

Welcome

Esri

**SENIOR
EXECUTIVE**



GIS

As Support
For Smart Decisions

JACK DANGERMOND
PRESIDENT, ESRI

Thank You for Coming





esri

SERVING OUR USERS

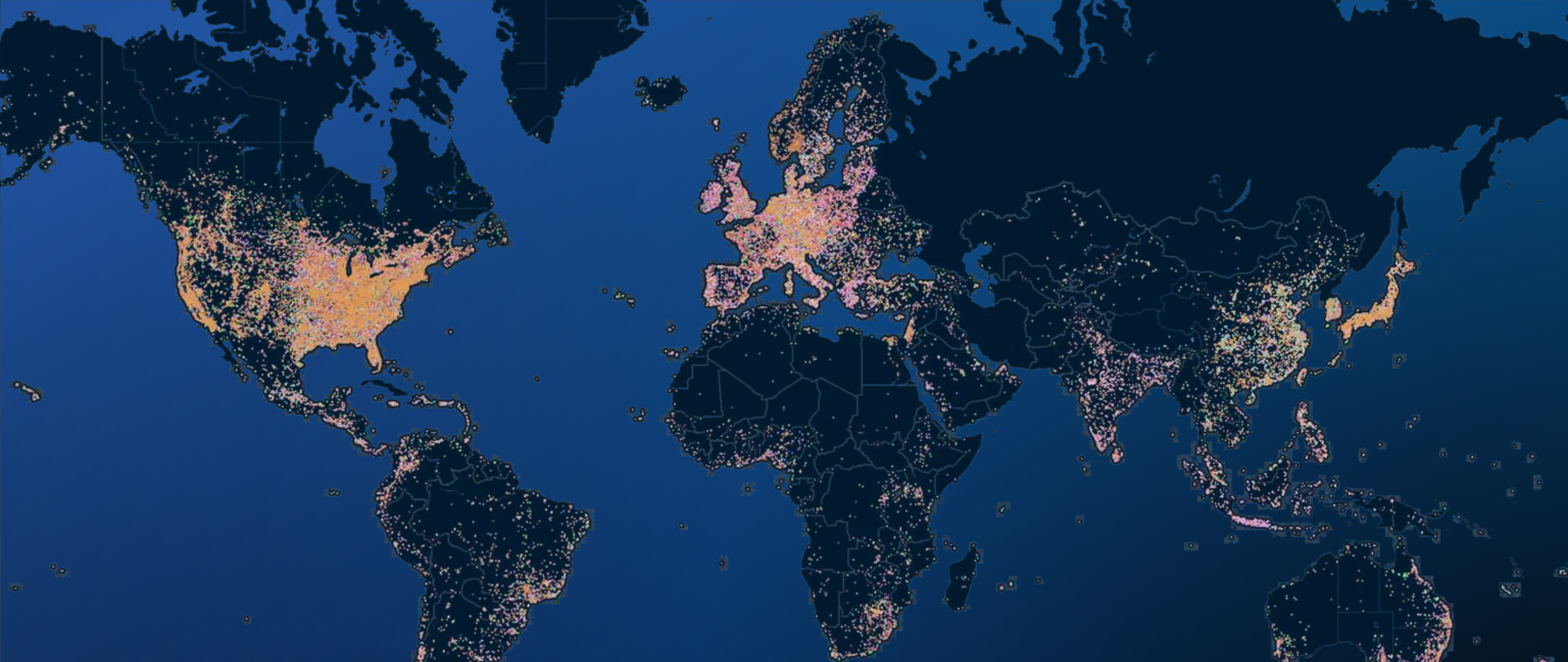
*... Working Together
to Make a Difference*

Advancing GIS & The Geographic Approach

Engineering and Science Focused

Growing, Strong and Impactful

*Promoting Geographic Thinking
... at a Global Scale*



Empowering Over 650K Organizations Worldwide

The Geographic Approach

A Way of Thinking and Problem Solving
That Integrates Geographic Science & Information

An Inclusive and
Multidisciplinary Process

Holistic
Collaborative

Science Based

Integrated

Providing a Framework for
Understanding and Applying
Our Knowledge

Understandable

*Impacting Every
Sector of Our Society*



GIS Enables The Geographic Approach

Data Collection

Visualization & Mapping

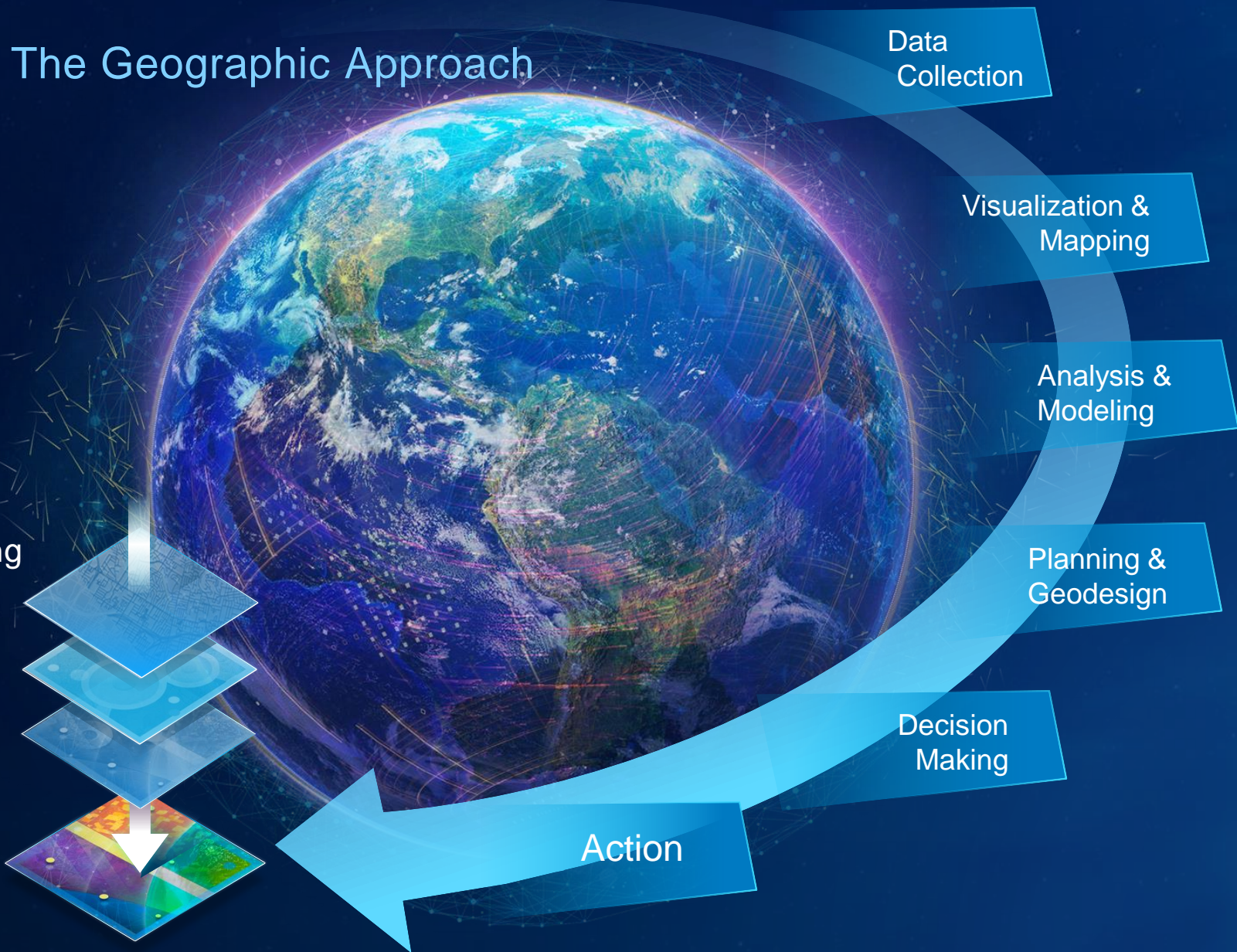
Analysis & Modeling

Planning & Geodesign

Decision Making

Action

A Process for
Creating Understanding
& Facilitating
Collaboration



GIS and Mapping Provide a Fundamental Language

For Organizing & Telling Stories About Our World . . .

Helping Us Understand and Collaborate

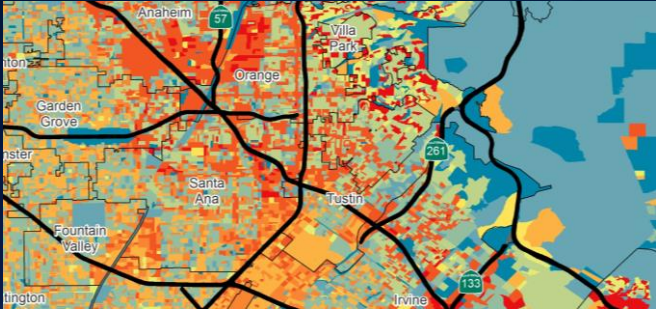
Mapping . . .

