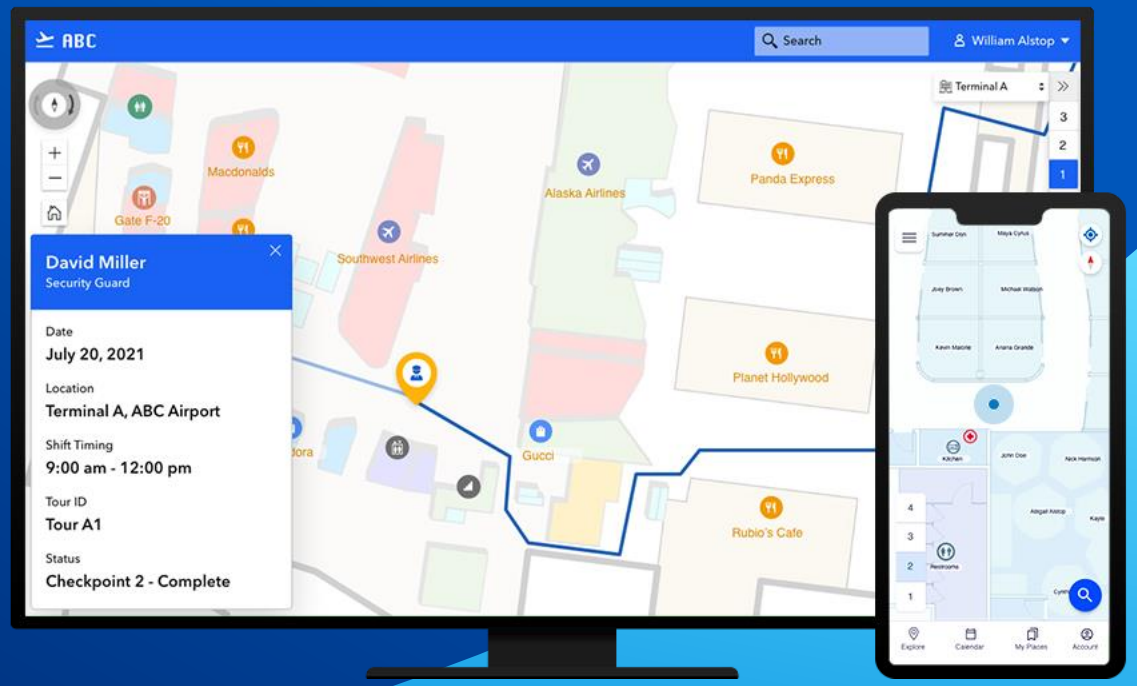
Indoor GIS

Joseph Brigham Bowles

Agenda

- Introduction to Indoor GIS
- Interactive Demonstrations
- Getting Started
- Questions & Answers



Indoor GIS

Introduction

ArcGIS Enables

The Geographic Approach

A Powerful System for . . .

Creating Understanding

Exploring Alternatives

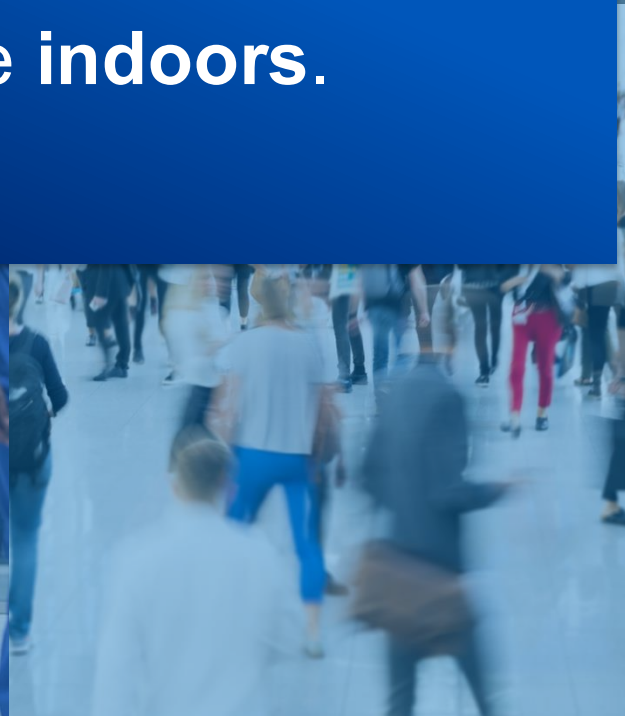
Finding Solutions

. . . and Taking Action

We’ve mapped
every inch
of the world
outdoors.

