



# ArcGIS Workflow Manager: An Introduction

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Technical Workshop

# Why are you here?

- **Importance of standardizing GIS and non-GIS workflows**
- **ArcGIS Workflow Manager allows you**
  - **Organize**
  - **Centralize**
  - **Execute Workflows**
- **Additional Resources**

# Overview

## Work Management

*Why is it important to manage work?*

# Benefits of Work Management

Improve Data Quality and accuracy

Simplify Process

Reduce Production Cost

Optimize Resource allocation

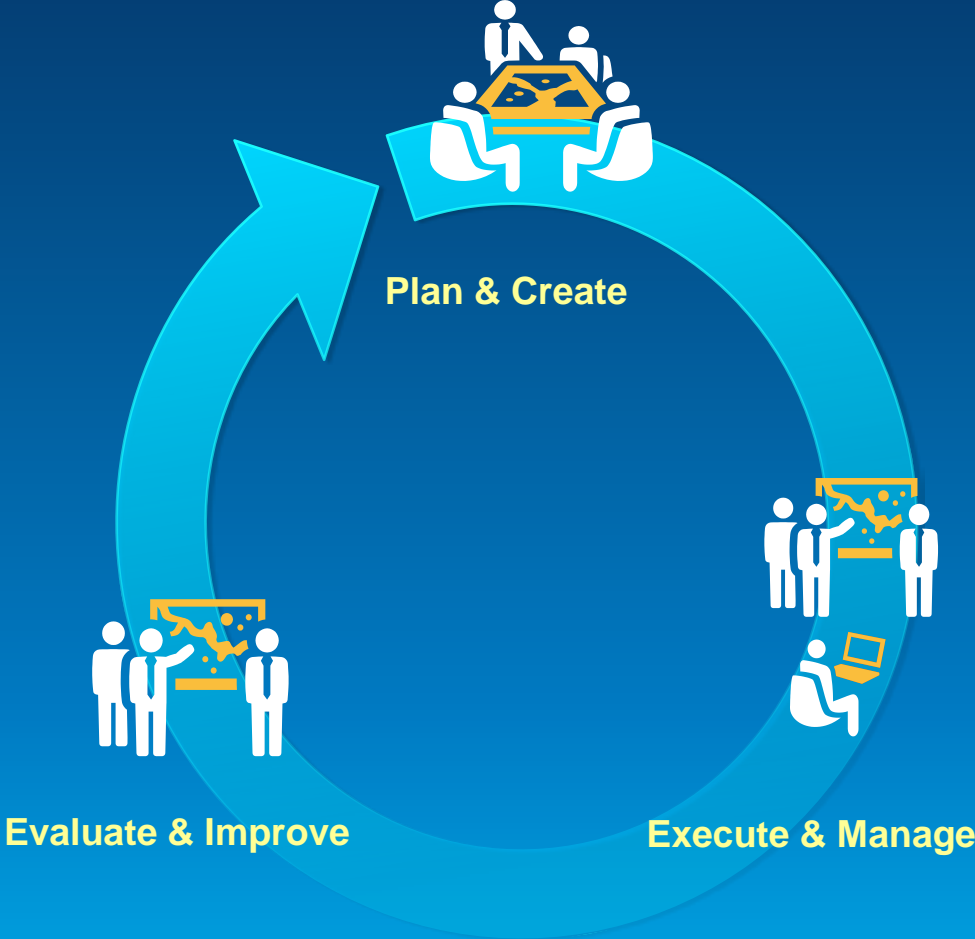
Enhance Communication

# Common Methods of Managing Work

- Individual approach
- Mock-up workflows
- Ticketing systems
- Whiteboards
- Spreadsheets