What Is

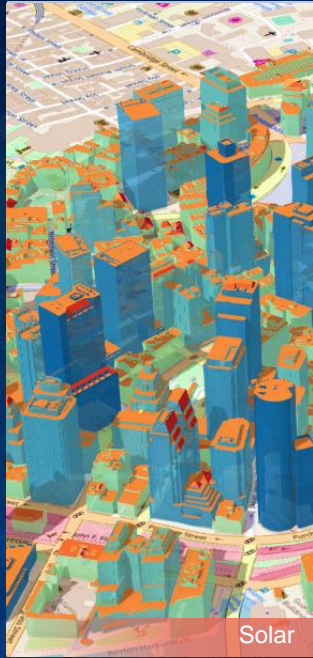
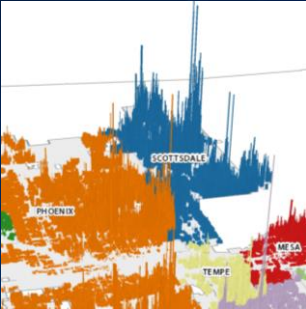
What Could Be



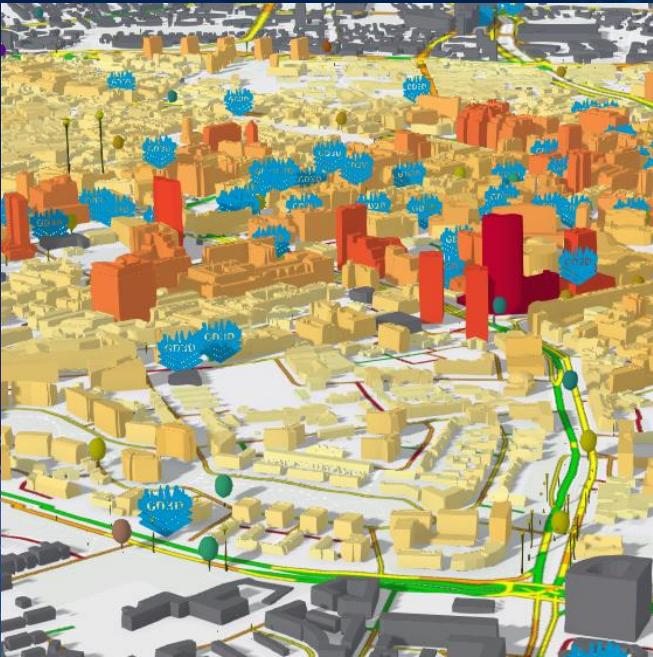
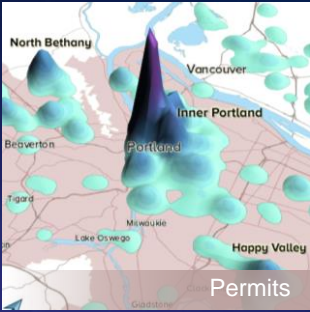
GIS | Delivering Value



Land Use



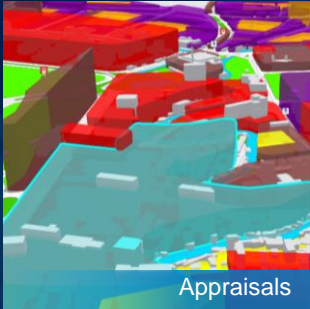
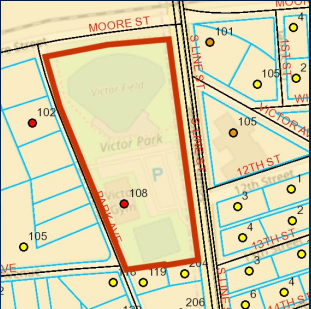
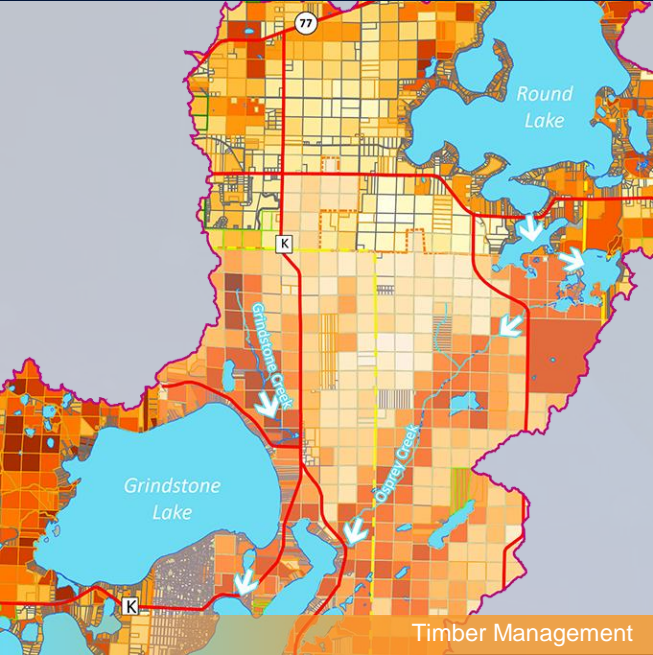
3D Cities



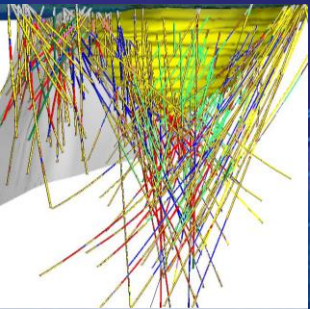
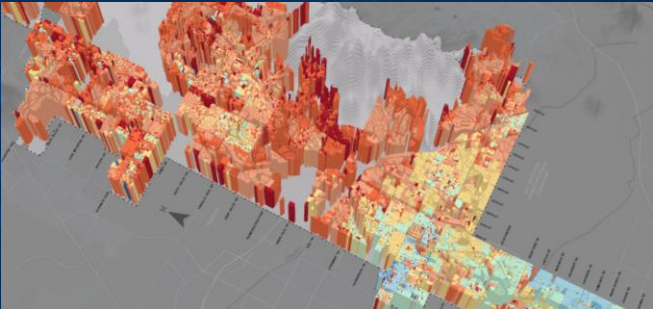
Urban Planning



