



# Unpacking the ArcGIS Platform

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Cameron Muller





# ArcGIS

A Comprehensive Geospatial Platform

... For Creating Systems & Solutions

Pro  
Enterprise  
Online



- Mapping
- 3D
- Imagery
- Analytics
- Data Management

Living Atlas

Software and SaaS



# ArcGIS Is Designed for Everyone





# ArcGIS

Is an Enterprise IT Platform

Open  
Standards-Based



Scalable  
Secure  
Reliable

Workflows

Apps & APIs

Services

Data

Infrastructure

A Well-Architected Platform



# ArcGIS

Is an Enterprise IT Platform on Which Systems Are Designed, Built & Sustained

ArcGIS  
*Platform*



ArcGIS  
*Systems*



## A photograph of three people—two women and one man—collaborating around a laptop. The man is seated at the desk, typing on the laptop. One woman stands behind him, pointing at the screen, while another woman stands to the left, looking on. They are all focused on the laptop screen. The background is a solid blue color with the 'ArcGIS Online' logo in the top right corner.



ArcGIS  
Enterprise

An aerial view of a city block. A central green space with trees is surrounded by various colored buildings: a tall pink one, a blue one, a yellow one, and an orange one. A river or canal flows along the bottom edge. The surrounding urban area is shown in grey.

Now the model can be positioned in the



# ArcGIS

Supports Multiple Implementation Patterns

Mission & Enterprise Systems  
Data Management & Applications

Projects / Studies  
Mapping and Spatial Analysis



System of Systems  
Integrating Multiple Systems



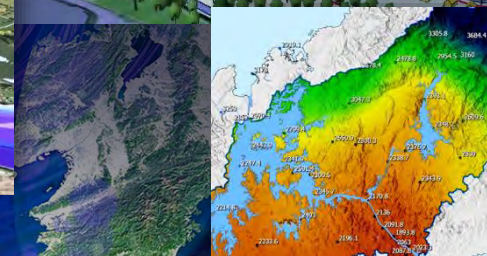
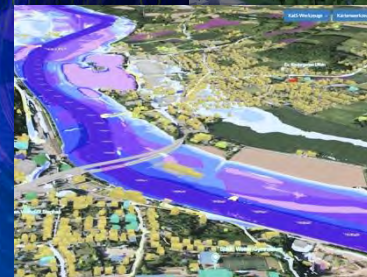
*Enabling and Integrating Individuals, Organizations  
and Entire Communities*



# ArcGIS Technology



*Strategic  
Initiatives*





# ArcGIS Continues Advancing

Leveraging and Integrating Many Innovations





# ArcGIS Is Being Enhanced with AI

Integrating the Power of GIS and AI

*Advancing Science*



*90+ Models  
... Open & Extendable*



**GeoAI**  
(Tools & Models)



*Secure &  
Trustworthy*

**AI Assistants**  
(Improve Access  
& Efficiency)



*Productivity*

**Supporting**

- **Documentation**
- **Tech Support**
- Mapping & Analysis
- **Code Generation**
- Search
- App & Solution Creation
- Translation
- ...

*Making ArcGIS easier ...  
... and more intelligent*



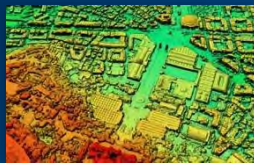
# Imagery & Remote Sensing

A Comprehensive System

Includes  
Ready-to-Use  
Imagery

## Reality Mapping

3D Mesh  
Point Clouds  
True Ortho  
Elevation



Airbus

Massively Scalable  
Multidimensional

## Analysis

### GeoAI

Classification  
Change Detection  
Terrain Analysis

### Raster Analytics



## Data Management

All Formats  
STAC

Tiled & Dynamic Services  
Open Standards



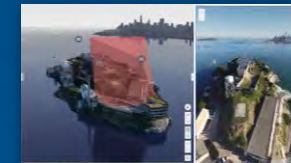
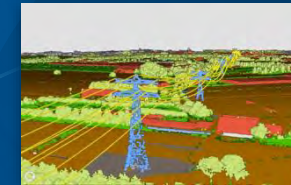
New & Improved

- **GeoAI Models**
- **Imagery Analysis App**
- **Image Analysis in Online**
- Additional Sensor Support
- **Video and Oriented Imagery**
- Hyperspectral, SAR, Hi-Res Optical

## Visualization

### Image Interpretation

Map & Image Space  
Oriented Imagery  
Stereo  
Video



*A fundamental part of ArcGIS*

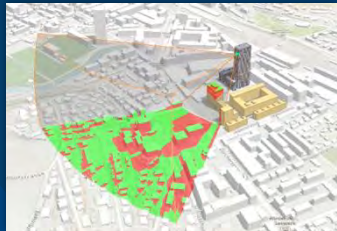
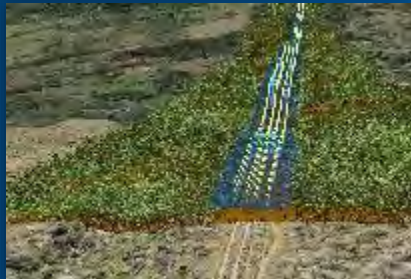


# 3D GIS

Enabling Living Digital Twins

## Analytics

Building Extraction



Advanced Point Cloud Processing

Web Analytics

Many 3D Formats  
(Mesh, BIM . . .  
. . . 3D Tiles, Terrains)

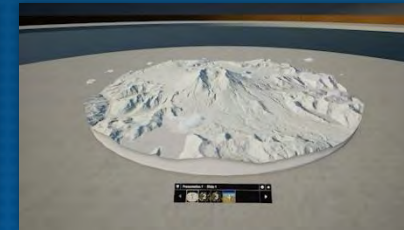


## Visualization

Urban Digital Twin



Immersive



New Tree Library



Global Visualization



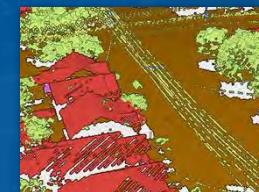
XR Viewer



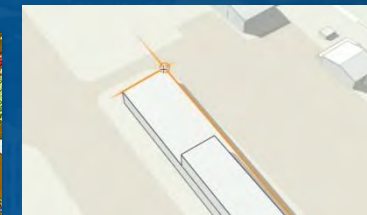
Mobile

## Data Management

Point Cloud



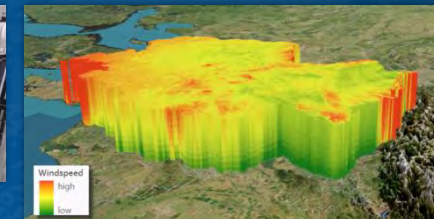
3D Editing



Mesh & BIM



3D Feature & Building Layers



Voxel Layer

## New & Improved

- 3D Feature Performance
- **3D Building Layer**
- Web Analytics
- Volumetric Clouds
- 3D Tiles
- KML Tracks
- Elevation Data Quality Tools
- XR Viewer (beta)