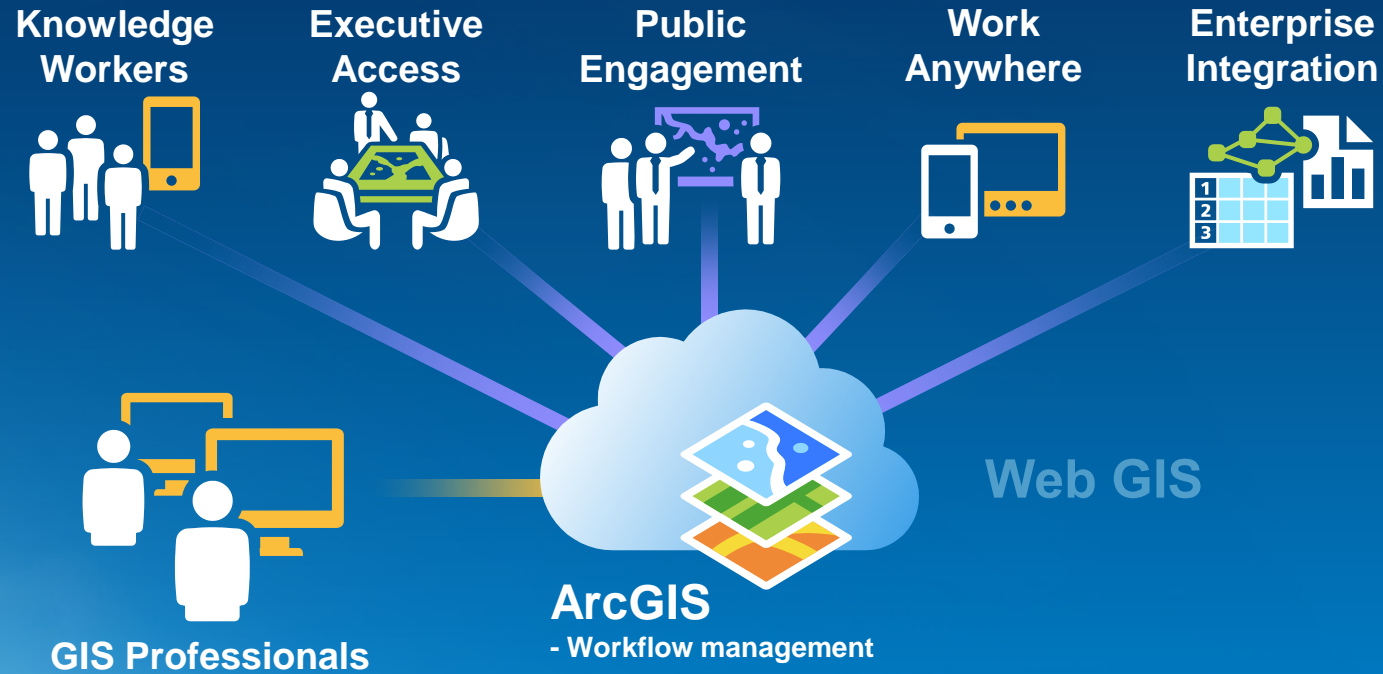


# What is ArcGIS Workflow Manager



*A framework for continuous process improvement*

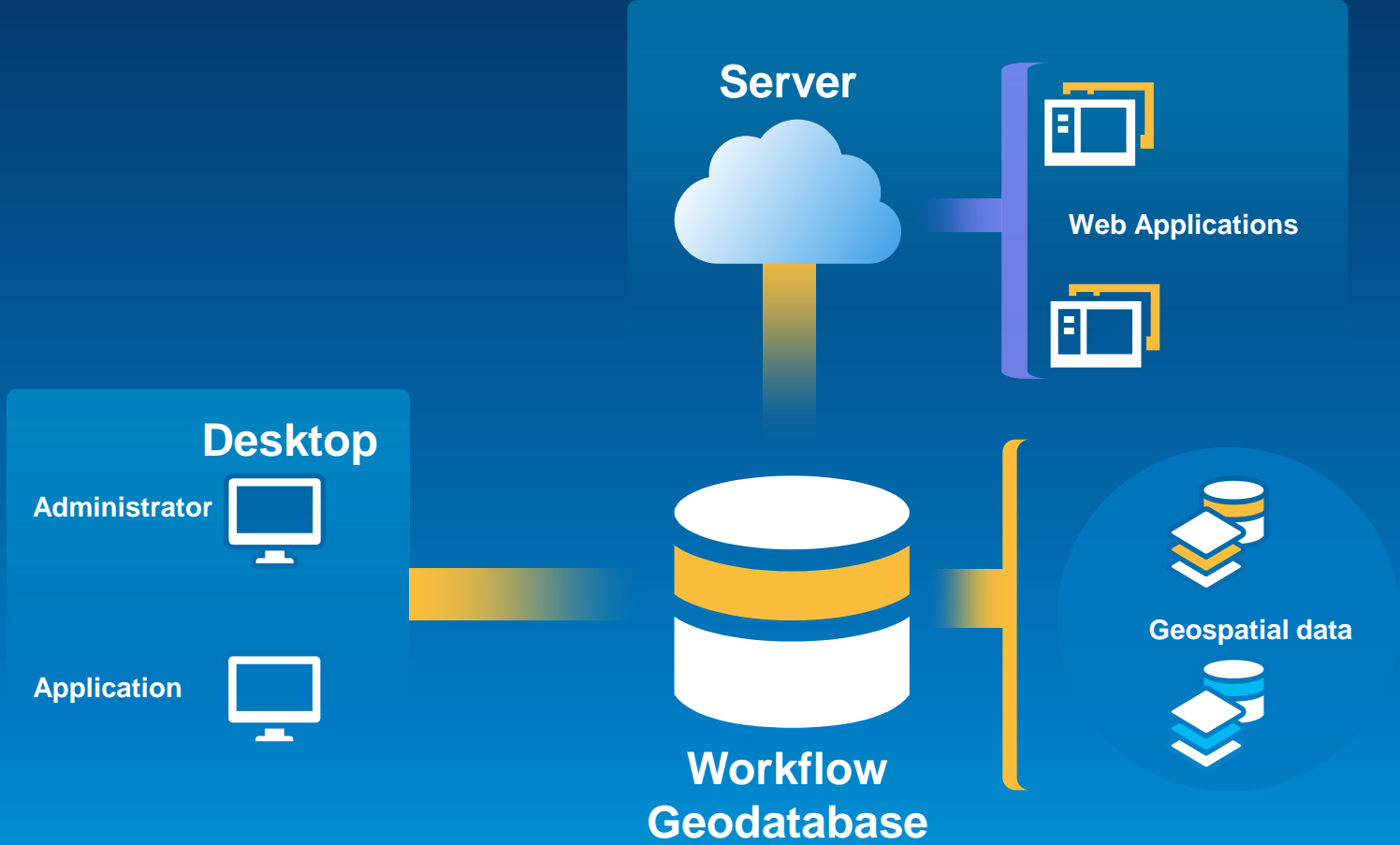
# ArcGIS Supports the Enterprise



**Making Mapping and GIS  
Available Across Your Organization**

*Transforming the Role of GIS*

# System Framework





# Workflow Manager Administrator Roles

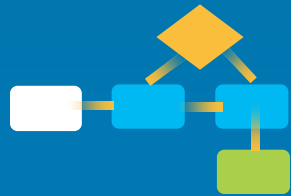
- **Basic Administrator**
  - Manage configuration items
- **Workflow Author**
  - Designs and authors Workflows
- **Workflow Developer**
  - Extends workflow with custom scripts/code