GIS | Delivering Value



Land Information

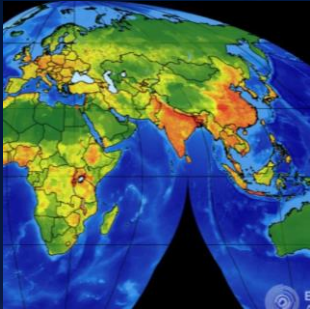


Natural Resource

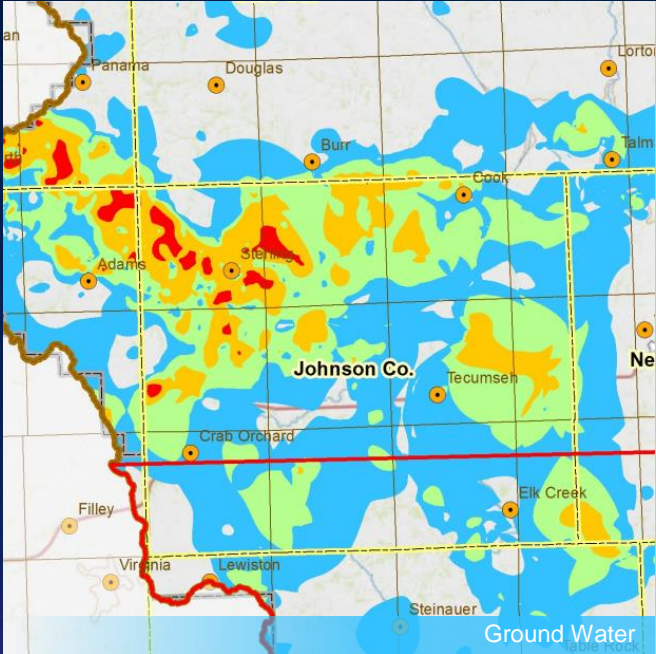


Renewable Energy

GIS | Delivering Value

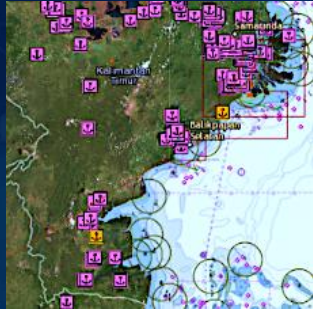


Environmental Assessment

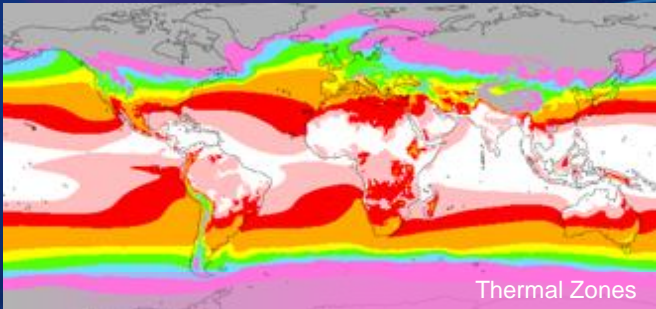


Ground Water

Ocean

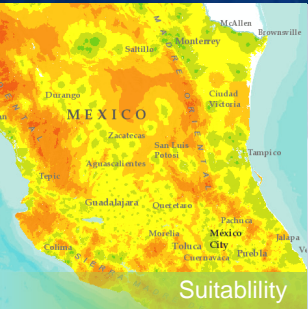


Ecological Marine Units



Thermal Zones

Agriculture

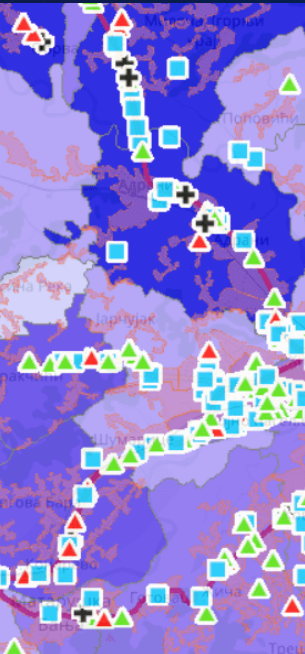
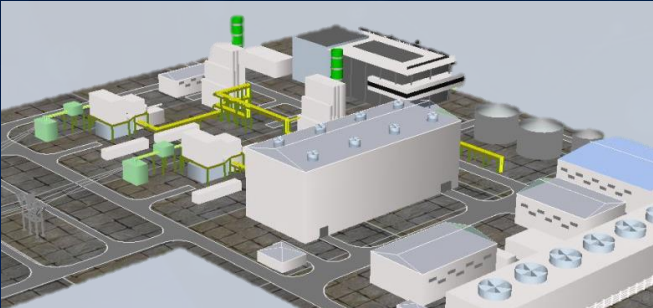


Suitability

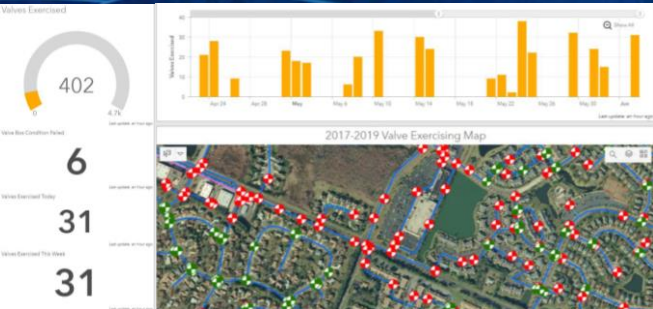


GIS | Delivering Value

Engineering

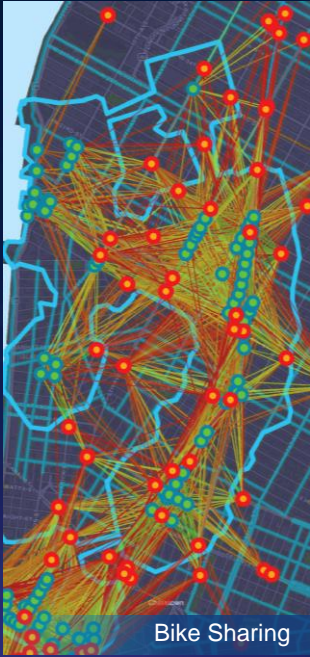


Public Works

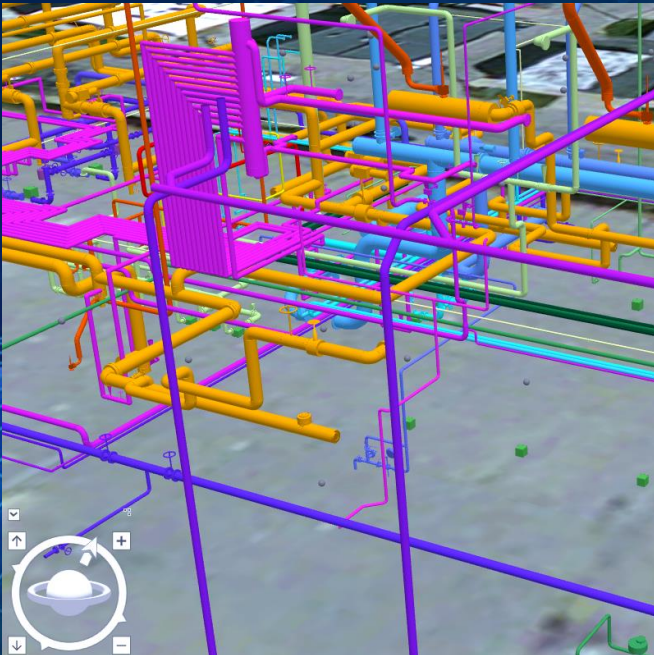
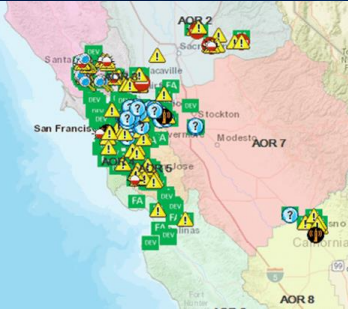


Asset Management

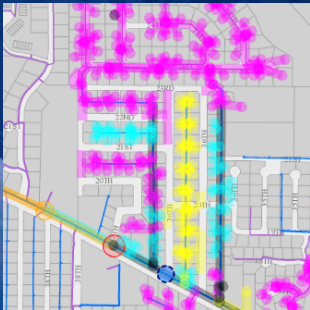
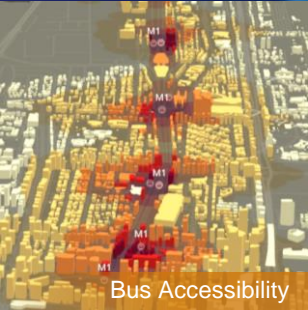
GIS | Delivering Value



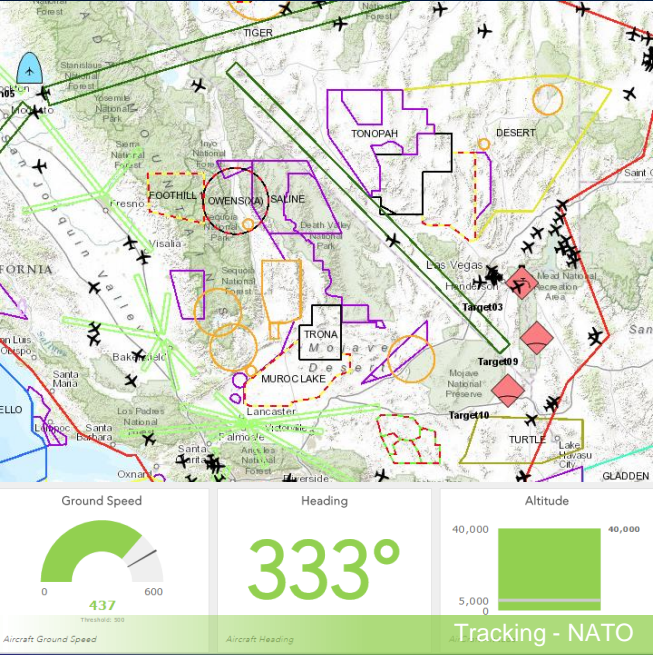
Transportation



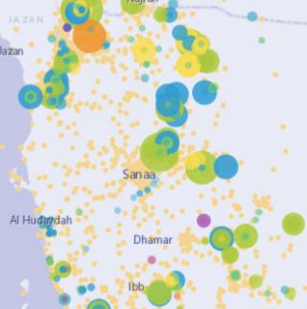
Utilities



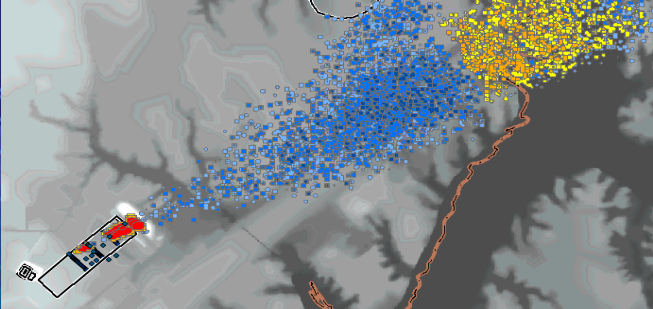
GIS | Delivering Value



Defense



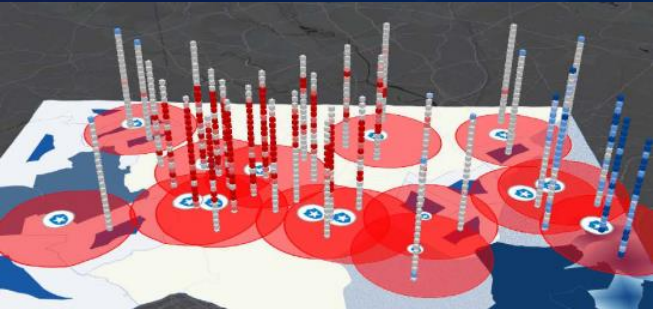
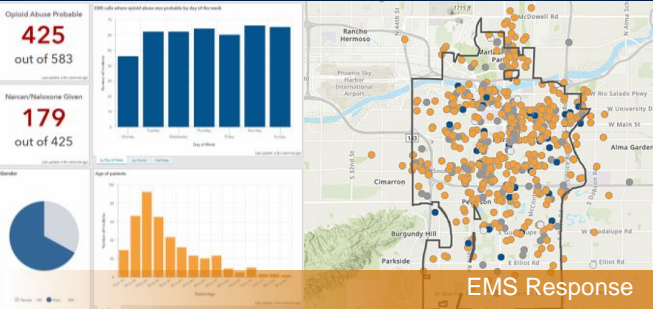
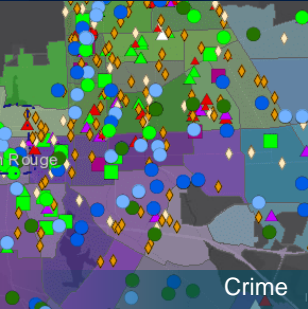
National Security