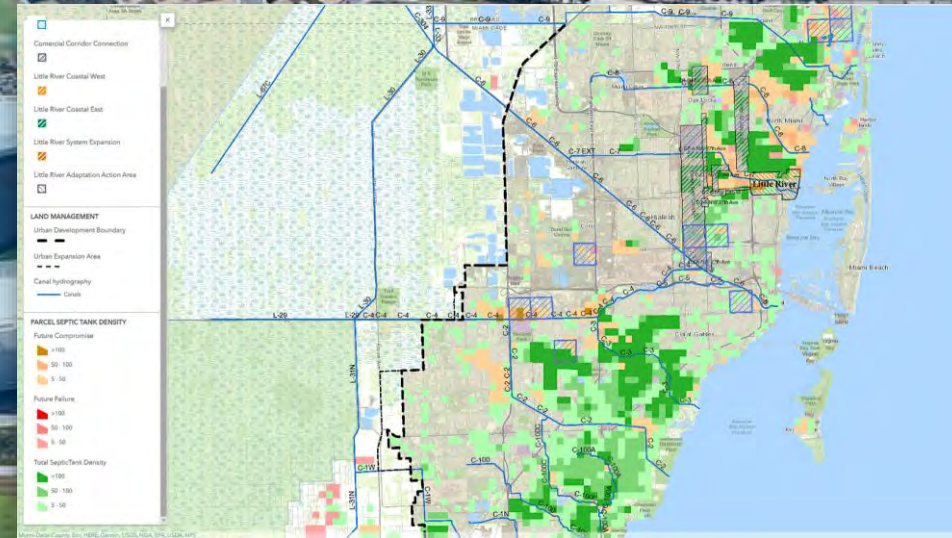
## Coming Soon

- Gaussian Splats
- CityGML



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# 3D and Digital Twins





# What's Coming Next

Continuous Product Improvements  
& Incremental Releases

Agentic AI  
SAR Reality Server

Natural Language Search

Data Lakes

Uncertainty Analytics

Video

Scalability

Situational Awareness

GeoAI

Web GPU

Web ModelBuilder

Knowledge Graphs

Enterprise Integration

AI Assistants

Generative AI

Fabric

Smart Mapping

Text Analytics

Automation VR/AR Cloud Native

Lidar

Security

Location Sharing

ISO 27001 Web Editor

Kubernetes

GeoParquet

Exploratory Analysis Time

Utility Network

Accessibility

Offline Workflows

Data Innovation

Edge Computing

Analysis-Optimized Imagery

Gaussian Splats

Unstructured Data

XR Viewer

BIM

Hyperspectral

Real Time

More Content

Telco Data Model

Metadata & Search

3D

Easier Administration

Simulation Modeling

Predictive Analysis

Web Components

Spatial Reasoning

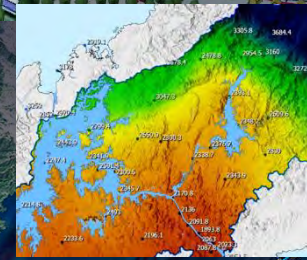
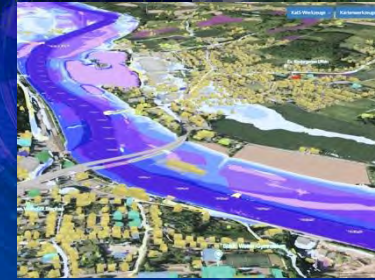
Focusing on Quality  
and Performance



... Driven by user feedback  
and technological innovation



# ArcGIS Products

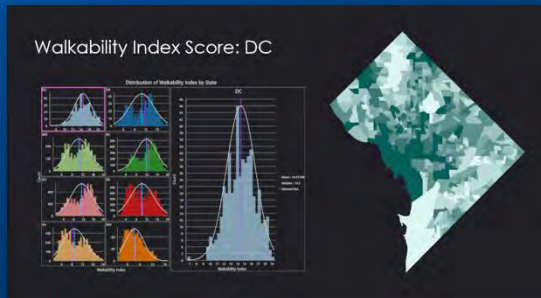




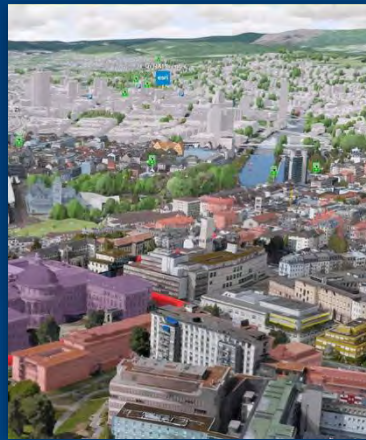
# ArcGIS Pro

Comprehensive Application for GIS Professionals

Hundreds of New  
User-Driven Improvements

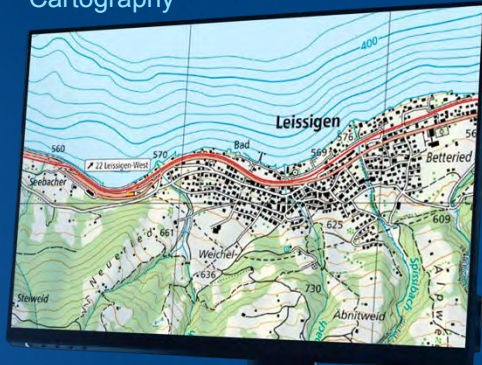


Advanced Analytics



3D

Cartography



Mapping &  
Visualization

Analytics

Data  
Management



*Many Powerful Extensions*

## New & Improved

- 84 Geoprocessing Tools
- **Unified Metadata Editing**
- Spatial Definition Query
- Editing Experience
- **Multuser Project Collaboration**
- Parquet & NoSQL Support
- Tool Suggestions

## Coming

- **OneDrive Support**
- **AI Assistant (beta)**
  - Workflow
  - Documentation
  - Coding
- Gaussian Splats
- Layer & Feature Effects
- Simulation Modeling

*... And improved quality, productivity & performance*



# ArcGIS Enterprise

## Enterprise GIS Infrastructure

### Advanced Applications

#### Imagery Analytics & Management



#### Mapping & Visualization

#### Analytics

#### Data Management

#### Portal

#### Content Sharing & Discovery

#### Admin DevOps

#### Observability

Windows, Linux  
and Kubernetes

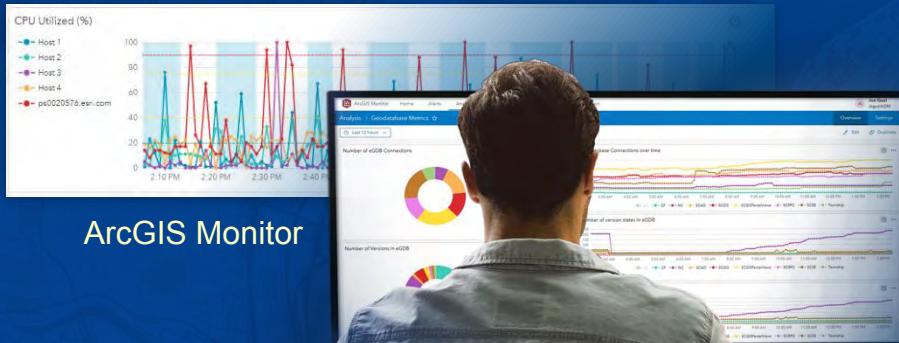
Many Powerful Extensions

### New & Improved

- **Item Classification**
- **System Reporting**
- **Updating Portal URL**
- Cloud Integration
- **Observability**
- **Kubernetes**