# Key Features

# Workflow Management System



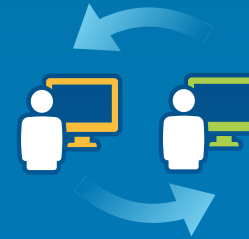
**Graphical  
Representation**



**Data Entry  
Form**



**Role Based  
Access**



**User  
Reassignment**



**Report  
Generation**



**Document  
Integration**



**Geospatial  
Integration**



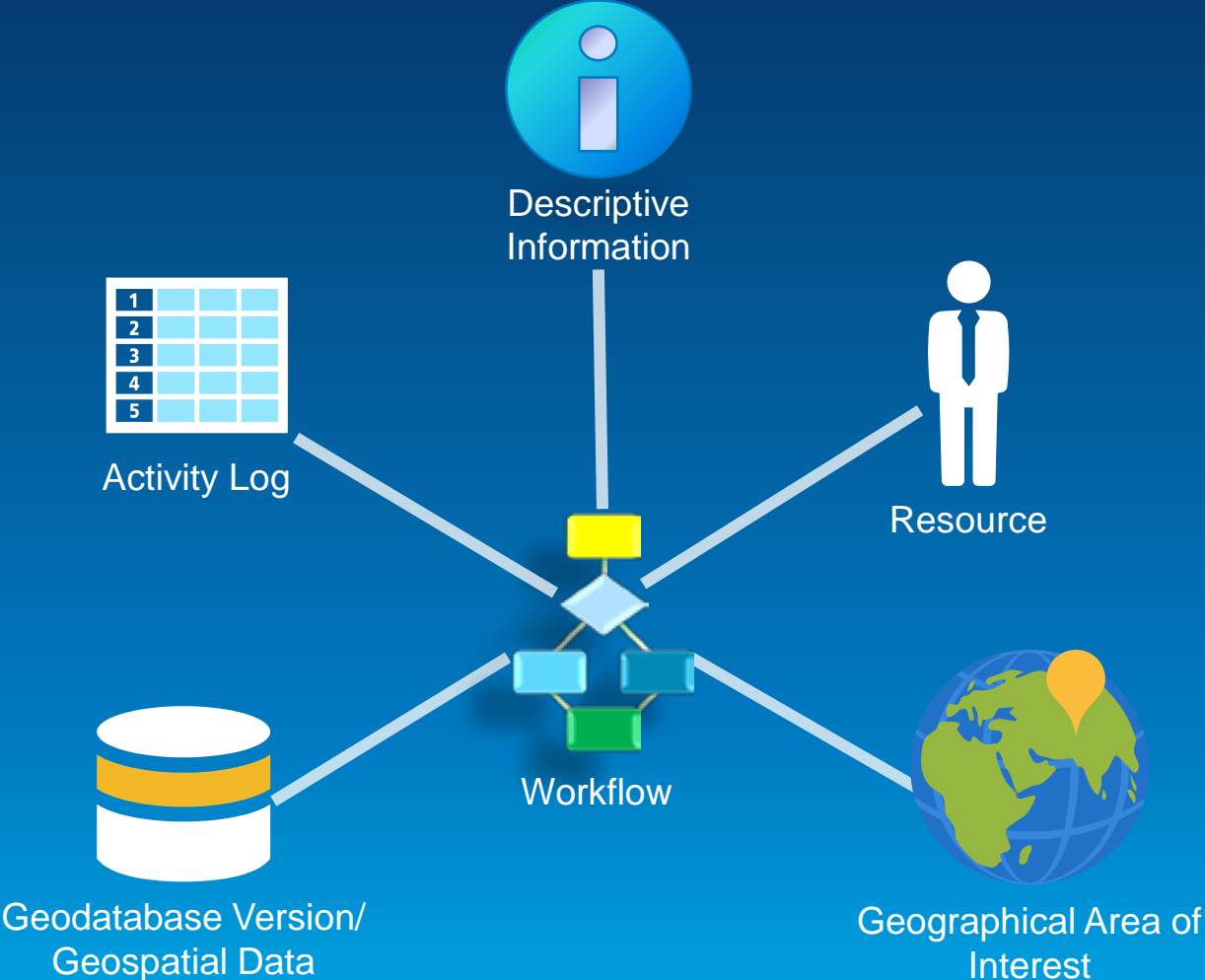
**Email  
Notifications**

**...and more**

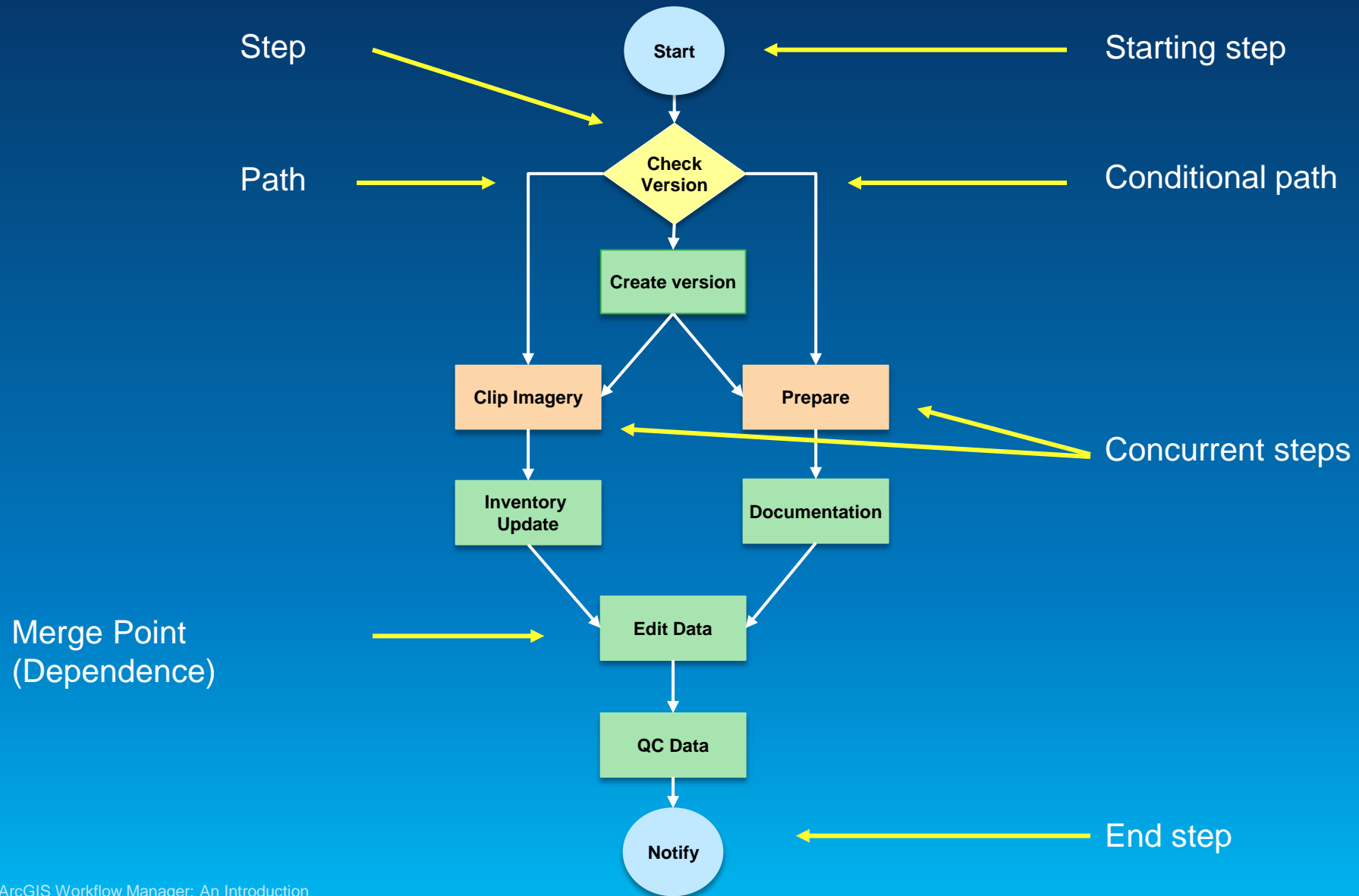
# Workflows

- **Document and automate processes**
- **Graphical representation of the work**
  - Canvas with shapes
- **Organized as Jobs**
  - Create data packet for field data collection
  - Updating data for vegetation boundaries
  - Creating maps of specific scale in various areas.

# Anatomy of a Job

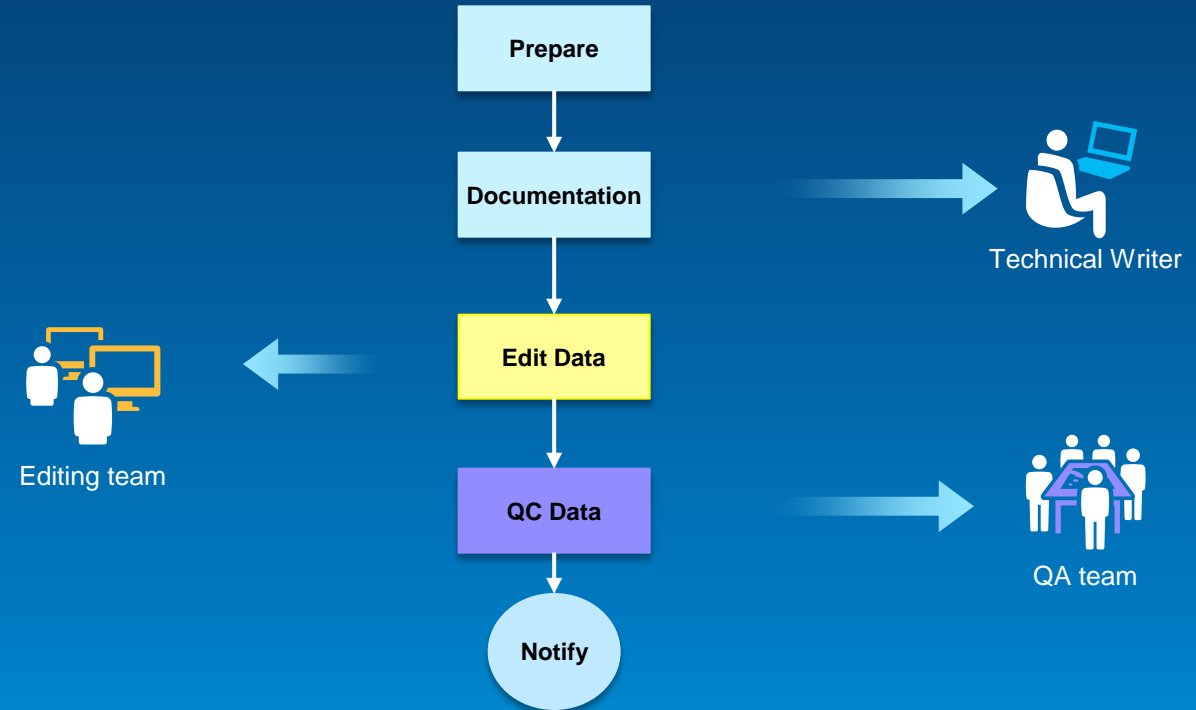


# Anatomy of a Workflow

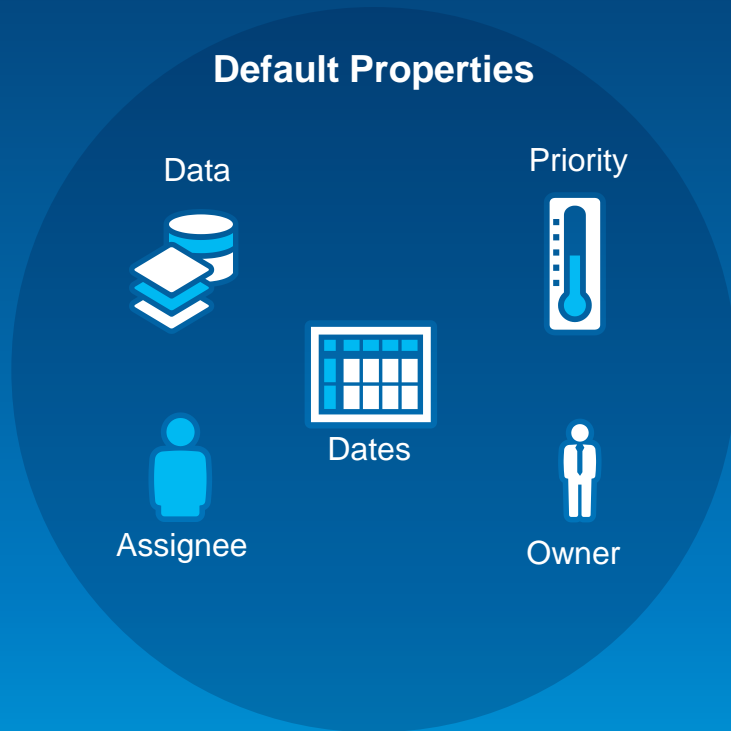


# Workflow Assignment

- Automatically route work
- Target specific groups
- Varying staff skills
- Manage large workforces