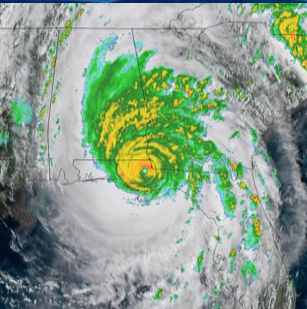
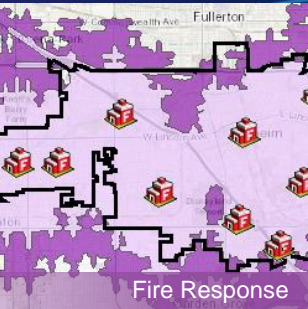
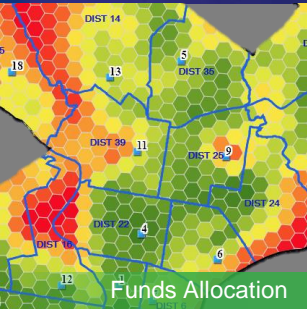
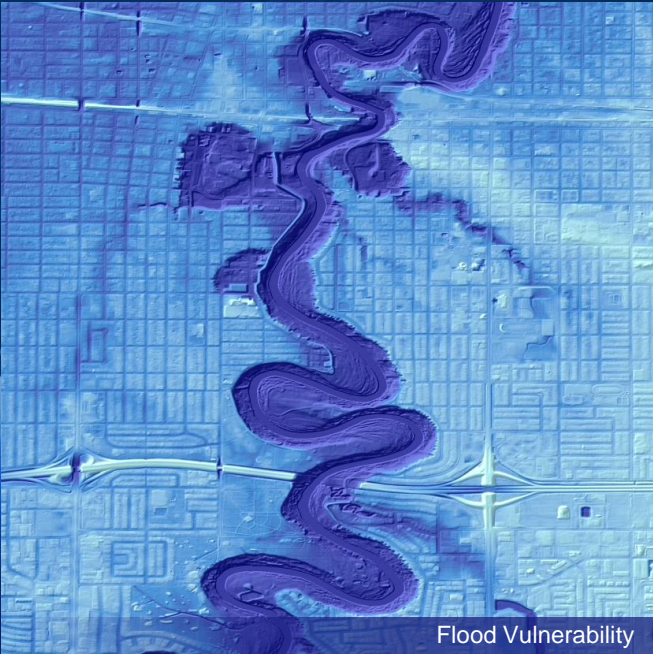
Humanitarian

GIS | Delivering Value

Public Safety

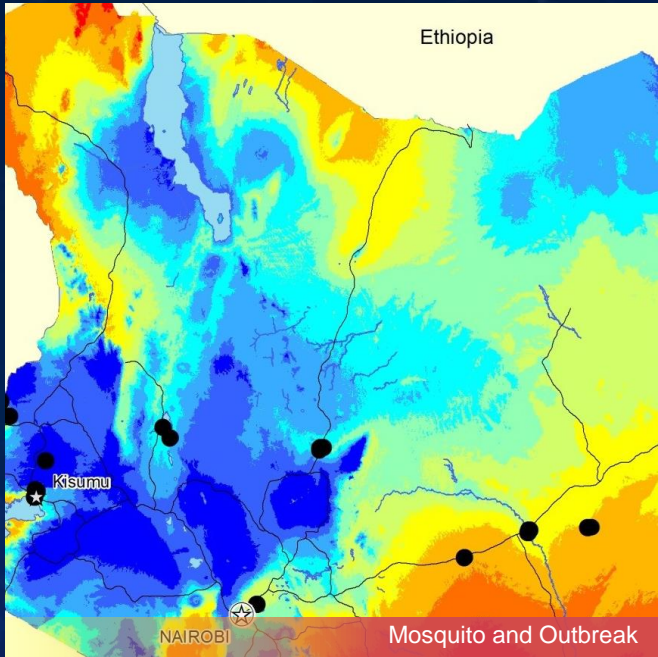
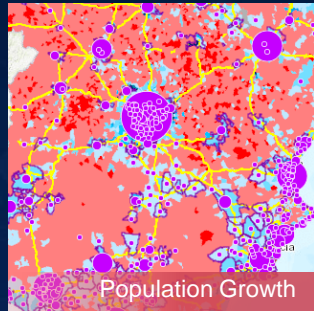


Disaster Response

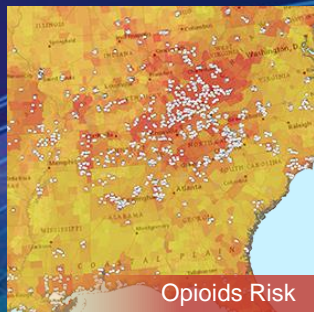
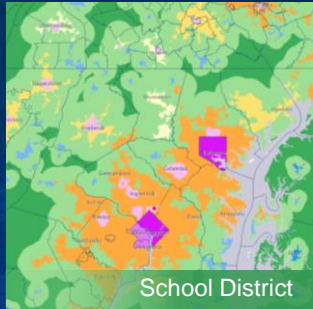


GIS | Delivering Value

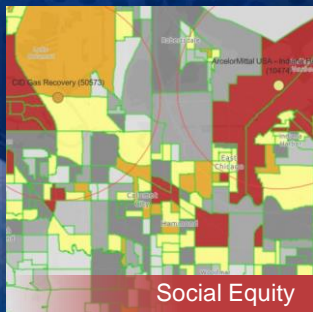
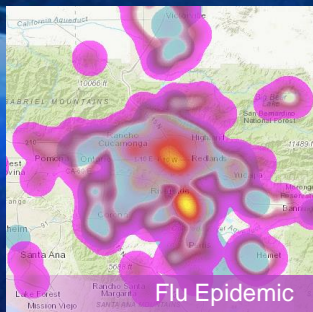
Demographic



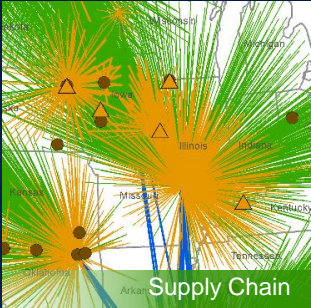
Education



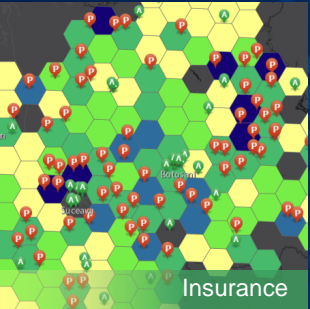
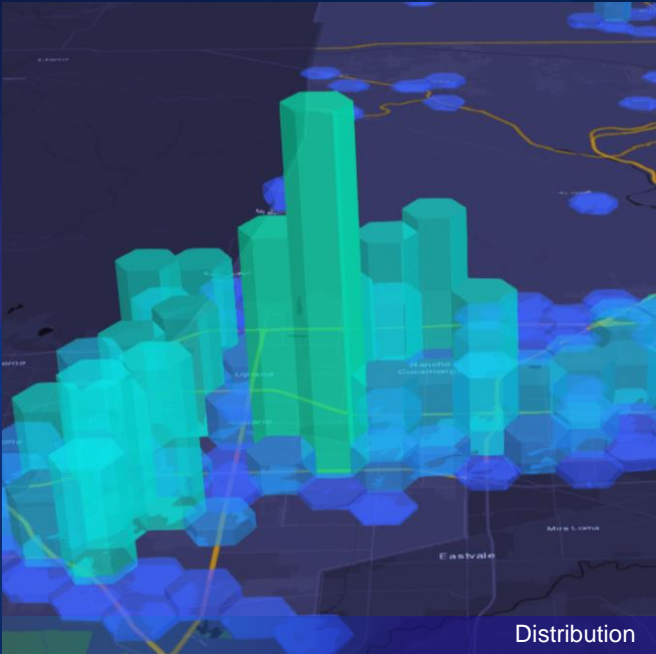
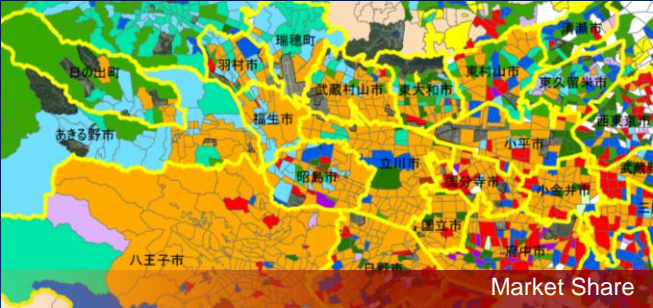
Public Health