### Coming

- **More Cloud Storage Options**
- **Data Pipelines**
- Semantic Search



ArcGIS Monitor

Supporting clouds and on-premises deployments



# ArcGIS Online

Comprehensive SaaS GIS

Interactive Mapping



2D & 3D Visualization Analysis

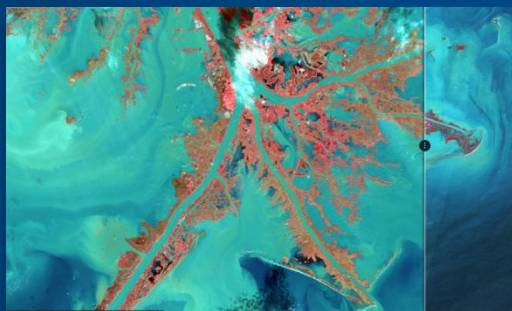
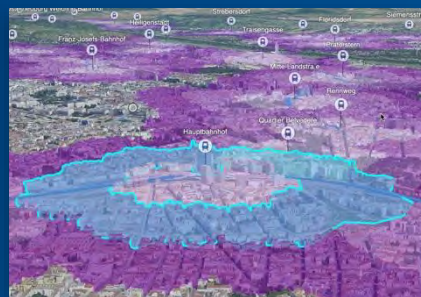


Image Management & Analysis

Millions of Users

Tens of Millions of Items

Billions of Maps per Day

... Growing Rapidly (35%)



## New & Improved

- FedRAMP Moderate
- **ModelBuilder**
- Imagery Analysis & Exploitation
- Web Editor
- Bulk Administration
- Premium Feature Data Store
- Premium Feature Services (Dedicated Infrastructure)

## Coming

- AI Assistants
- Organizational Analytics
- ISO 27001
- **Item Dependencies**
- Bulk SSO Migration

*Enabling community GIS*

*... interconnecting users & systems*

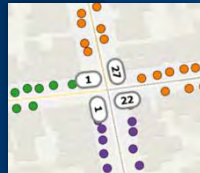
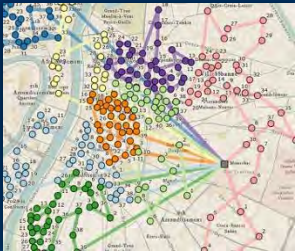


# ArcGIS Extensions

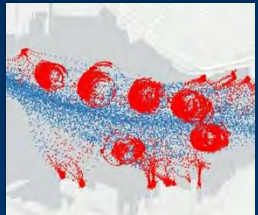
Integrate Focused Capabilities

## Analytics

Spatial Analyst



Network Analyst



Geostatistical Analyst



3D Analyst

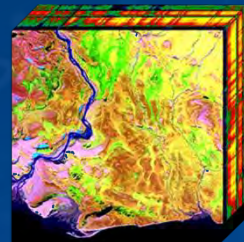
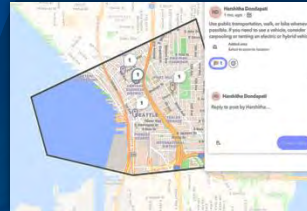


Image Analyst

## Community Engagement (Hub)

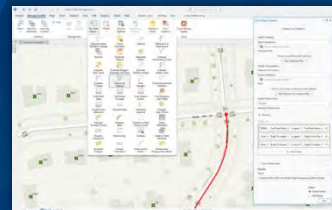
Map-Based Discussions



Open Data & Community Engagement

## Data & Workflow Management

Data Reviewer



Data Interoperability



Workflow Manager

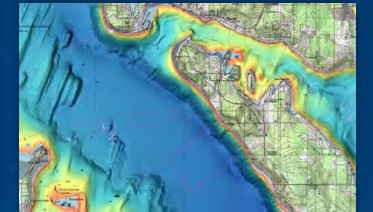


## Production Mapping & Charting

Topographic



Bathymetry



Maritime



Aviation

## Indoor GIS

Space Planning & Security



Navigation

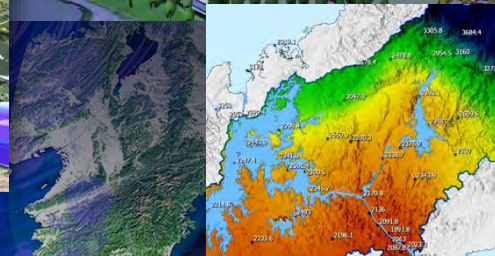
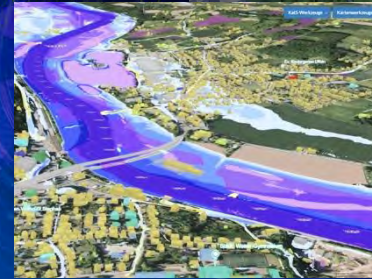


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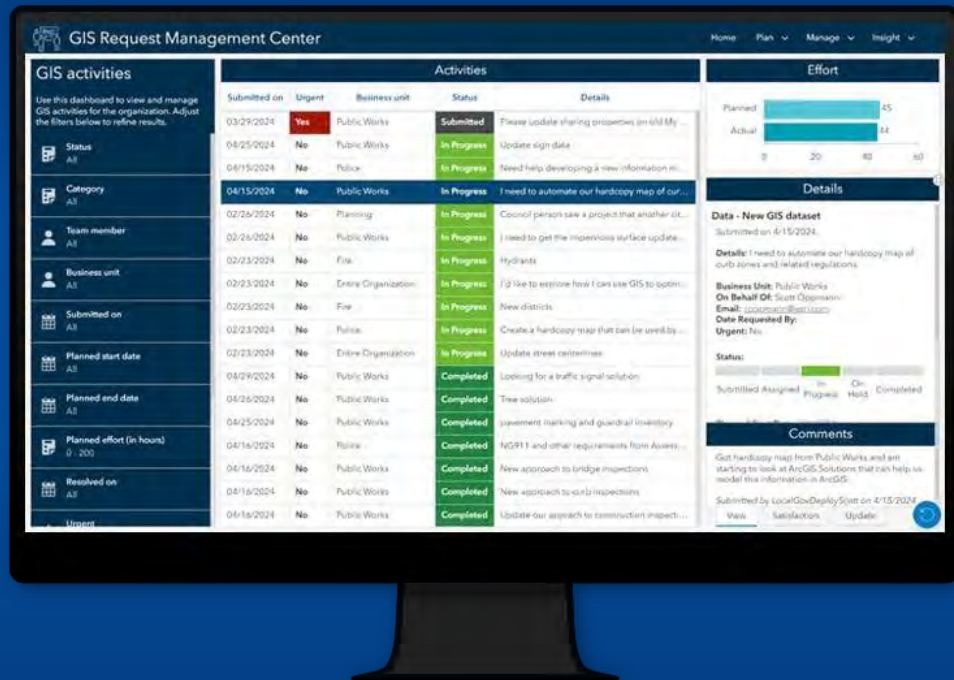
# What's New