# Default and Custom Properties



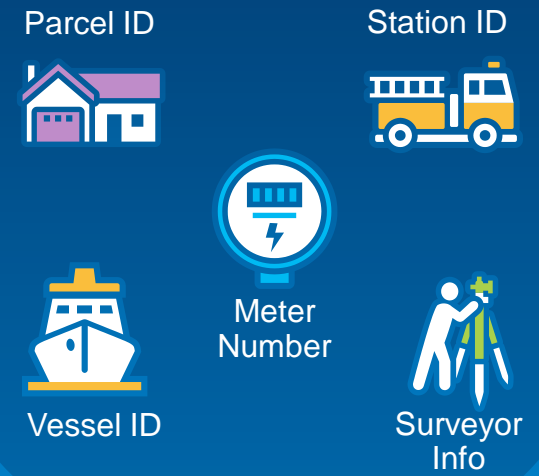


# Default and Custom Properties

## Default Properties



## Custom Properties



# Application Access Control

- **Control User actions**

- **Creating jobs**
- **Assigning jobs**
- **Closing jobs**

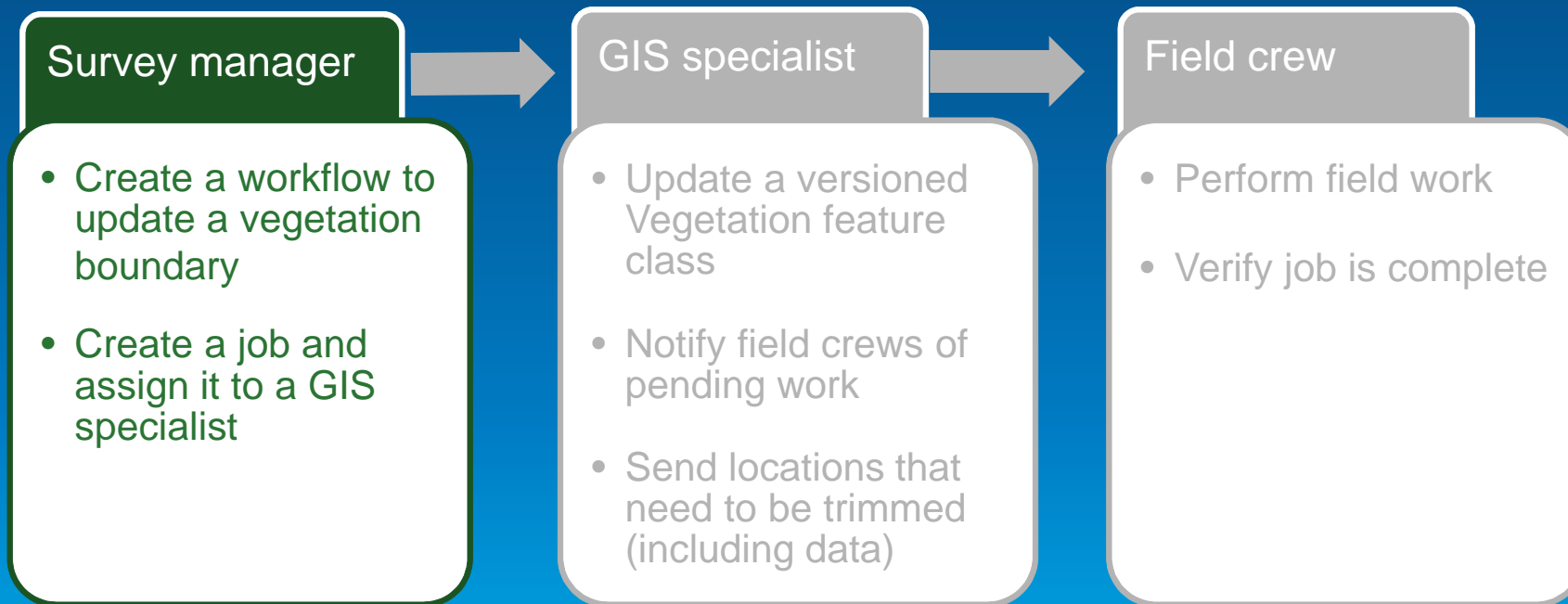
- **Show/hide functionality**

- **History**
- **Map view tab**
- **Reports**



# Software Demonstration

- Is vegetation growth encroaching on a rail line?





# Key Features

.....continued

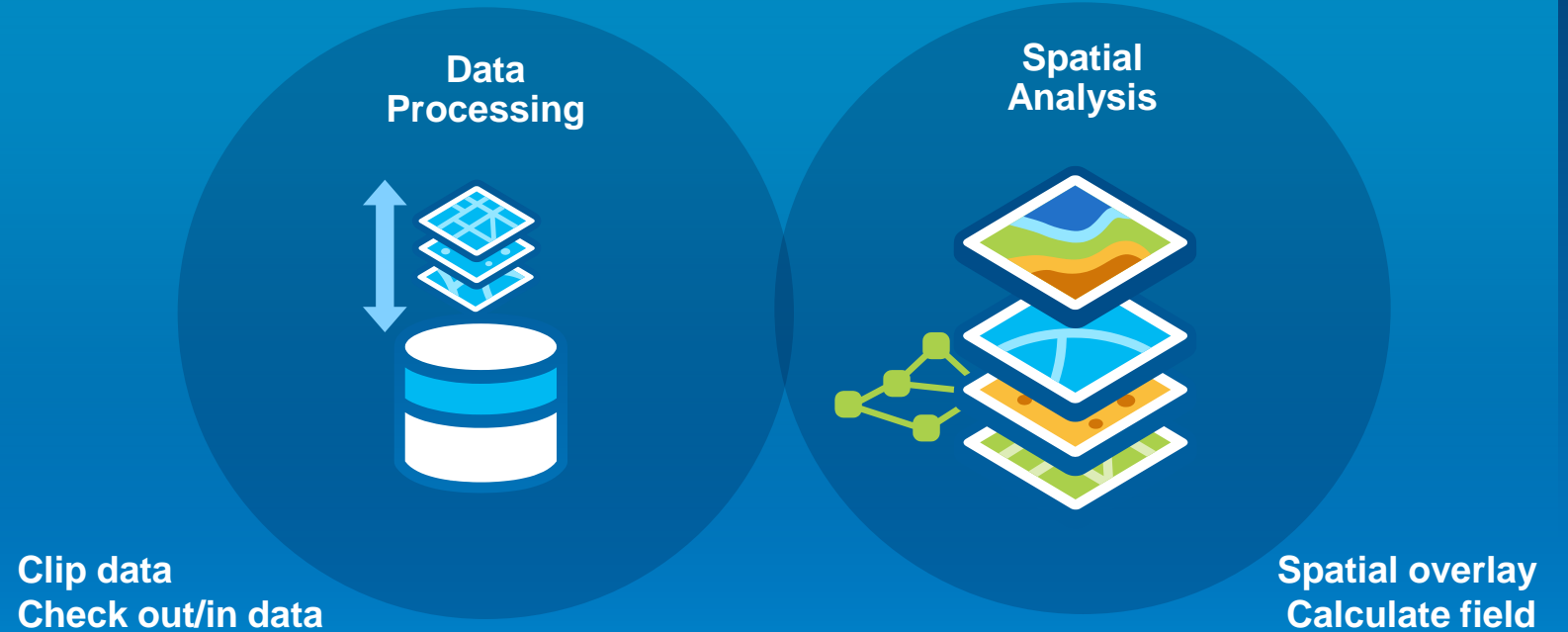
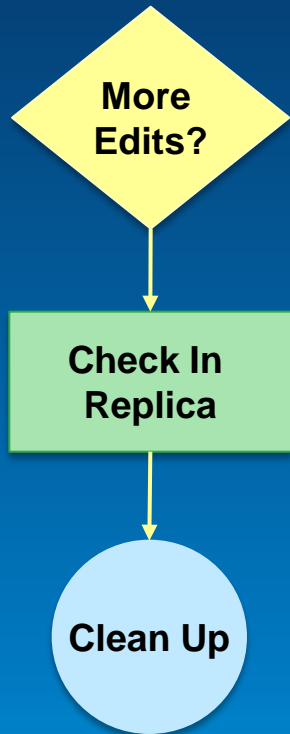
# Geographic Area of Interest

- **Spatial orientation of all work**
- **Restrict work to a spatial extent**



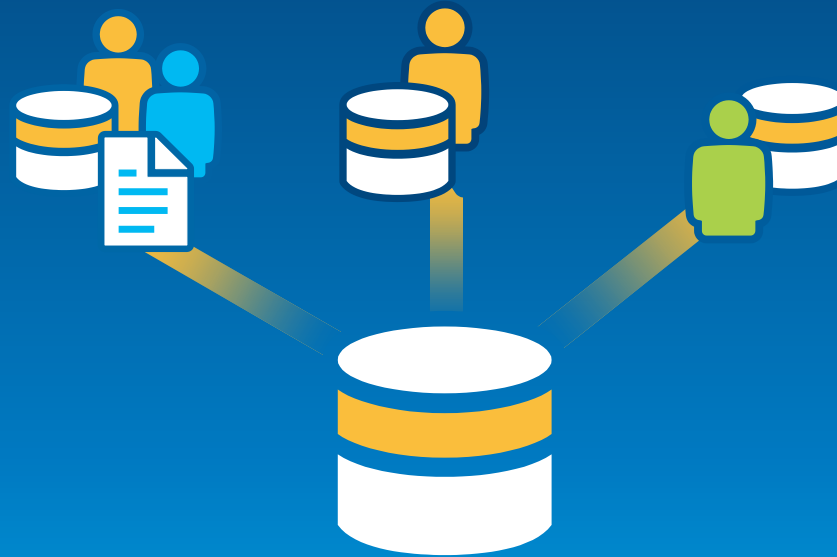
# Geoprocessing

## Launch GP Step Type



# Version Management

- Automate version management
  - Create version per job/user
  - Reconcile and post changes