GIS | Delivering Value



Economic Analysis



Location Intelligence

Business Analysis

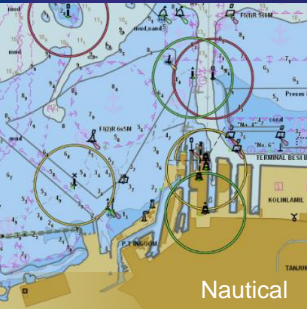
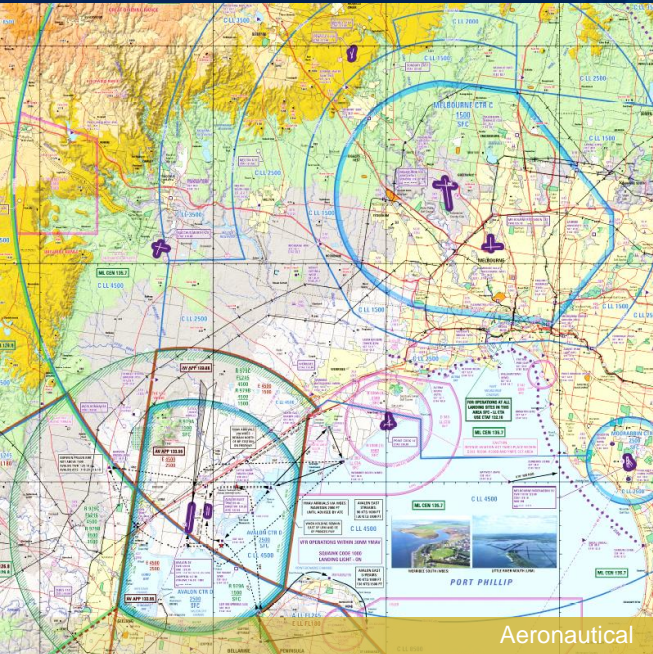


GIS | Delivering Value

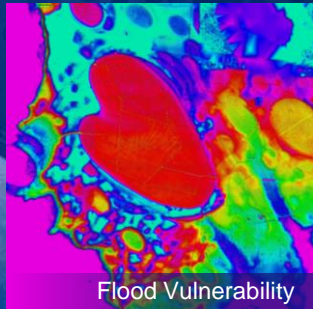
Charting



Mapping



Remote Sensing



What Is a Modern GIS?

A System for Managing, Sharing and Applying Geographic Information



Improving Efficiency, Communications, Decision Making and Collaboration

Integrating All Types of Data

Making Them Available and Immediately Usable



GIS Is an Enterprise System

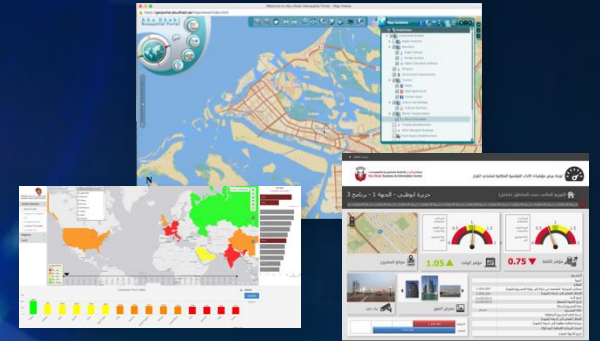
Supporting Hundreds of Interconnected Workflows



- Cross Cutting
- Shared
- Transactional
- Real-Time

Distributed

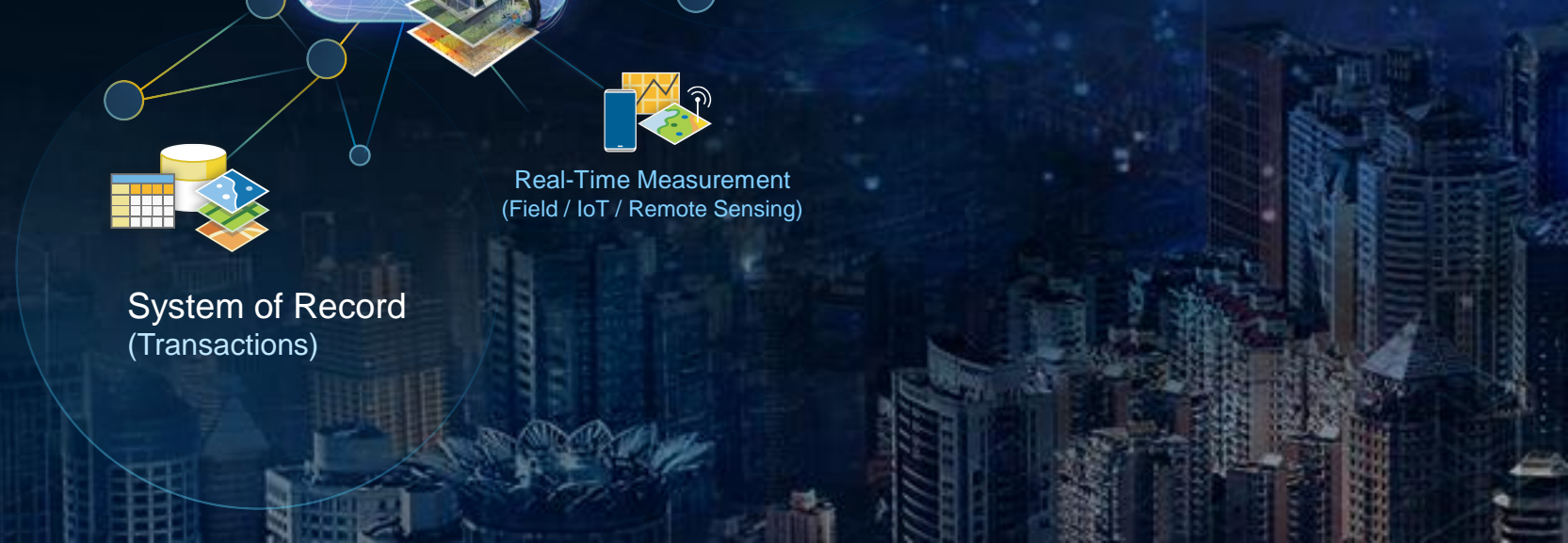
Mission Critical



Empowering Many Forms of Collaboration and Communication

GIS

Supports Three Fundamental Systems



GIS Is Open and Interoperable

Geo-Enabling Enterprise Workflows of All Types

Data
Maps
Analytics



Power BI
Office
SAS Viya
Civil 3D



Integrating Geographic Thinking Everywhere . . .

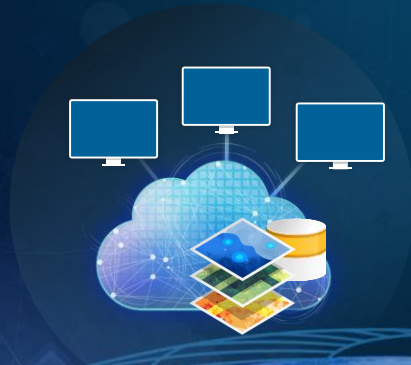
GIS Supports Multiple Implementation Patterns

Integrating Cloud and On-Premises Systems

Leveraging
Web Services



Projects



Systems



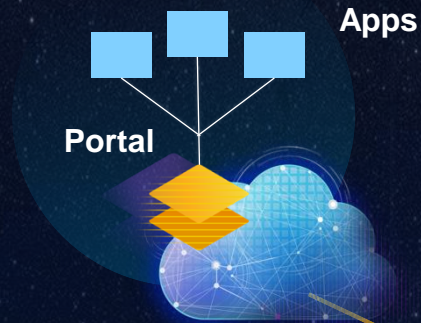
System of Systems

Connecting and Streamlining . . .
Collaboration, Workflows and Decision Making

GIS Portals

Organize and Make Available Content, Apps and Capabilities

Supporting Multiple
Communities & Stakeholders



Dynamically Integrating

Distributed Services
From Many Organizations



SCAG Regional Planning



FEMA Disaster Response



White House Climate Mapping for
Resilience and Adaption



Enabling Many Forms of Collaboration . . .