*Accessed via  
User Types*







# The ArcGIS ecosystem



# ArcGIS Includes Content – Living Atlas

A Curated Collection of Ready-to-Use Maps and Layers

## New & Improved

- **Analysis Optimized Imagery**
- **Enhanced 3D Basemaps**
- Google Photorealistic Basemap
- Overture Basemap
- Community Road Closures
- Marine Protected Seas
- **GBIF Data Extraction**
- iNaturalist
- Biodiversity
- Land Cover (1980s–2024)
- **World Imagery for AI**
- World Transit Service
- Winds
- GeoAI Models
- Ecosystems 2050
- **GeoEnriched Hexbin Data**

## US Only

- **Nationwide Parcels**
- 2025 Esri Demographics
- **NAIP Imagery**
- Census & ACS
- **Transit Feed**
- Broadband Data
- Hydrology (NHDPlus)
- NGDA Layers

## Premium Content

- **Imagery**
- Demographics & Tapestry
- Parcel Attributes
- ...

Infrastructure

Soils

Transportation

Hazards

Demographics

Habitats

Landscape

Basemaps

Hydro

Environment

Traffic

Weather

Elevation

Imagery

Biodiversity

Oceans

POI

Boundaries

Movement

Business

Land Cover

Ecosystems

Energy

Massive &  
Growing Rapidly

*Built using community contributions and commercial sources*



# ArcGIS Solutions

150+ Ready-to-Use Configurations

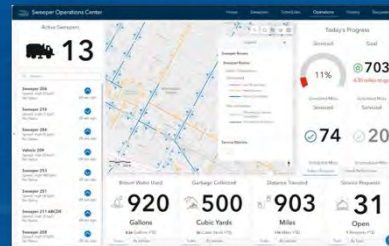
Included with ArcGIS

Local & State Governments

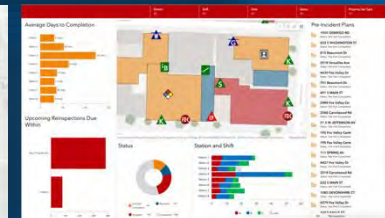
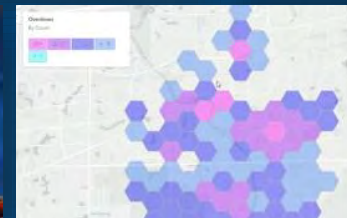
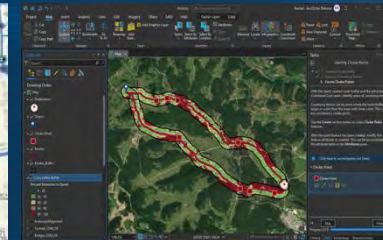
- Conservation
- Defense
- Elections
- Emergency Management & Disaster Response
- Health / Human Services
- Land Records
- Natural Resources
- Planning and Development
- Public Safety
- Public Works
- Transportation
- Telecommunications
- Utilities / Network Management



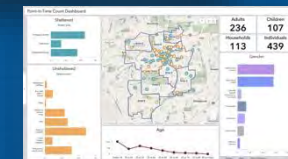
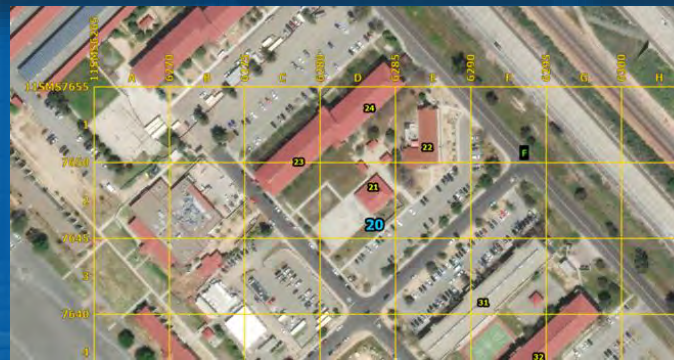
New Solution for GIS Managers



Utilities & Telecom



Public Safety & Security

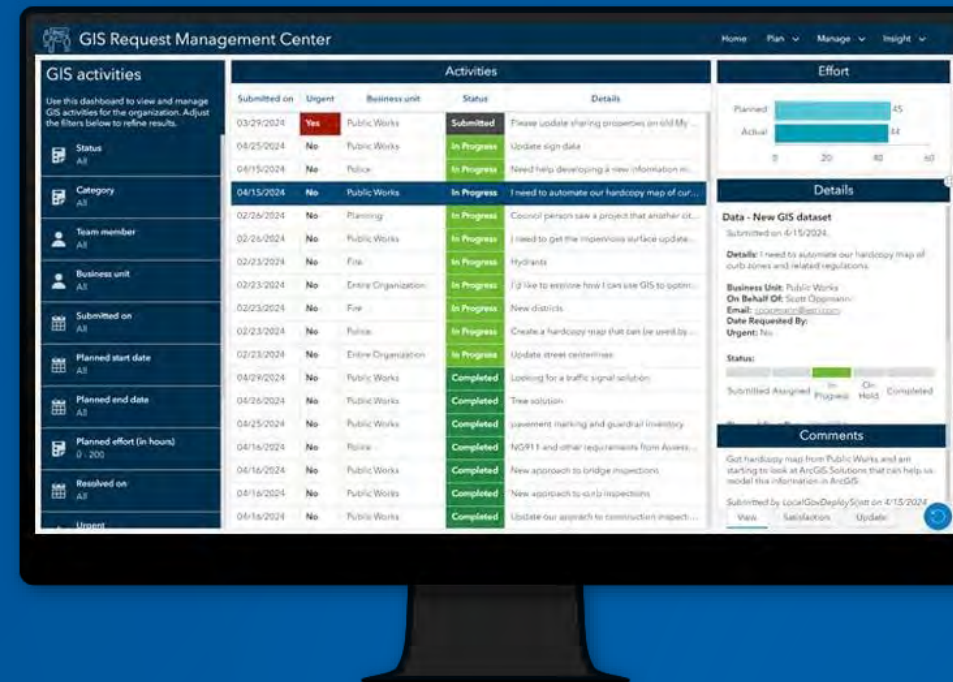


Accelerates implementation  
& delivers business value



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# ArcGIS Solutions





# ArcGIS APIs and SDKs

Rich Capabilities for Automating, Extending & Creating Apps

## New & Improved

- **Arcade AI Assistant**
- **Web Components**
- UI / UX Design System (Calcite)
- Editing
- **Location Services**

