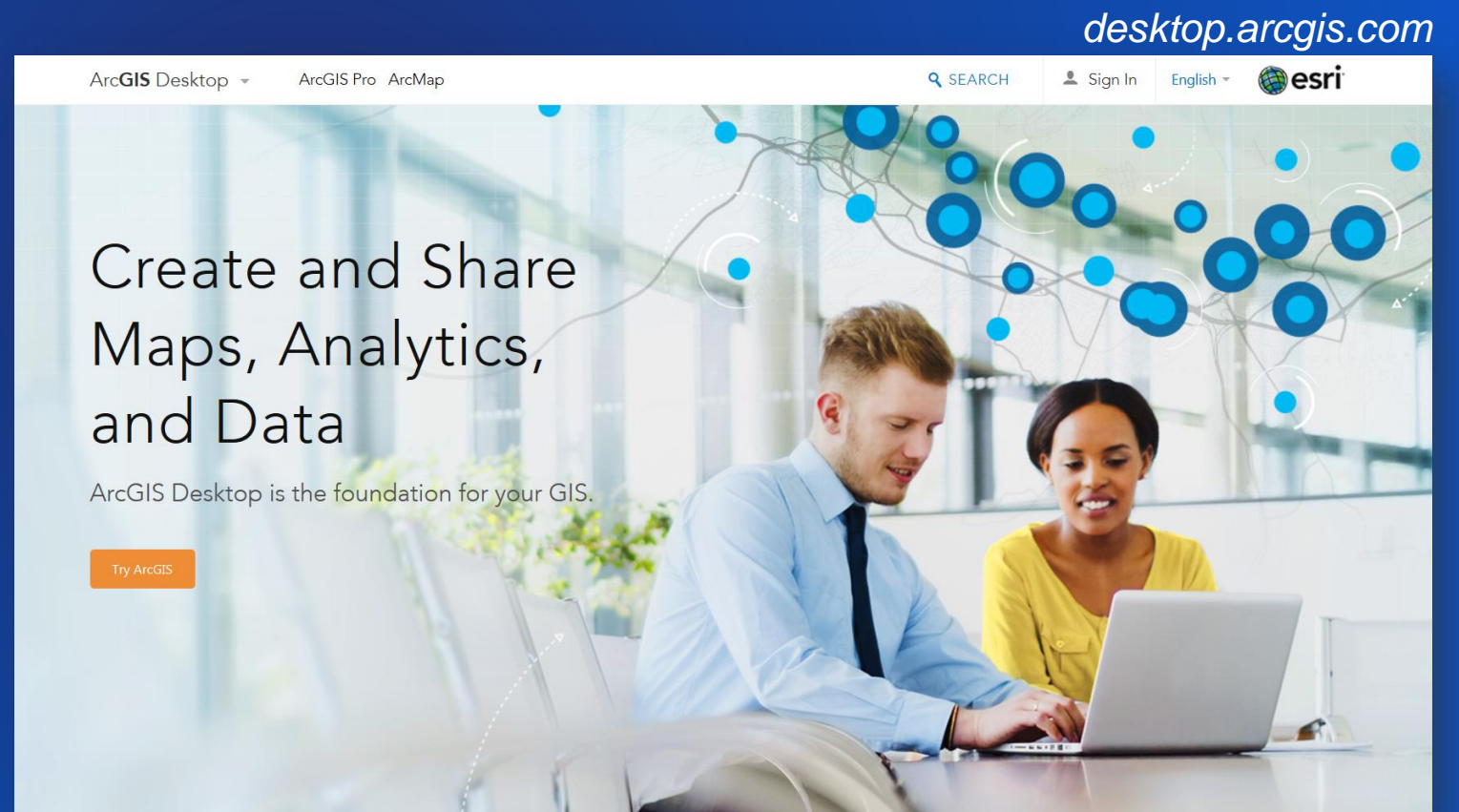
Whether managing resources for a nation or facility assets for a local community, you want to make sure that your data is free of errors. With ArcGIS Data Reviewer, you can make data quality a component of your overall data management strategy.

"We can now perform consistent QA/QC tasks and keep our data in top shape after we have done the initial time investment."

Daniel Hewitt—GIS Specialist, City of Woodland

Want to learn more?

- Documentation
 - Desktop



Want to learn more?