GIS Is Advancing Rapidly

Integrating Many Innovations

Interactive Data-Driven Maps



Distributed GIS (Geospatial Infrastructure)



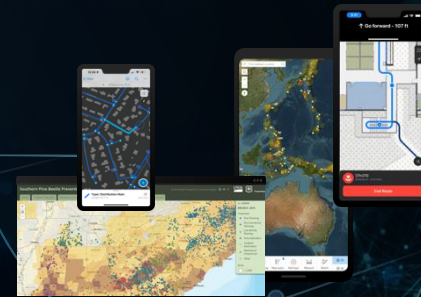
3D & Real-Time GIS



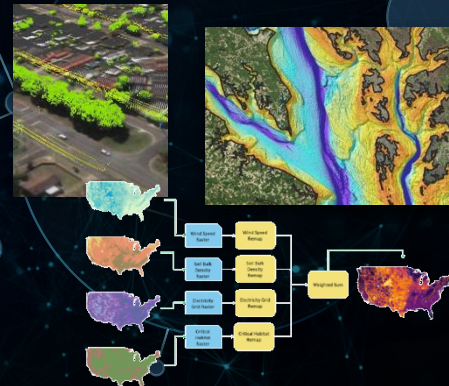
Imagery & Remote Sensing



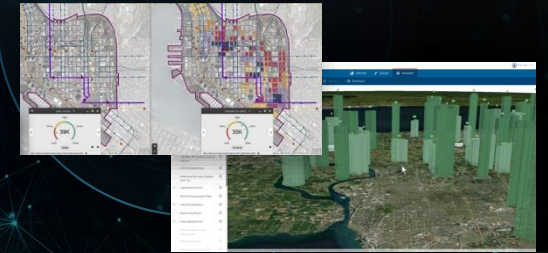
Pervasive Web & Mobile Apps



Advanced Analytics & AI



Geodesign



Reporting & Storytelling



Expanding Capabilities . . .
. . . and Creating New Insights

Powerful Mapping

Creating Beautiful & Impactful Maps

Smart Mapping

Change Style
Potholes

1 Choose an attribute to show
city

2 Select a drawing style
Types (Unique symbols)

Options
Heat Map
Location (Single symbol)

Done Cancel

New York City Construction

Building Footprints

Built: in 1850, in 1859, before 1838

1888 1880 2017

Powered by NYC OpenData, State of New Jersey, Esri, HERE, Garmin, USGS, EPA, NPS, USDA

Production Mapping & Charting

Aeronautical

Topographic

Nautical

Automation

Embedded Mapping

Florida storm surge impact on insurance policies - risk analysis

SharePoint and Power BI

Office

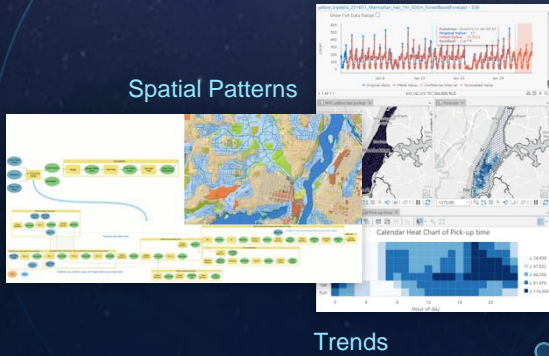
Microsoft 365

Dynamic, Analytic and Data-Driven

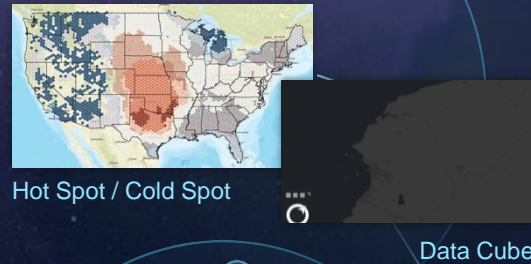
Spatial Analytics

Creating New Insights and Understanding

Predictive Modeling



Spatiotemporal



Real-Time



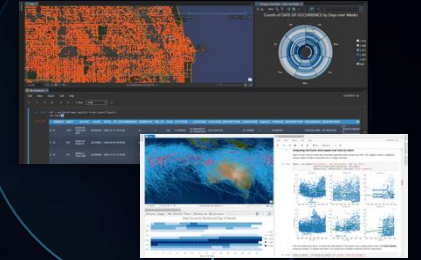
Interactive Visual Analytics



Graph Analytics



Big Data



Raster Analytics & Modeling (In the Cloud)



GeoAI & ML



... Bring It Together

Leveraging Many Technical and Scientific Innovations



3D GIS

Supports Multiple Applications



... Enabling & Integrating With Multiple Enterprise Workflows



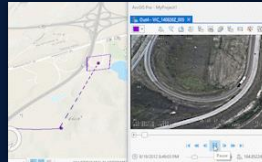
Integrating Imagery and Remote Sensing

Transforming All Aspects of Geospatial Work

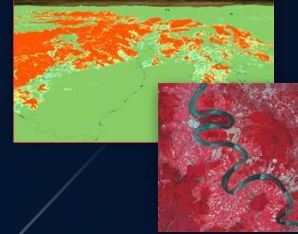
Oriented Imagery



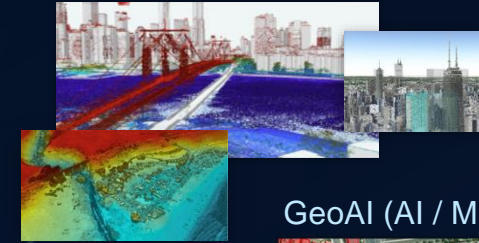
Motion Imagery



Dynamic Image Processing



3D Visualization



GeoAI (AI / ML / DL)



Image Basemaps



Raster Analytics & Modeling . . .



Advancing
Geospatial Science

. . . Bring It Together

Integrating Massive & Timely Content



Includes Ready-to-Use Content

Petabytes of Basemaps, Imagery, Demographics and Thematic Content . . .

ArcGIS
Living Atlas

Land Cover Habitats

Biodiversity

Basemaps Transportation Landscape

Environment

Movement Infrastructure

Hydro Traffic Business

Elevation Boundaries

Demographics Imagery

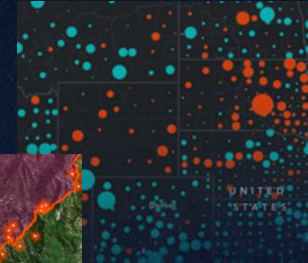
POI Oceans Hazards

Weather Soils

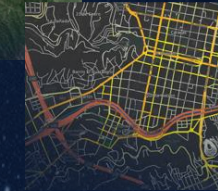
Authoritative
Community Content

User Shared
Maps & Data

Monthly Unemployment
Statistics (BLS)



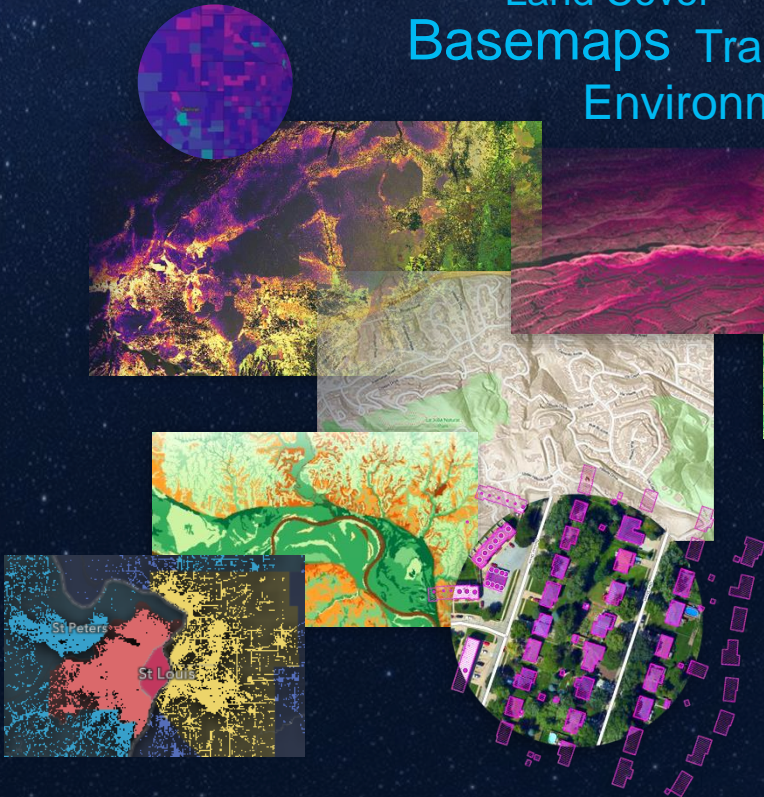
Real-Time
Observations



OpenStreetMap
Layers

Global & Local Geographic Content . . .

About Everything



Geospatial Apps

Supporting Many Types of Workflows and Engagements



Powerful Desktop Apps

ModelBuilder Pro

Screenshots of ArcGIS ModelBuilder and Pro desktop applications, showing workflow diagrams and 3D maps.

3D

Insights

Screenshot of ArcGIS Insights dashboard showing various data visualizations and maps.

Operational Awareness



Massive Mobile Deployments

Field Operations

Data Collection

Tracking

Work Management

Quick Data Capture

Form-Centric

A collage of various mobile geospatial applications, including field operations, data collection, tracking, work management, and form-centric interfaces.

Pervasive Web Apps

Dashboards

Mapping

Infographics

StoryMaps

A collage of various web-based geospatial applications, including dashboards, mapping, infographics, and story maps.