*Increasing Developer Productivity*

## Customizing & Extending

## Creating Apps

## Automating

Enterprise SDK  
Pro SDK

JavaScript SDK

Open-Source APIs

Native SDKs

Game Engine SDKs

Python API

3rd-Party Connectors

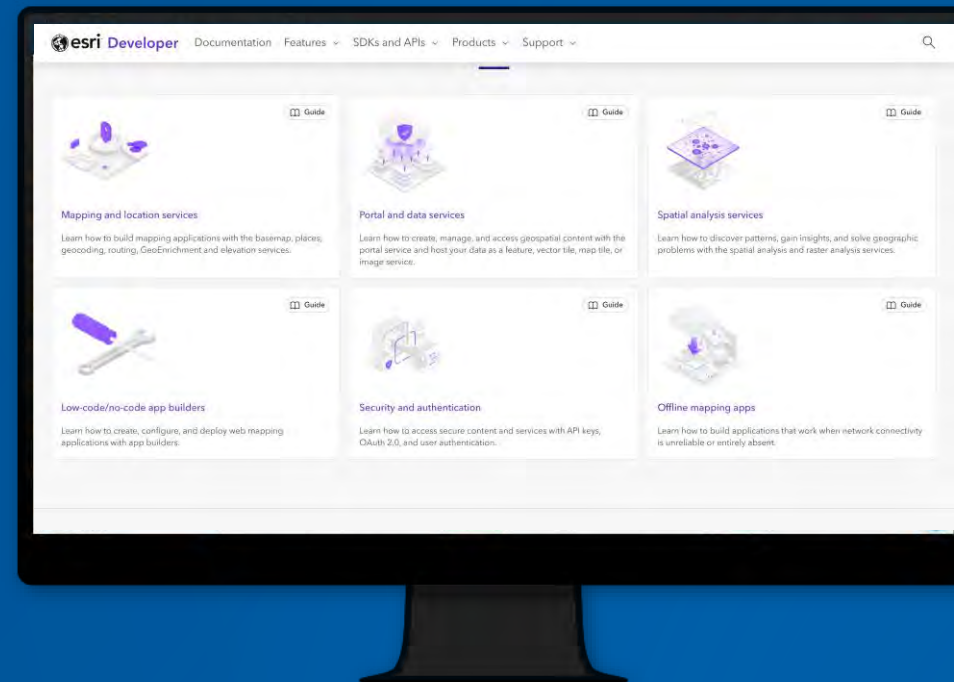
*Tools & resources for  
scripting, coding & embedding*