# Version Management

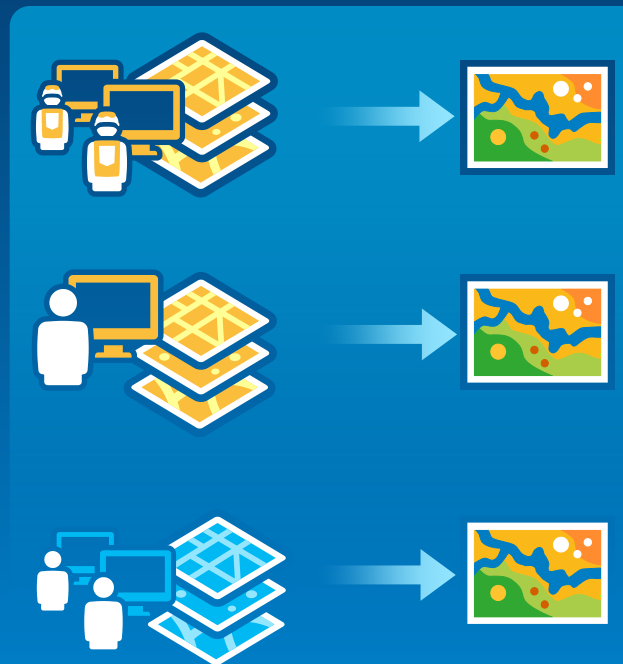
- Automate version management
  - Create version per job/user
  - Reconcile and post changes
  - Cleanup versions





# Task Assistant

- **Standardize steps in ArcMap**
  - Author, share and use tasks
- **Promotes sharing of knowledge**
  - Communicate best practices
- **Automated tasks**



*....Provides consistency and efficiency*

# Map Document Management

- **Step to launch ArcMap in preconfigured state**
  - **Predefined layers and cartography**
  - **Zooms to job's area of interest**
  - **Update layer source**



# ArcMap Tools

## Set current Job

Manage Steps

Workflow Diagram



## Spatial auditing

Geodatabase archiving

Reconcile and post version

Add data from version

Rollback edits

Properties

## Job Information

Attachments

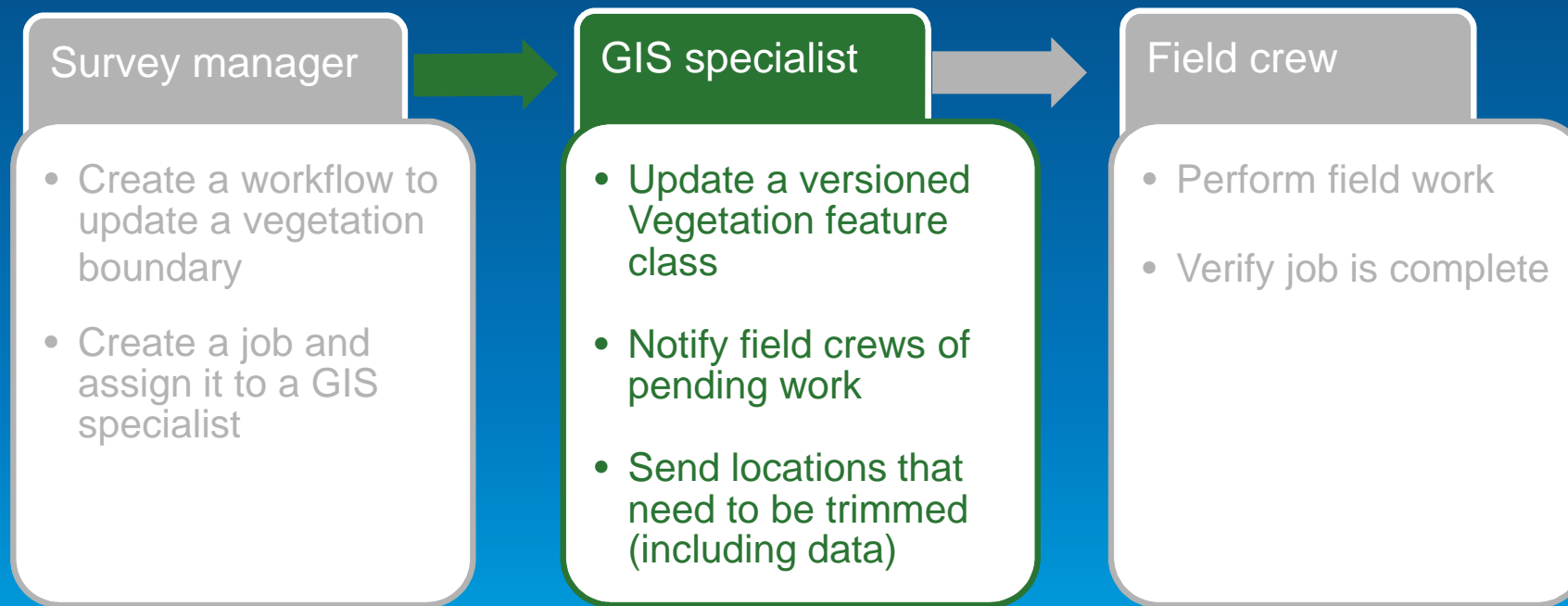
Notes

Step description

History

# Software Demonstration

- Is vegetation growth encroaching on a rail line?





# Key Features

.....continued

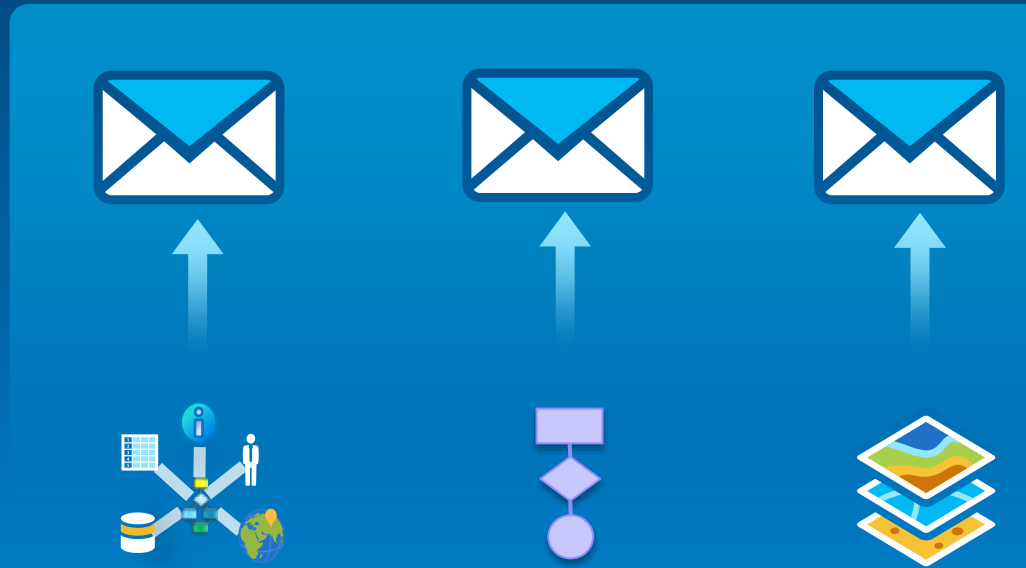
# Document Management

- **Attachments are key**
  - Linked to existing DMS
  - Linked to existing website
  - Embed in workflow database
- **Notes captured**



# Alerts and Notifications

- **Job Notifications**
  - Assign Job
  - Create Job
  - Close Job
- **Workflow Notifications**
  - QC step alert
  - Data received
- **Spatial Notifications**
  - Feature modification



# Reports

- One stop shop for all job information
- Built-in reporting capabilities
- Database tables
  - Support additional reporting tools



Percentage Complete	Job Type Name	Total Jobs
7.3625	Landbase Updates	1
Overall Total:		1