We spend 90%

of our time **indoors**.



Indoor mapping starts with
accurate floor plans.

Most organizations still rely on **outdated data formats** to manage their facilities.

Indoor GIS Enables

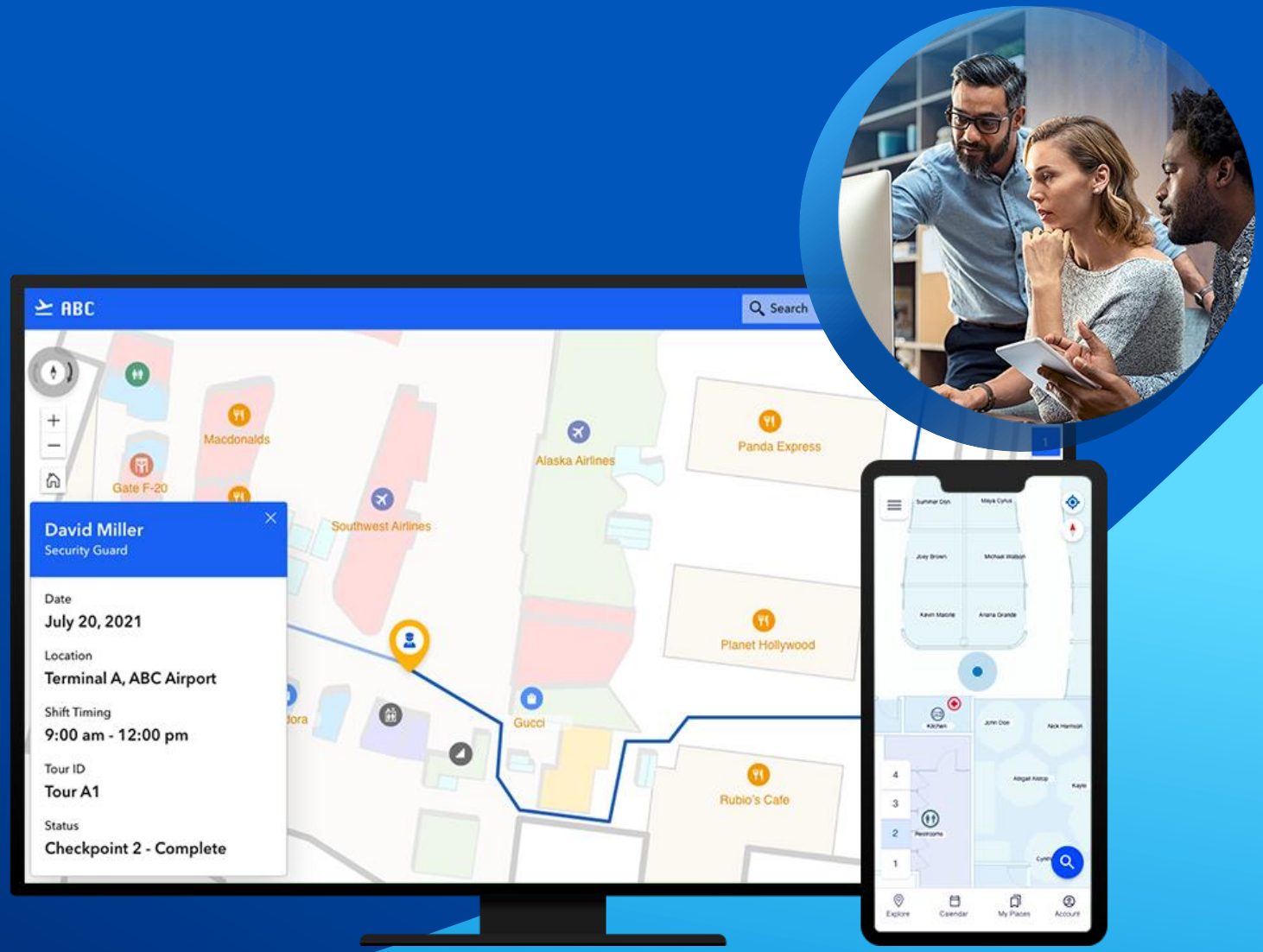
The Geographic Approach Indoors

A Powerful System for . . .