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# Developer Platform





# Esri Alliance Products

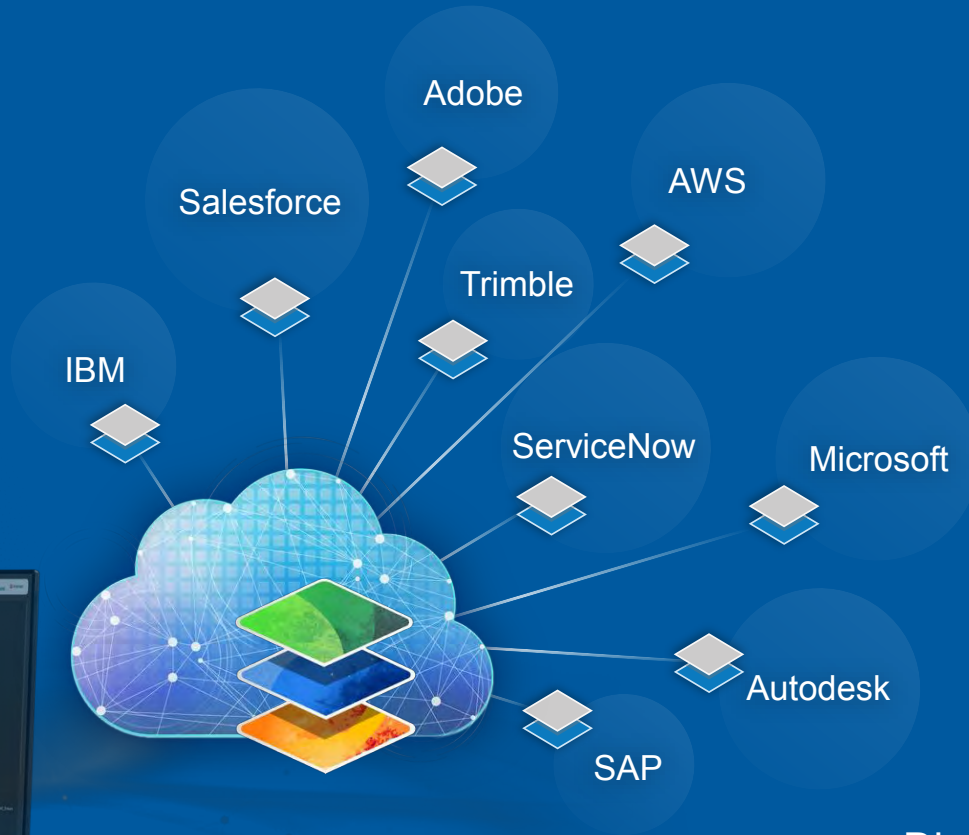


*SOUTHERN AFRICA ESRI USER CONFERENCE 2025*

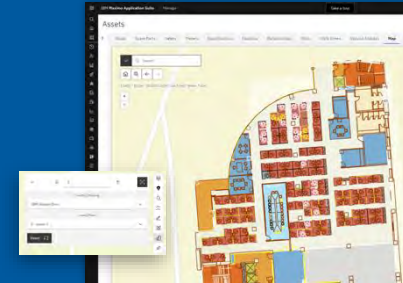


# Integration with Other Systems

Interconnecting and Geoenabling Enterprise Business Workflows



Asset Management



Analytics



Engineering



Work Management



Graphic Design

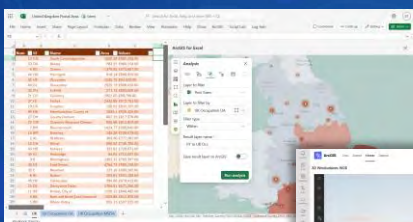
Directly Supported as Part of ArcGIS



# ArcGIS for Microsoft Users

Geospatially Enabling the World's Most Popular Platforms

Excel



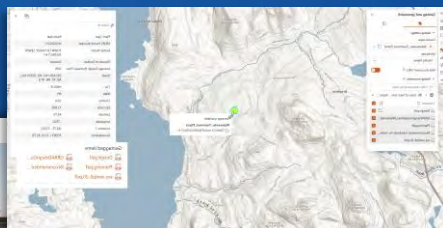
Spatially Enable

Teams



Collaboration

SharePoint



Discover and Share

Microsoft 365

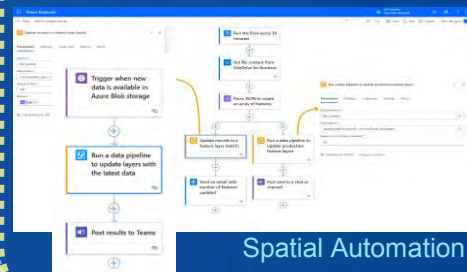
Expand  
Extend  
Enable



ArcGIS

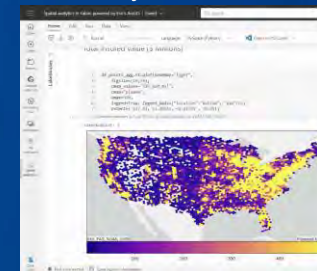
Power Platform

Power Automate



Spatial Automation

GeoAnalytics for Fabric



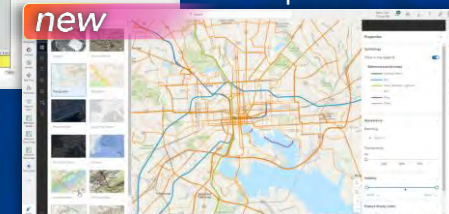
Geospatially Enabling

Power BI

Location Intelligence



Maps for Fabric



Advanced Mapping

.NET .NET Framework

ArcGIS Maps SDK for .NET

Azure

ArcGIS Pro

ArcGIS Enterprise

Mission  
Knowledge  
GeoAnalytics

GeoEvent  
Image  
Notebook



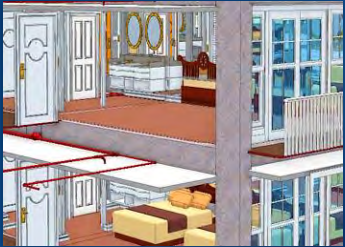
# ArcGIS for Autodesk Users

Integrating CAD & BIM with GIS

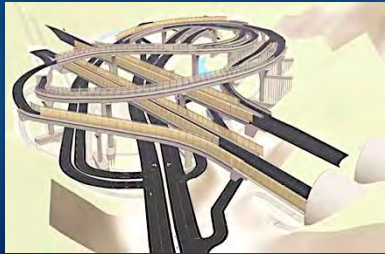
Linking GIS Features  
with Autodesk Documents

Strategic Partnership with Autodesk

Accessing CAD & BIM Data



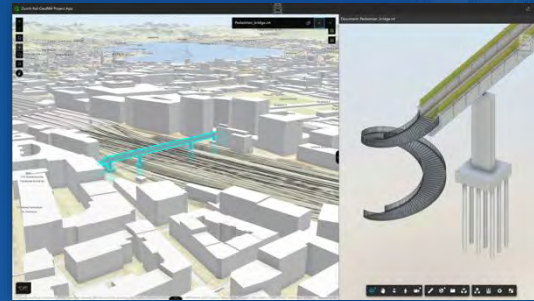
RVT



IFC



DWG & DGN



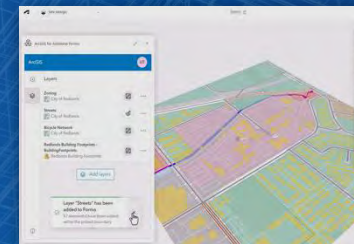
Autodesk Construction Cloud

**GeoBIM**

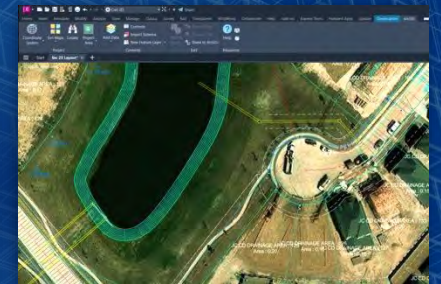
**ArcGIS Pro**

Connecting Data, Systems & Workflows

Integrating ArcGIS



Forma (New)



Civil 3D

**Autodesk  
Apps**



AutoCAD

*Enriching GIS . . .  
. . . and geoenabling AEC*



# Demonstrations

Esri Alliance Products



Microsoft 365

*Mapping  
Geocoding  
Spatial Analysis*



Online &  
Enterprise



Autodesk

*Bringing ArcGIS to  
knowledge workers worldwide*



# SUPPORTING USERS

## Technical Support

Documentation &  
Web Resources

User Conferences

Esri Community

ArcUser

Esri Press

ArcNews

Webinars

Blogs

Tutorials

Instructor-Led  
Courses

Web  
Courses

Technical  
Certification

MOOCs

Hundreds of  
Free Courses

## Professional Development

Developer  
Program



**Cartography.**

Aug. 27 - Oct. 8, 2025

esri

**GIS Day**

November 19, 2025

## Professional Services

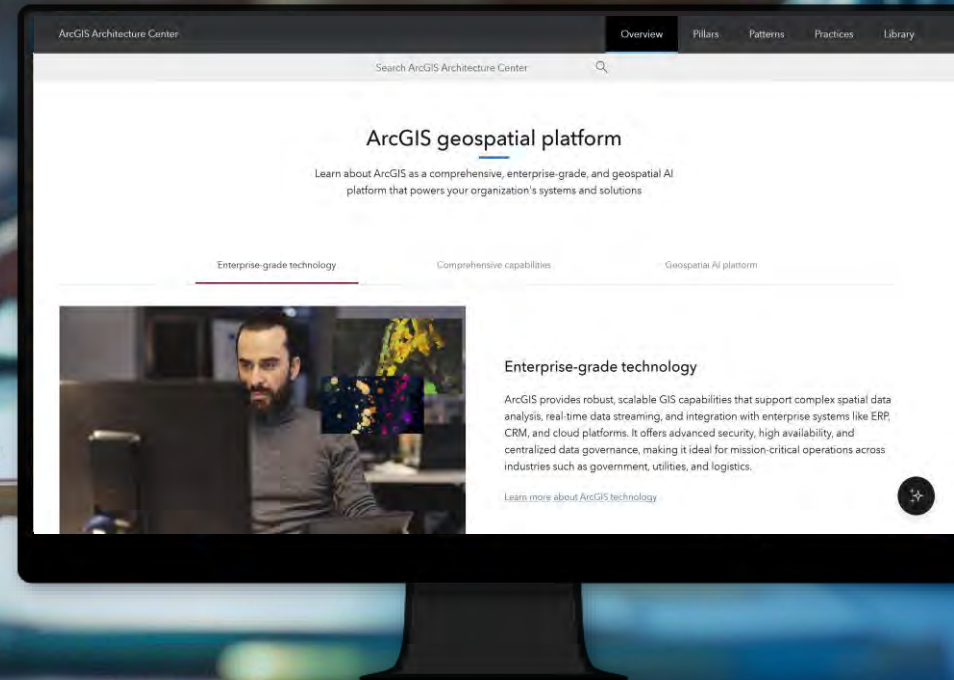
*Helping users stay current and grow their expertise*





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# Learning and Information Resources