Portal



Geospatial Infrastructure

Empowering Everyone . . .
. . . In Your Organization and Beyond

Indoor GIS Supporting All Types of Buildings & Campuses

Facility
Operations

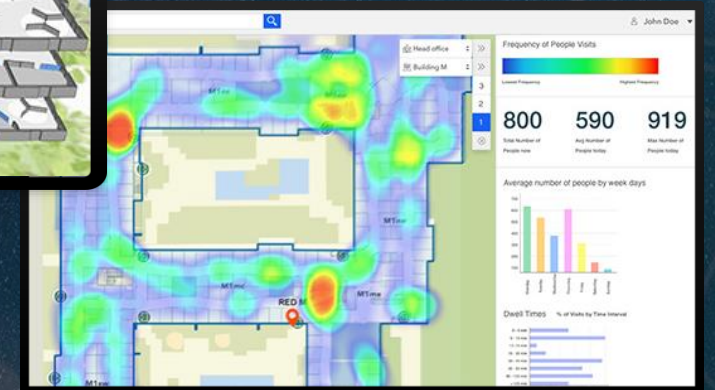
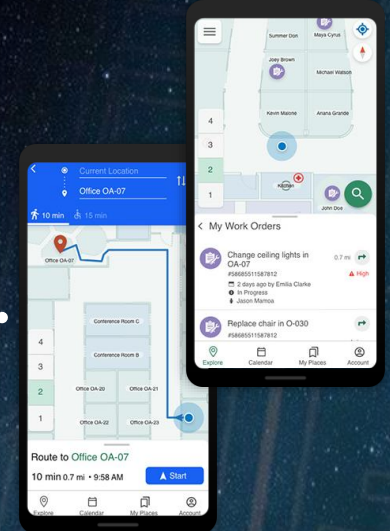
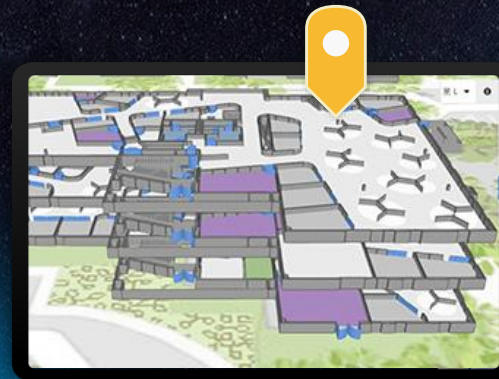
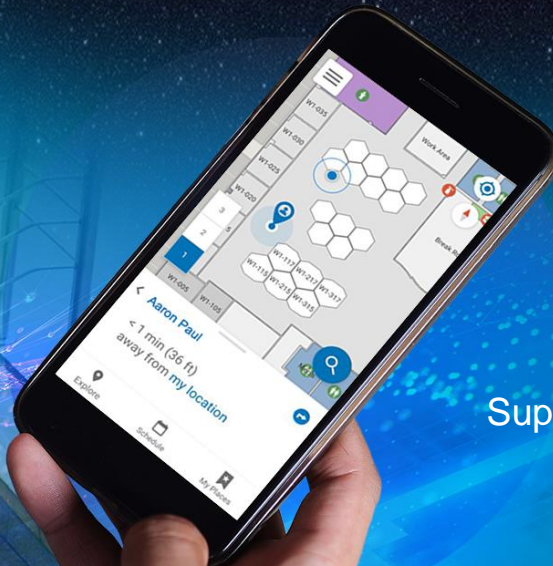
Occupant
Experience

Space
Management

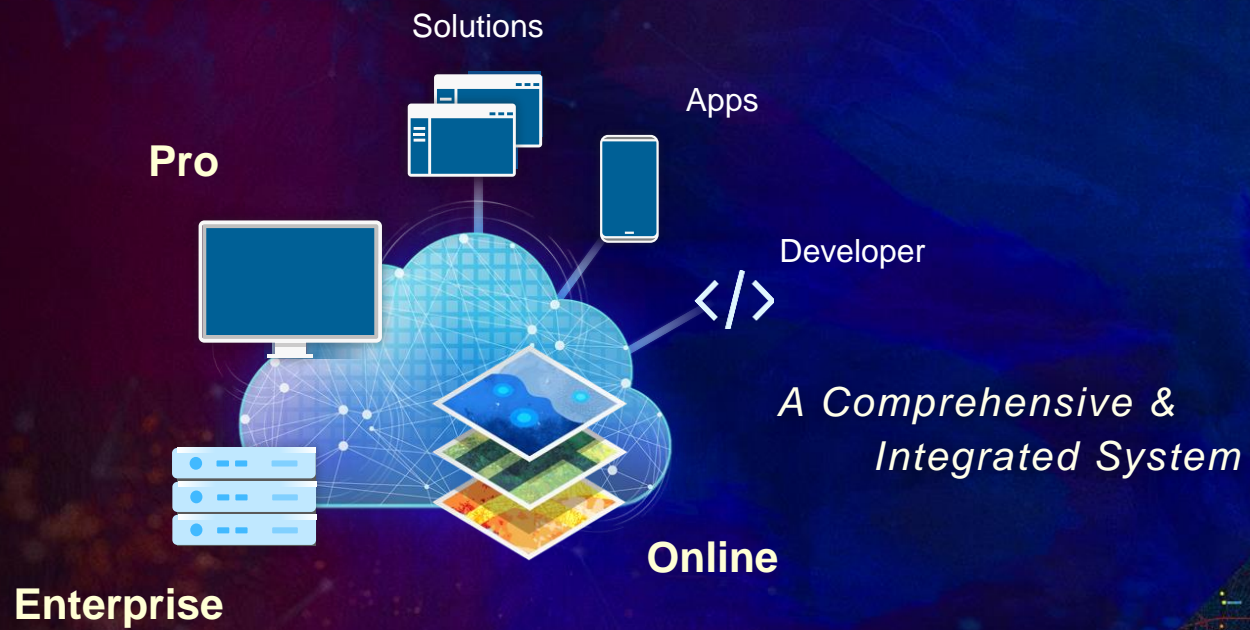
Indoor
Positioning

Supporting
Mobile Apps & Developers

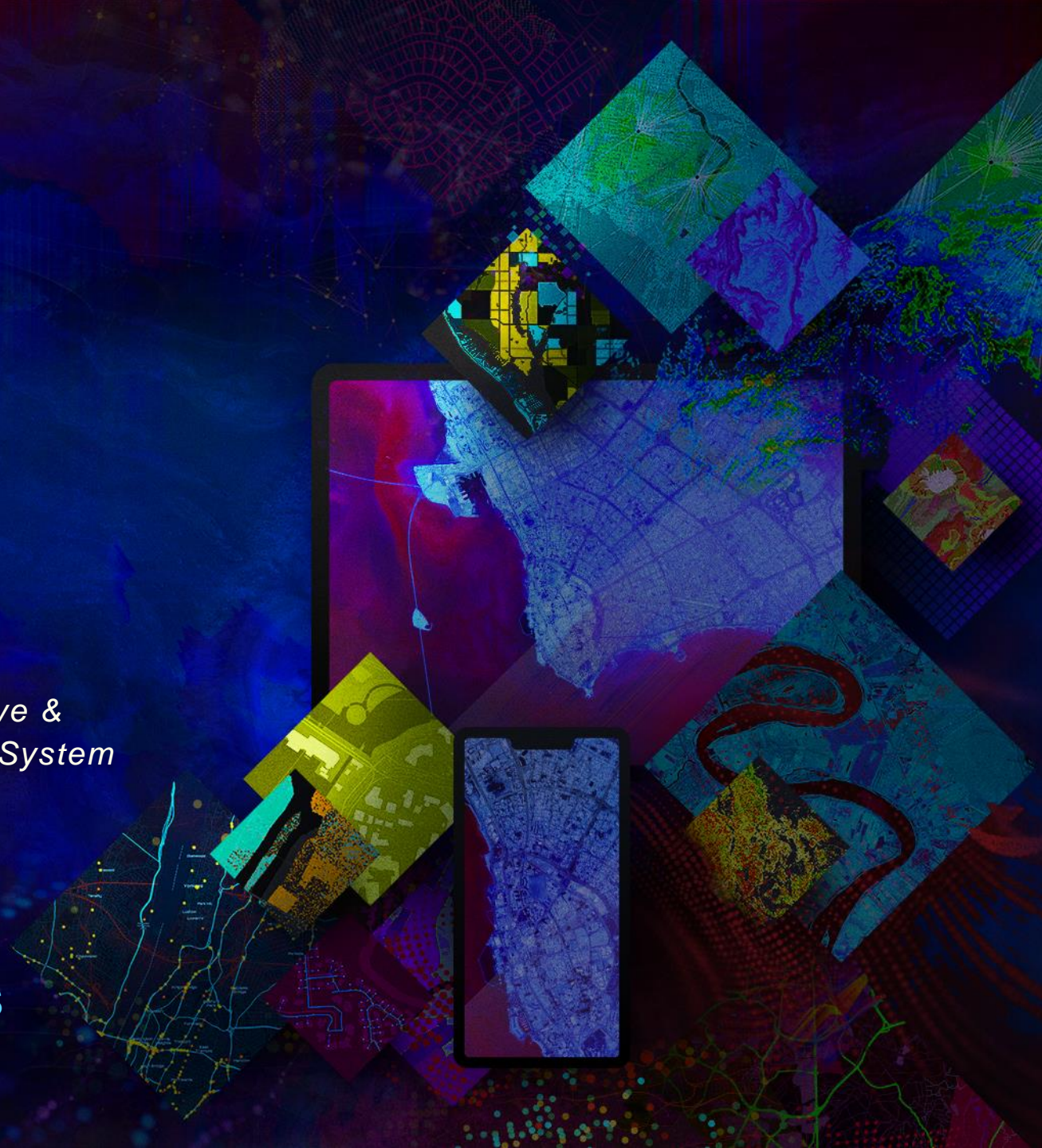
Improves Location Awareness . . .
Streamlines Indoor Operations



ArcGIS



Software, SaaS and PaaS



GIS is Becoming a Powerful Force

Transforming Work Everywhere...