Percentage Complete	Job Type Name	Total Jobs
75	Map Request	1
Overall Total:		1

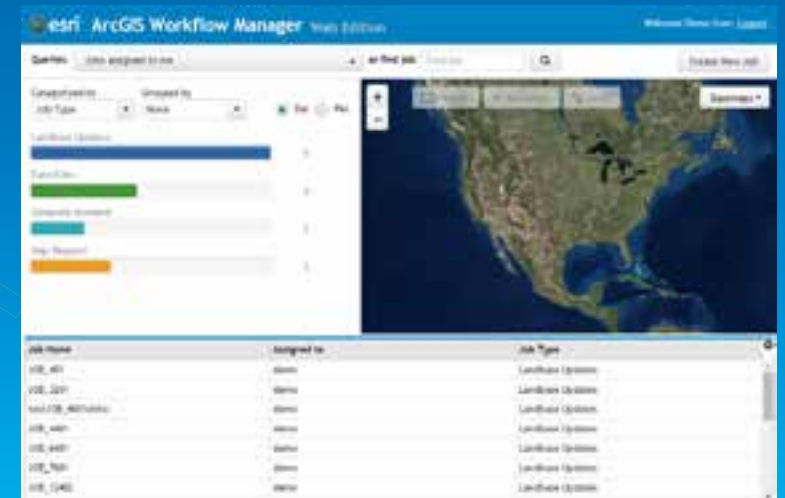
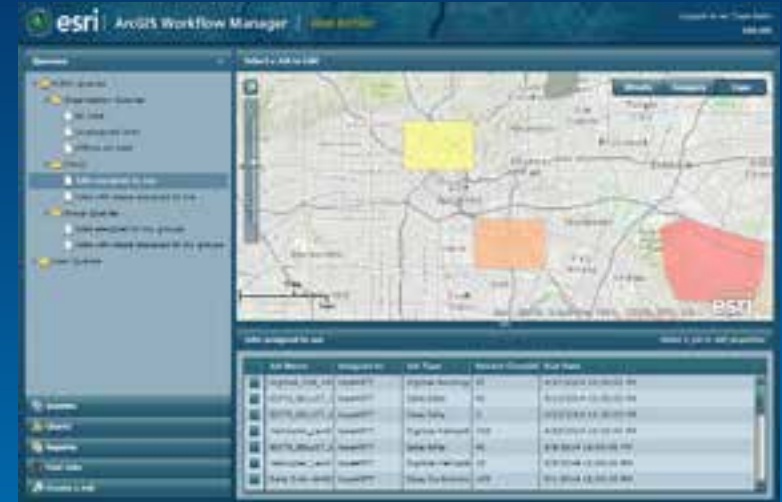
  

Percentage Complete	Job Type Name	Total Jobs
100	Domestic Incident	2
	Landbase Updates	1
	Map Request	2
Overall Total:		5



# Enterprise Offering

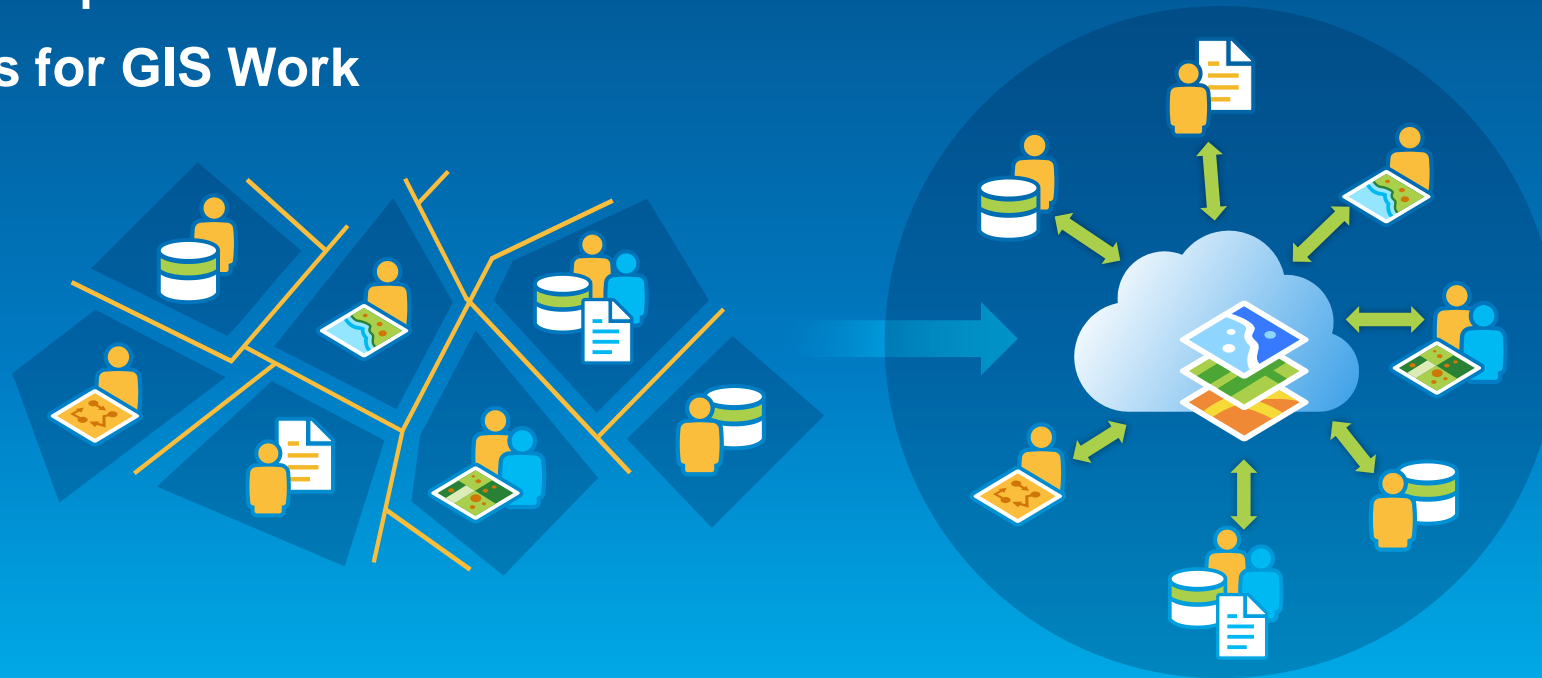
- Non-GIS staff
- Ready to use web apps
- No programming



# Extensibility

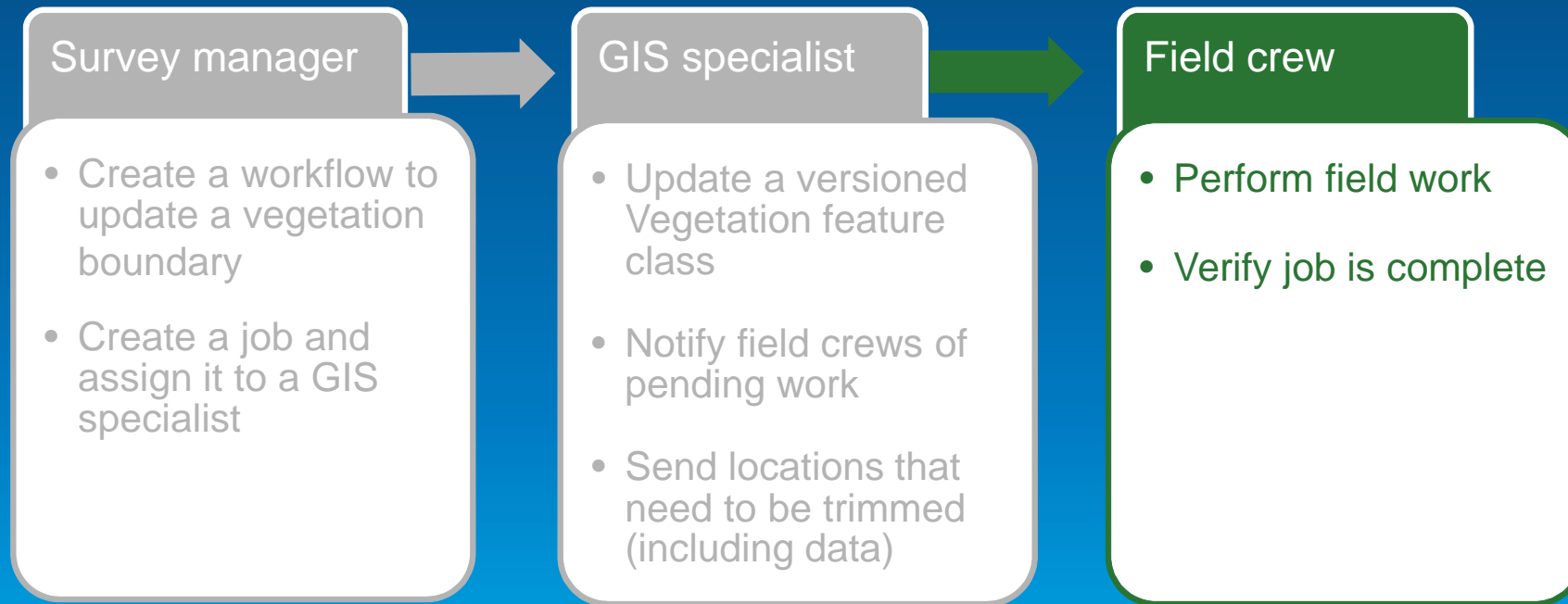
## Developer Options

- **Integrate with other systems**
  - Desktop APIs
  - Web APIs
  - Extended Properties
- **Dashboards for GIS Work**



# Software Demonstration

- Is vegetation growth encroaching on a rail line?