# The Path to Geospatial Excellence



*SOUTHERN AFRICA ESRI USER CONFERENCE 2025*



# The Path to Geospatial Excellence

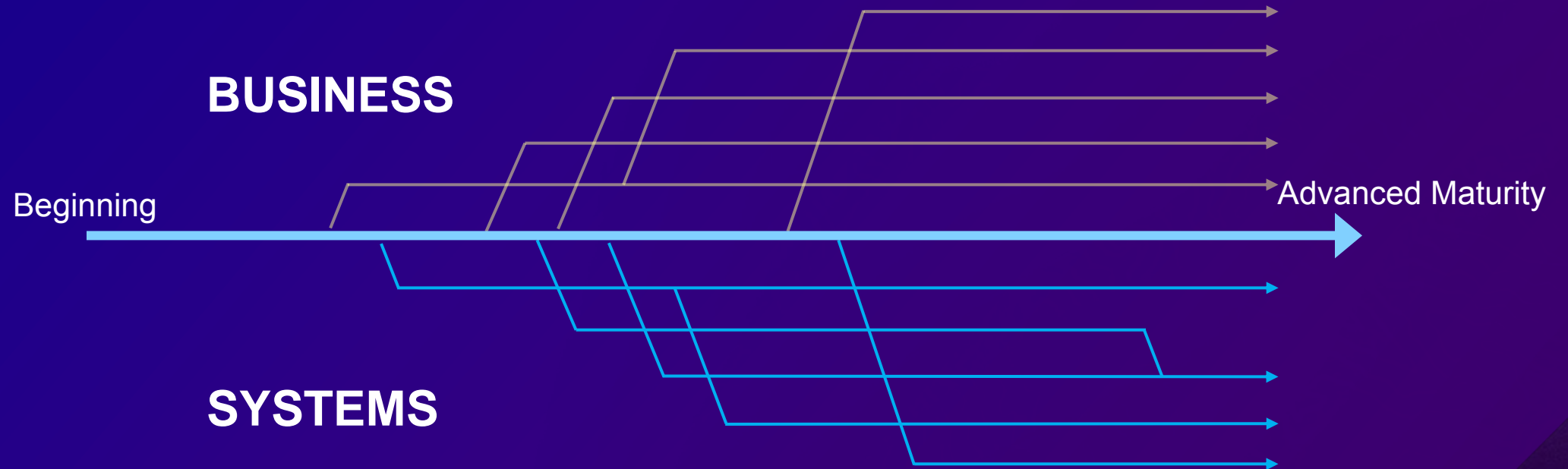
## Common Obstacles to Enterprise Success





# The Path to Geospatial Excellence

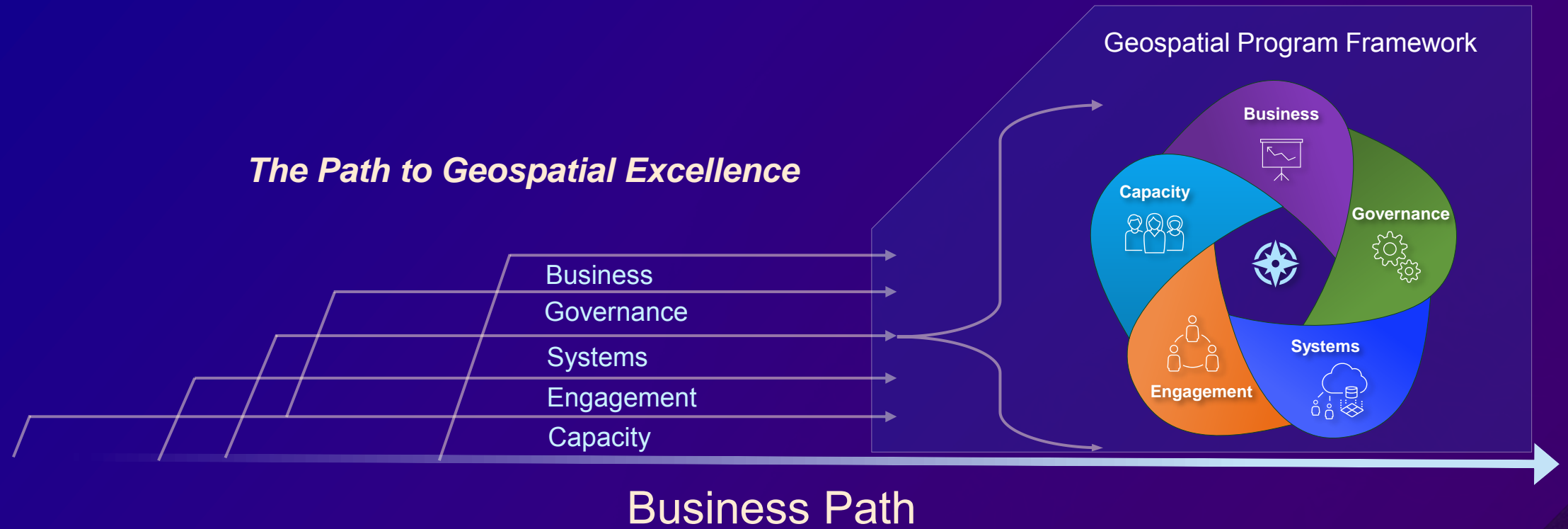
Customer Enterprise Journey – Two parallel paths





# The Path to Geospatial Excellence

## The Business Path





# Geospatial Excellence Framework

## Geospatial Program Framework

Business	Governance	Systems	Engagement	Capacity
Executive Sponsorship & Strategy	Organization	Well Architected Framework	Awareness & Promotion	Knowledge and Skills Development
Investment & ROI	Policies and Standards	Innovation and Modernization	Communication & Collaboration	Building Capabilities
Value & Alignment	Processes & Procedures	Data and Information Product Management	Adoption	Human Capital Management (HCM)
Initiative Prioritization	Controls & Metrics	Insights and Analytics	Culture	GIS Patterns of Use
Solution Portfolio	Delivery and Operations	Web GIS Operations & Management	Advocacy	Leadership Development



# The Path to Geospatial Excellence

What is the Path to Geospatial Excellence?



## Direction

For some, it's a starting point, for others, it's an azimuth check or a path forward



## Self-Help

Serves as a self-help resources site



## Best Practices

Culmination of best practices and recommendations



## Common Characteristics

Collection of common characteristics from organizations who maintain highly successful GIS programs



## Approach

A programmatic approach to implementing & maintaining successful & sustainable GIS programs




## Framework

It's a common framework for achieving success



# The Path to Geospatial Excellence

## A Look at the Resources

 Products ▾ Industries ▾ Support & Services ▾ Stories ▾ About ▾


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Path to Geospatial Excellence

Overview | Resources ▾

## The Path to Geospatial Excellence

Running a full-scale GIS program requires skills across a wide realm of subjects. Find assistance from those closest to the technology.