- **Documentation**

- **Desktop**
- **Server**

enterprise.arcgis.com

The screenshot shows the ArcGIS Data Reviewer for Server help page. The header includes navigation links for ArcGIS Enterprise, Portal, Server, Data Store, and Cloud, along with search, sign-in, and language options. The main heading is "Data Reviewer" with the subtext "Integrate data quality capabilities into your ArcGIS Enterprise workflows." Below this is a search bar and a navigation bar with "Home" and "Help" links. The "Released Version: 10.6.1 (June 2018)" is noted, followed by links for "What's new", "System requirements", "Installation guide", "Template gallery", and "Help archive: 10.3". The "Get Started" section features four cards: "Find Dangles" (with a diagram of a network), "Monotonicity" (with a diagram of a vertical axis), "Deploy data quality services" (with a diagram of a server), and "Manage quality feedback" (with a diagram of a map). The "Report data quality" card shows a pie chart, and the "Use ArcGIS REST or JavaScript APIs" card shows a code icon.

ArcGIS Enterprise Portal Server Data Store Cloud

Search Sign In English

Data Reviewer

Integrate data quality capabilities into your ArcGIS Enterprise workflows.

Home Help

Search ArcGIS Data Reviewer for Server help

Released Version: 10.6.1 (June 2018) | [What's new](#) | [System requirements](#) | [Installation guide](#) | [Template gallery](#) | [Help archive: 10.3](#)

Get Started

Find Dangles

Find polygons to delete with vertices that are within a user-defined tolerance but not connected to other polygons or polygon features.

Monotonicity

Find polygons with vertices that are not strictly increasing or decreasing in value or are trending based on specified conditions.

Deploy data quality services

Automatically detect errors in your data using out-of-the-box validation checks.

Manage quality feedback

Supplement out-of-the-box validation checks with simple-to-use visual review.

Report data quality

Monitor data health and identify error trends in quality dashboards. Reduce risk.

Use ArcGIS REST or JavaScript APIs

Interact with ArcGIS Data Reviewer for

Want to learn more?

- **Documentation**

- Desktop
- Server

- **Training**

<http://esriurl.com/15503>



The screenshot shows the Esri Academy interface. At the top, there is a dark header with a home icon, the text 'Esri Academy', and a hamburger menu icon. Below the header, the page has a teal background with large circles. The title 'Working with ArcGIS Data Reviewer' is prominently displayed in white. Above the title, 'Learning Plan' is written and underlined. Below the title, it says 'Created by Esri on June 27, 2019'. At the bottom, there is a blue 'Enroll' button, a row of five empty circles with '(0)' next to them, and icons for a heart, a document, a group of people, and a share arrow.

Esri Academy

Learning Plan

Working with ArcGIS Data Reviewer

Created by Esri on June 27, 2019

Enroll

(0)

Icons: Heart, Document, Group of People, Share Arrow

Want to learn more?

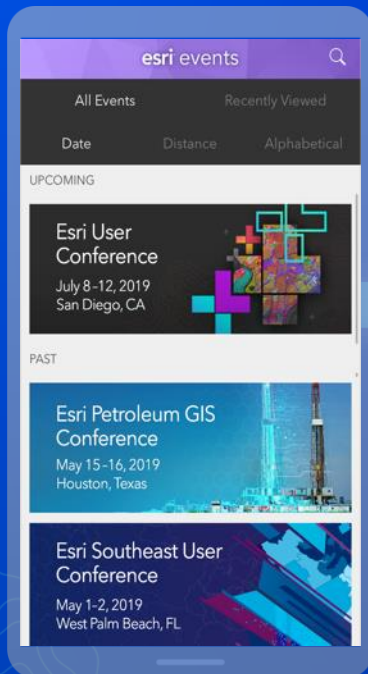
- **Documentation**
 - Desktop
 - Server
- **Training**
- **GeoNet Community**