What's coming

## Pro

A New Application  
for Desktop

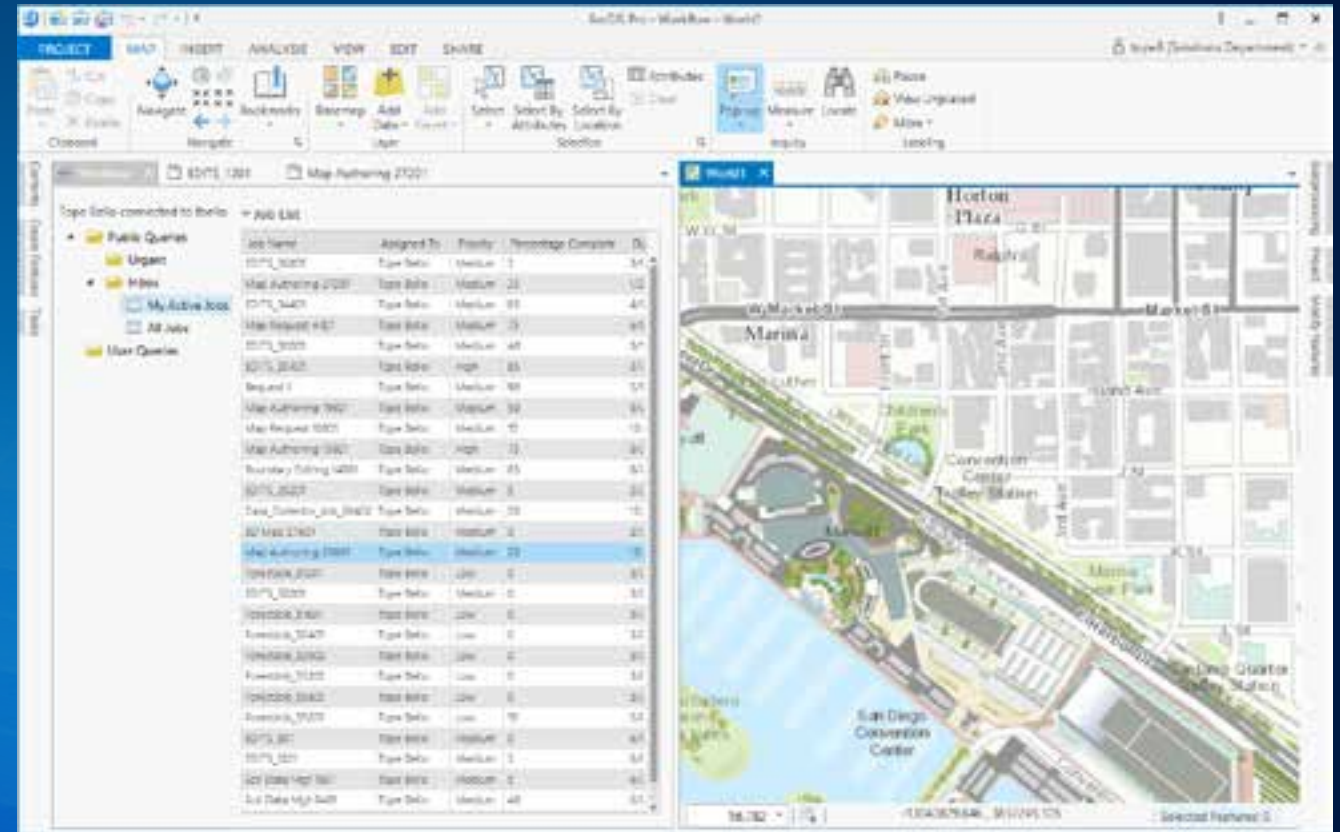
Application

Administrator

ArcGIS Pro

Desktop

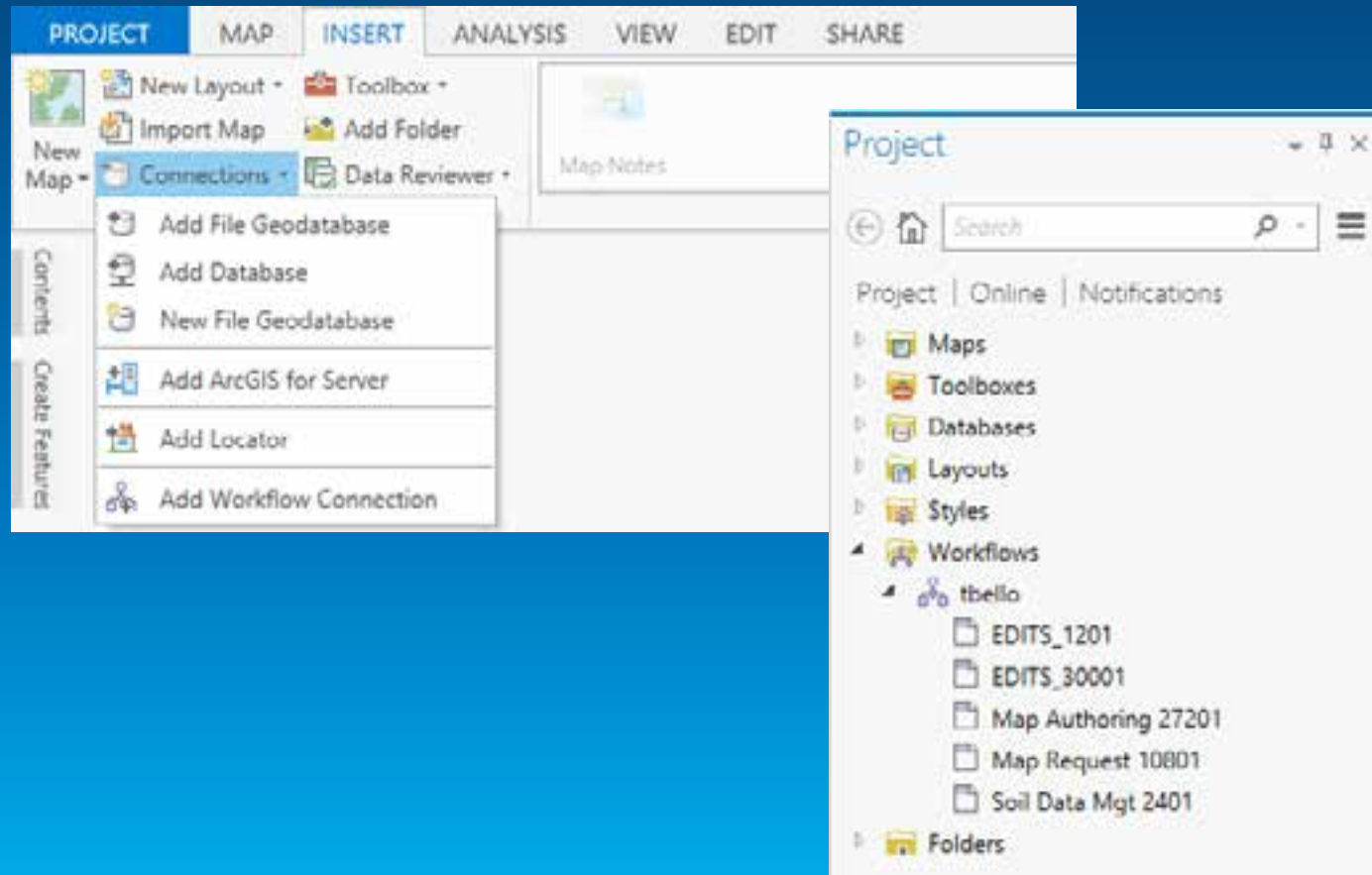
- Ribbon Based UI
- Better integration
- 64 bit