Projects

Missions

Organizations

Coalitions

Organizing &
Automating Work

Improving Communication
& Collaboration

Understanding Complexity

Creating Holistic Solutions

Delivering Value
Across Organizations
And Beyond



Geospatial
Infrastructure

Leveraging Your GIS Investment

The image features a night-time aerial view of a city skyline, likely Dubai, with numerous skyscrapers illuminated. Overlaid on this scene is a complex digital network of glowing blue and purple lines and nodes, representing GIS data and connectivity. The lines form a grid-like pattern across the city, with some nodes appearing as bright points of light. The overall color palette is dominated by deep blues and purples, creating a futuristic and technological atmosphere.

Provide Leadership and Vision

Enabling Your Organization to Be Successful

Seeing What's Possible

Learning, Sharing Collaborating

Creating Organization Vision

Leveraging GIS Technology for Impact

Driving Towards Outcomes

Helping Deliver Value

... Strategic Leadership Requires Intent

Develop a Strategic Plan

Solidify Your Organizations Vision

Driving Outcomes

Quick Wins

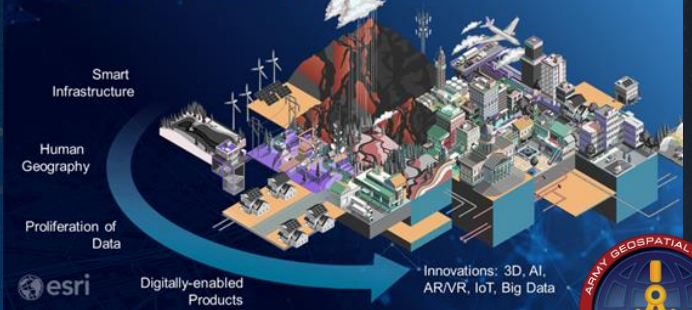
Build on Success

Shared . . . and Revisited



Geospatial is Transforming the Operating Environment

Enabling AGC for an increasingly Complex World



PLANNING & DEVELOPMENT

Key Dates

- Develop a plan to implement the strategy
- Develop a plan to implement the strategy
- Develop a plan to implement the strategy

Key Activities

- Develop a plan to implement the strategy
- Develop a plan to implement the strategy
- Develop a plan to implement the strategy

Geospatial Strategy

City of Raleigh

Driving, Reliable and Timely Geospatial Capabilities

The geospatial strategy is a key element of the City of Raleigh's overall strategy to drive economic growth, innovation and quality of life. It is a plan to drive economic growth, innovation and quality of life. It is a plan to drive economic growth, innovation and quality of life.

Raleigh

Our Progress So Far

We have been working hard to implement our Geospatial Strategy. Here's how we're doing:

- Initiatives: 74
- Completed: 0%
- On Track: 0%
- At Risk: 0%
- Delayed: 0%

Initiatives by Status

Initiatives by Department

Recognize and Leverage GIS as an Enterprise Asset

Supporting Cross Cutting Missions

Mapping &
Location
Enablement

Data
Management

Analytics &
Planning

Field
Mobility

Operational
Awareness

Constituent
Engagement

Integrated GIS Platform



Empower Everyone in Your Organization with Mapping and Geospatial Apps

Providing a Common Language

Supporting Communication and Real-Time Awareness

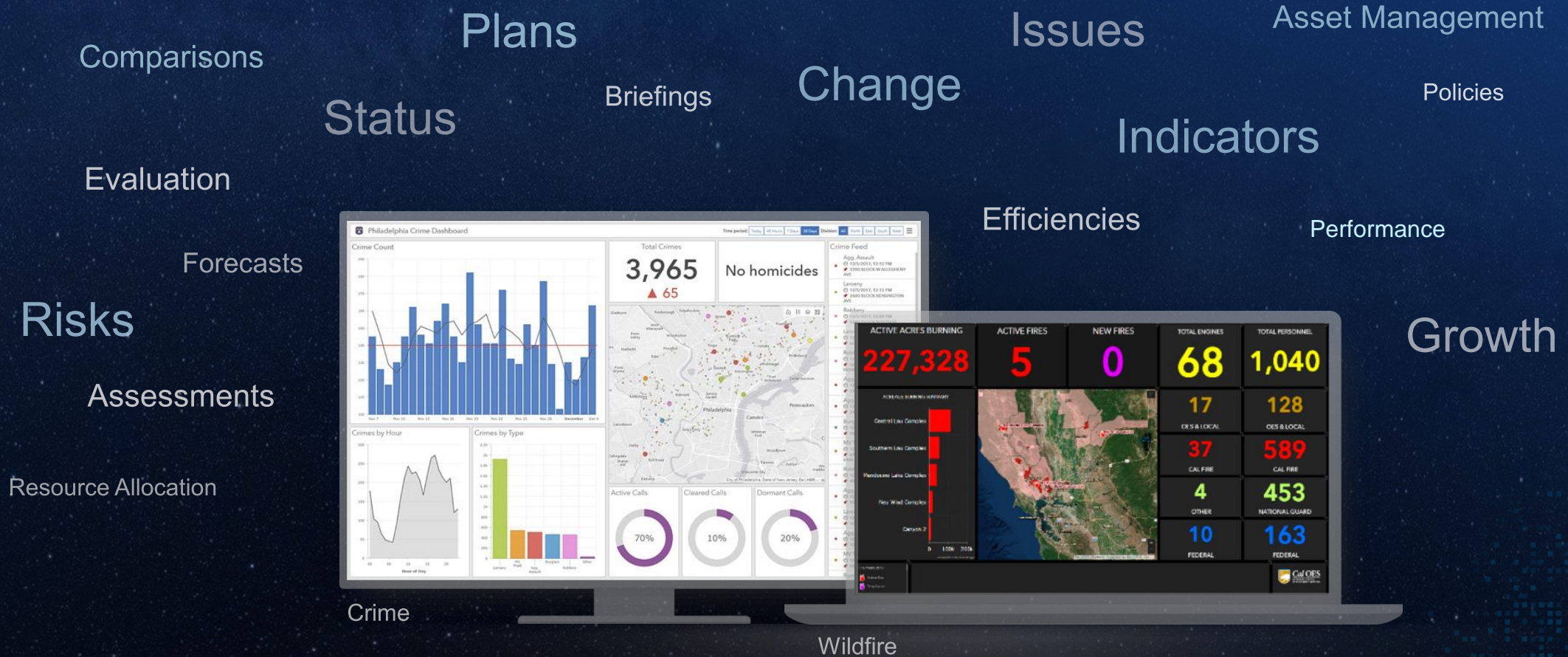


*A Common Framework . . .
for Collaborating and Problem Solving*

Create and Deploy Useful Information Products

Using Maps & Dashboards To Illustrate Your Business Objectives and Performance

Dynamic Visual Reporting & Analytics



Create a Destination

Organizing and Making Available Ready to Use Maps
and Authoritative Knowledge About Your Assets and Resources



Internal
& External

City of San Marcos GIS

Explore Data Categories

Browse through the different groups of data contained in the categories below.
Choose to download in shapefile, spreadsheet or KML format.

Category	Description
Boundaries	San Marcos City Boundary, Council Districts, Zip Codes, Zoning, Census Tract 2020, Sphere Of Influence, and more
Places	Parcel, Address Points, Parks, and more
Natural Features	Watersheds, FloodPlain, Trees, FloodPlain, and more
Transportation	Road Centerline, Railroad, and more

FEMA Geospatial Resource Center

FEMA GIS supports the emergency management community with world-class geospatial information, services, and technologies to prepare for, protect against, respond to, recover from and mitigate against all hazards.

Jump to: USA Structures Data | Indices | Data Catalog | About | Join the Community

During activations we will use the [Coordination Call page](#) to coordinate GIS response activities.

View incident-specific resources on the ["Incident Pages and Data"](#) page.

Explore Hazard Specific Resources

Hazard	Icon
Earthquakes	[Icon]
Flooding	[Icon]
Hurricanes	[Icon]
Pandemic	[Icon]
Radiological	[Icon]
Tornadoes	[Icon]
Wildfires	[Icon]
Winter Weather	[Icon]

Welcome to the City of Reno Geospatial Hub. The Geospatial Hub is the City's public platform for exploring, visualizing, and downloading location-based Open Data. Anyone can use this data to participate in and improve government by conducting research and analysis or by creating applications.

City of Reno Public Maps



Focus Your GIS Professionals

On Helping Your Organization Apply Geographic Science and Technologies

Teams



Workers



Professionals



Applying the Geographic Approach

Organize Effectively

Place Your GIS Resources Appropriately to Match Desired Outcomes



Promote a Culture of Sharing and Collaboration

Enable People to Work Together by Sharing Data, Apps and Knowledge



Collaboration Happens at the Speed of Trust

Get Involved Personally

GIS Requires More Than Technology

- Vision, Leadership and Involvement
- Developing a Strategic Plan
- Assessing Costs and Risks
- Planning and Governance
- Apps That Are Strategic and Engaging
- Good People



“Executive Sponsorship” Is Important,
But Being an Active Participant
and Contributor Is Priceless

... Create a Culture of Service and Innovation



THANK
YOU



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