<http://esriurl.com/15504>

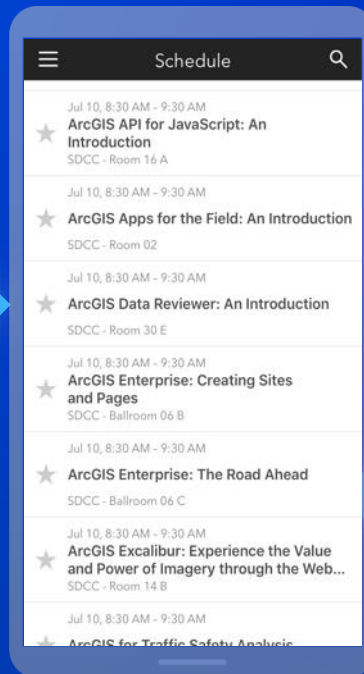


Please Share Your Feedback in the App

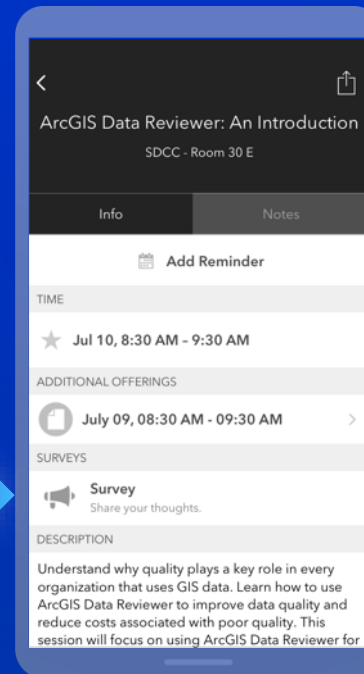
Download the Esri Events app and find your event



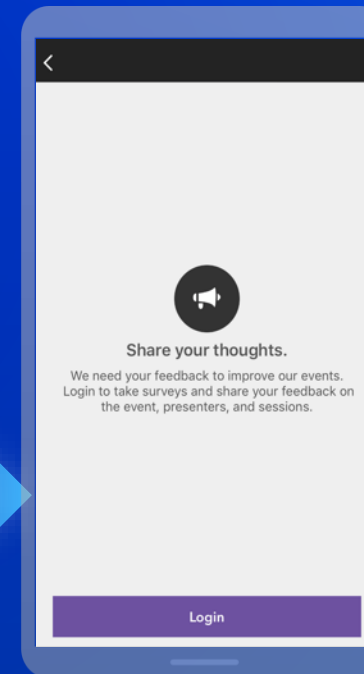
Select the session you attended



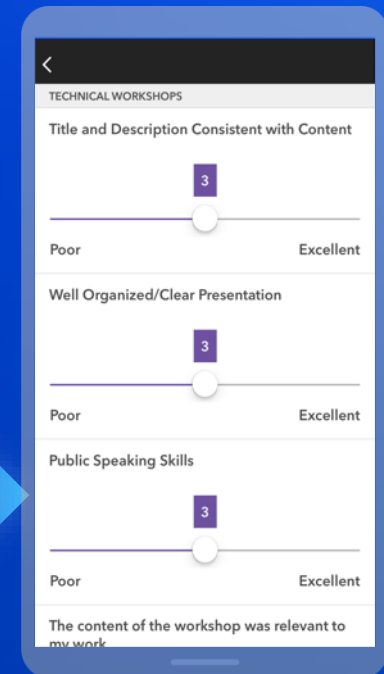
Scroll down to "Survey"



Log in to access the survey

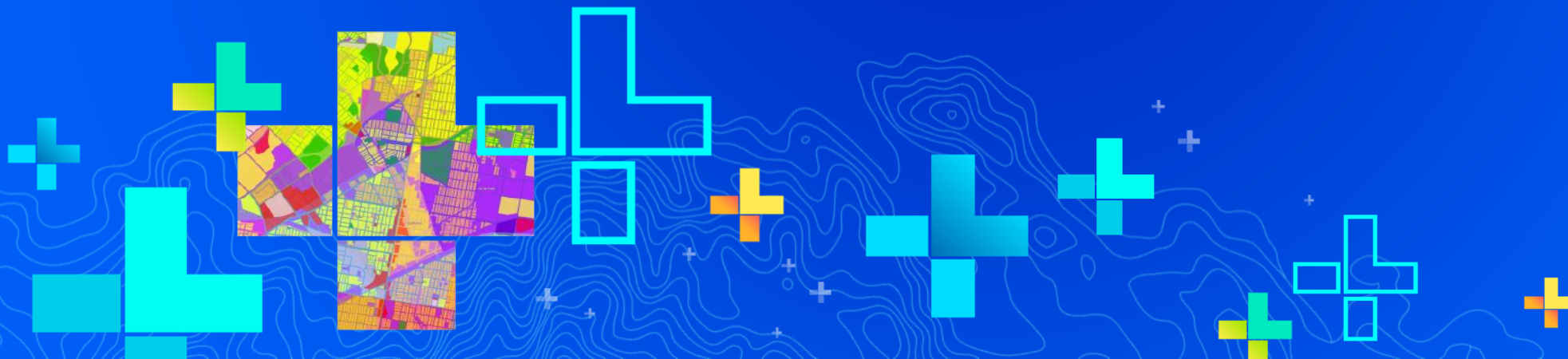


Complete the survey and select "Submit"





Questions ?



SEE
WHAT
OTHERS
CAN'T