# Pro

## Project Based System

- **Workflow Connection**
- **Jobs**
- **Maps**
- **Data**
- **GP Tools**



## Pro

## Context Driven UI

- Workflow View
- Job Views
- Map Views

Job Name	Assigned To	Priority	Percentage Complete	Due Date
EDITS_30801	Tope Bello	Medium	5	3/9/2014
Map Authoring 27201	Tope Bello	Medium	25	1/28/2014
EDITS_34401	Tope Bello	Medium	85	4/17/2014
Map Request 4401	Tope Bello	Medium	100	1/28/2014
EDITS_30001	Tope Bello	Medium	100	1/28/2014
EDITS_30401	Tope Bello	Medium	100	1/28/2014
Request 1	Tope Bello	Medium	100	1/28/2014
Map Authoring 10601	Tope Bello	Medium	100	1/28/2014
Map Request 10001	Tope Bello	Medium	100	1/28/2014

Job Type - Job ID  
Data Edits - 1201

Assigned to  
Tope Bello

Created By  
Tope Bello at 6/16/2014 11:12 PM

Days Active  
16

Job Notes

Workflow | Descriptive Information | History

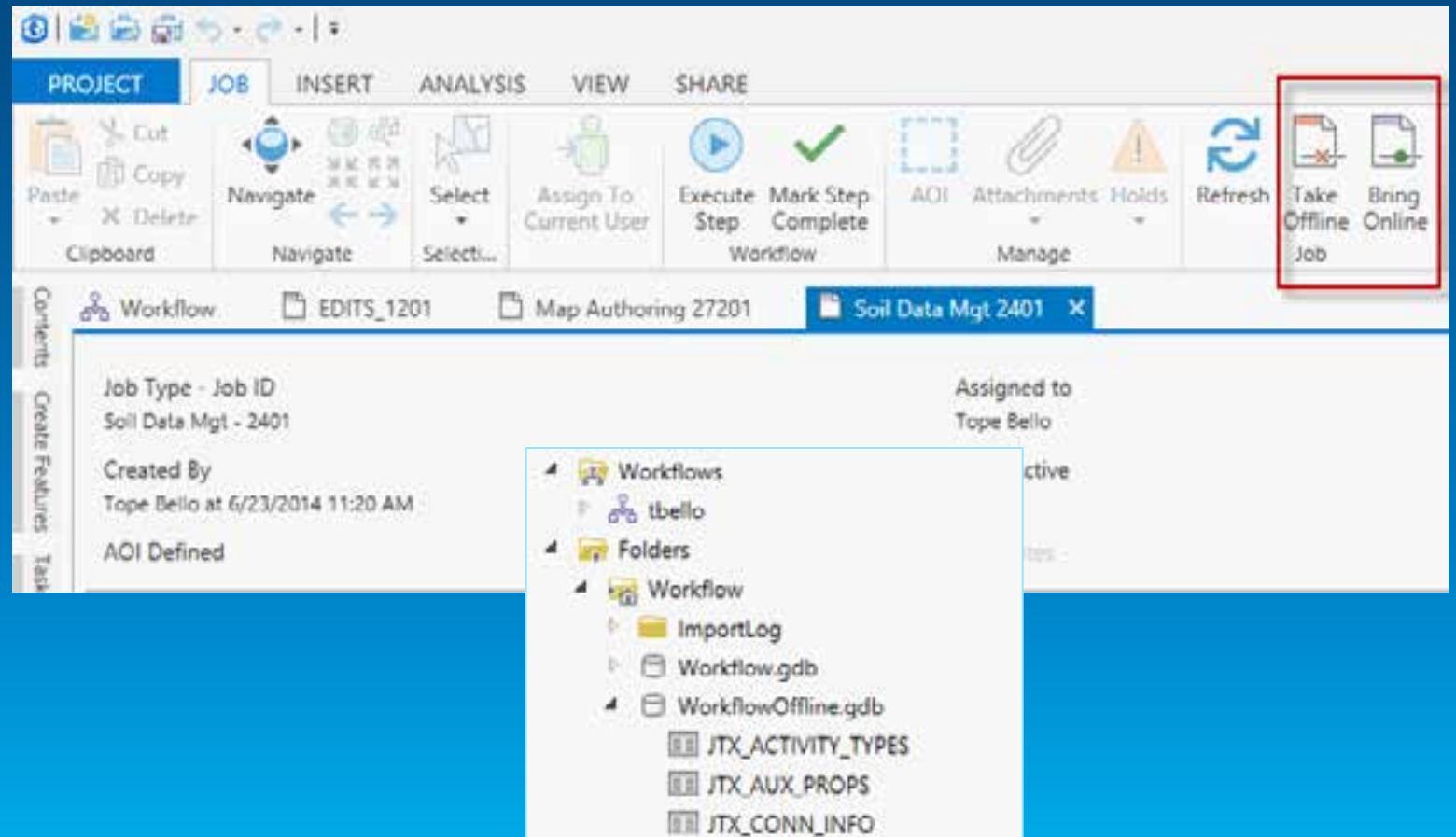
The screenshot displays the ArcGIS Pro Workflow Manager interface. At the top, the title bar reads "ArcGIS Pro - Workflow - Soil Data Mgt 2401". Below the title bar is a ribbon with tabs: PROJECT, JOB, INSERT, ANALYSIS, VIEW, and SHARE. The JOB tab is active, showing a toolbar with icons for Cut, Copy, Paste, Delete, Navigate, Select, Assign To Current User, Execute Step, Mark Step Complete, AOI, Attachments, Holds, Refresh, Take Offline, and Bring Online. Below the toolbar, there are three job tabs: "EDITS\_1201", "Map Authoring 22201", and "Soil Data Mgt 2401". The "Soil Data Mgt 2401" tab is highlighted with a red box. The main workspace is divided into two panels. The left panel shows the details for the "Map Authoring 22201" job, including Job Type (Map Authoring - 3), Assigned to (Tope Belo), Created By (Tope Belo at 1/26/2014 12:04 PM), Days Active (157), and AOI Defined. The right panel shows the details for the "Soil Data Mgt 2401" job, including Job Type (Soil Data Mgt - 2401), Assigned to (Tope Belo), Created By (Tope Belo at 6/23/2014 11:20 AM), Days Active (0), and AOI Defined. Below the job details, there are sections for "Workflow", "Descriptive Information", and "History". The "Descriptive Information" section for the "Soil Data Mgt 2401" job shows a workflow diagram with a yellow diamond labeled "Check AOI" and a green rounded rectangle labeled "Define AOI".



# Pro

## Offline Jobs

- Access Jobs off the network
- Track all job related actions offline
- Check in jobs back to production



Requirements of a Workflow  
management system...

Key capabilities of workflow manager..

ArcGIS Pro!

# Summary

# Sessions – Wednesday July 16th

Demo Theaters (Geodata Management Exhibit Hall C)

- *ArcGIS Data Reviewer*: **Integrating ArcGIS Data Reviewer and ArcGIS Workflow Manager to Automate Data Quality Control Workflows (11:30am – 12:00pm)**
- *ArcGIS Workflow Manager*: **Getting Started with Out-of-the-Box Templates (1:30pm – 2:00pm)**
- *ArcGIS Workflow Manager*: **Creating Holds and Dependencies on Projects (3:30pm – 4:00pm)**
- *ArcGIS Workflow Manager*: **Using Custom Properties to Automate Workflows (5:30pm – 6:00pm)**

## Sessions – Thursday July 17th

- *ArcGIS Workflow Manager: Advanced Workflows and Concepts (10:15am – 11:30am) Room 15 A*
- *ArcGIS Workflow Manager: Integrating Geoprocessing into Your Business Processes (12:30pm – 1:00pm)*
  - Demo Theater - Geodata Management Exhibit Hall C

# Resources

- **Product Page**
  - <http://esri.com/workflowmanager>
- **Resource Center**
  - <http://resources.arcgis.com/en/communities/workflow-manager/>
- **Training**
  - <http://training.esri.com/>
- **Forums**
  - <http://forums.arcgis.com/forums/71-Workflow-Manager>

**Thank you...**

- **Please fill out the session survey:**

**First Offering ID: 1298**

**Online – [www.esri.com/ucsessionsurveys](http://www.esri.com/ucsessionsurveys)**

**Paper – pick up and put in drop box**



Understanding our world.