### Five key components for geospatial success

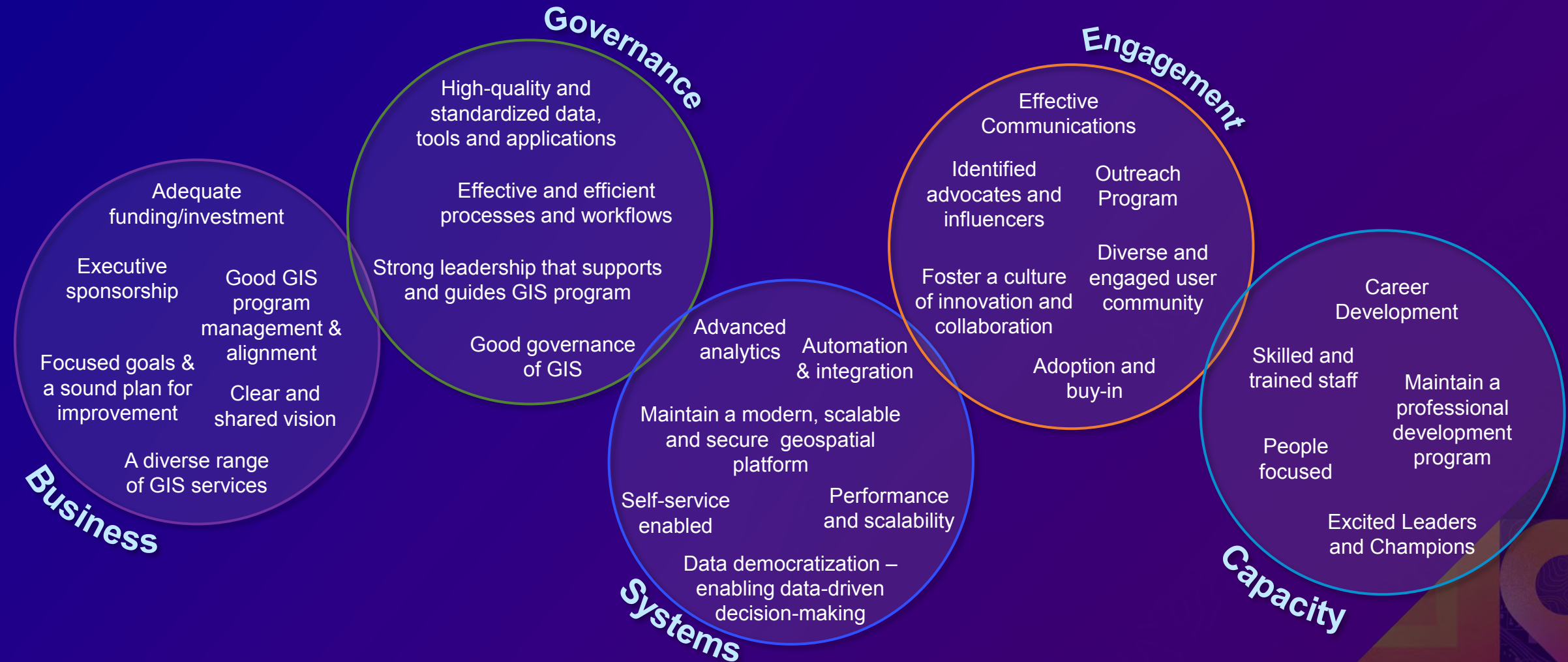
For decades, Esri has guided the work of thousands of customers in government and industry worldwide. The organizations that maximize the impact of GIS are those that proactively focus on the business of GIS.





# The Path to Geospatial Excellence

## Closing – Characteristics of Successful GIS Programs







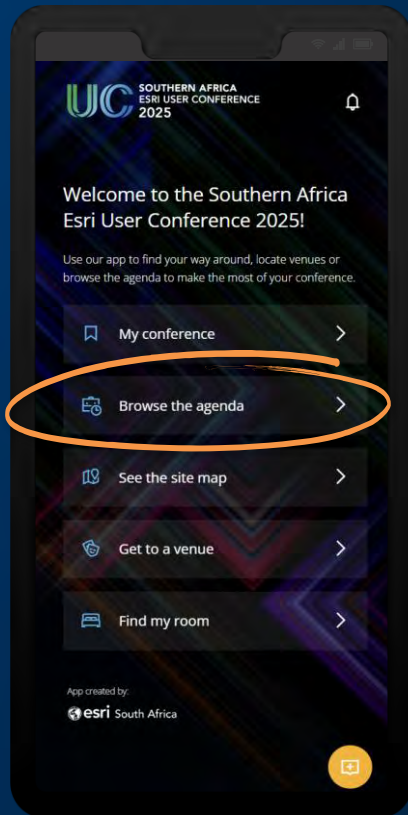
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2025**



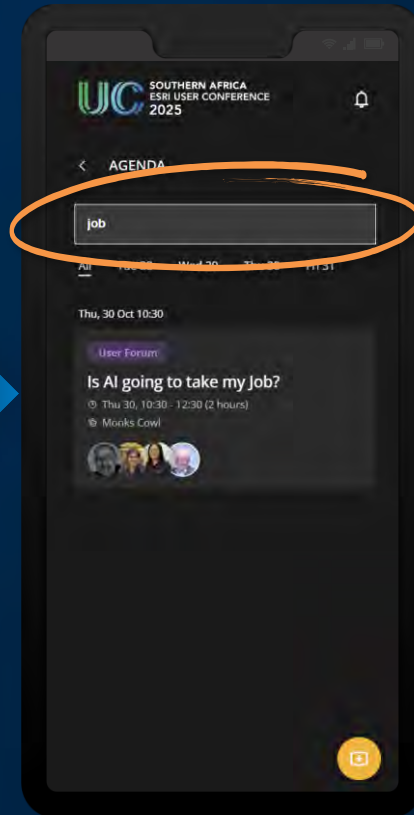
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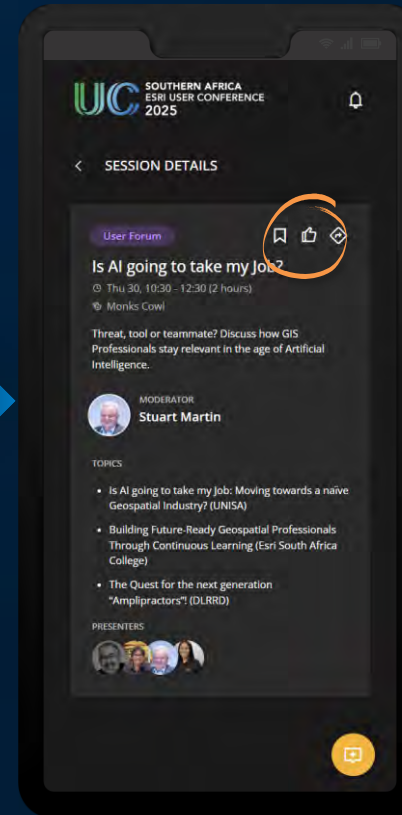
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