Creating Understanding

Exploring Alternatives

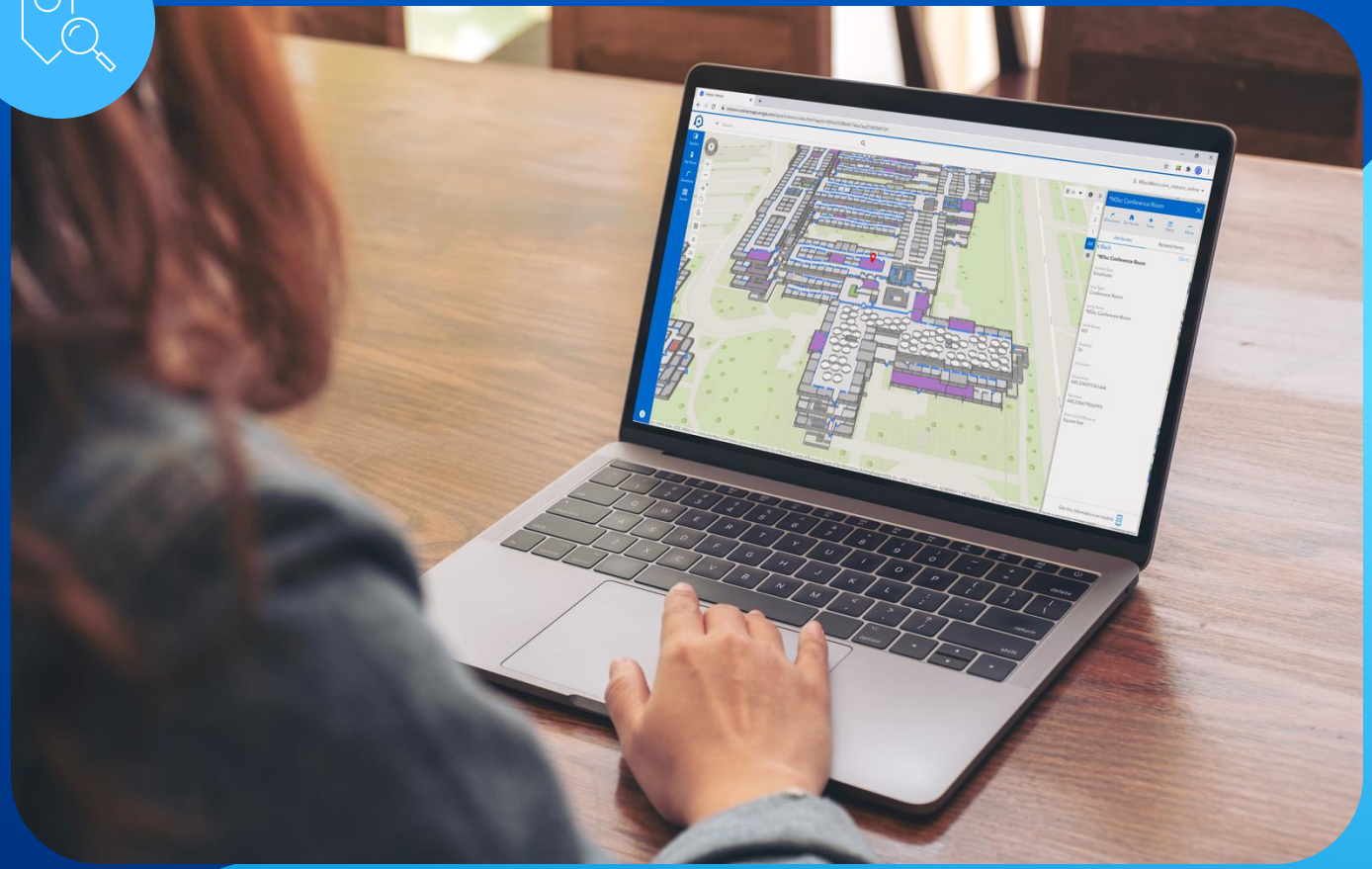
Finding Solutions



Indoor GIS users can find building data easily.

Non-expert users can quickly filter indoor maps by sites, buildings, floors, and layers throughout the vertical asset portfolio.

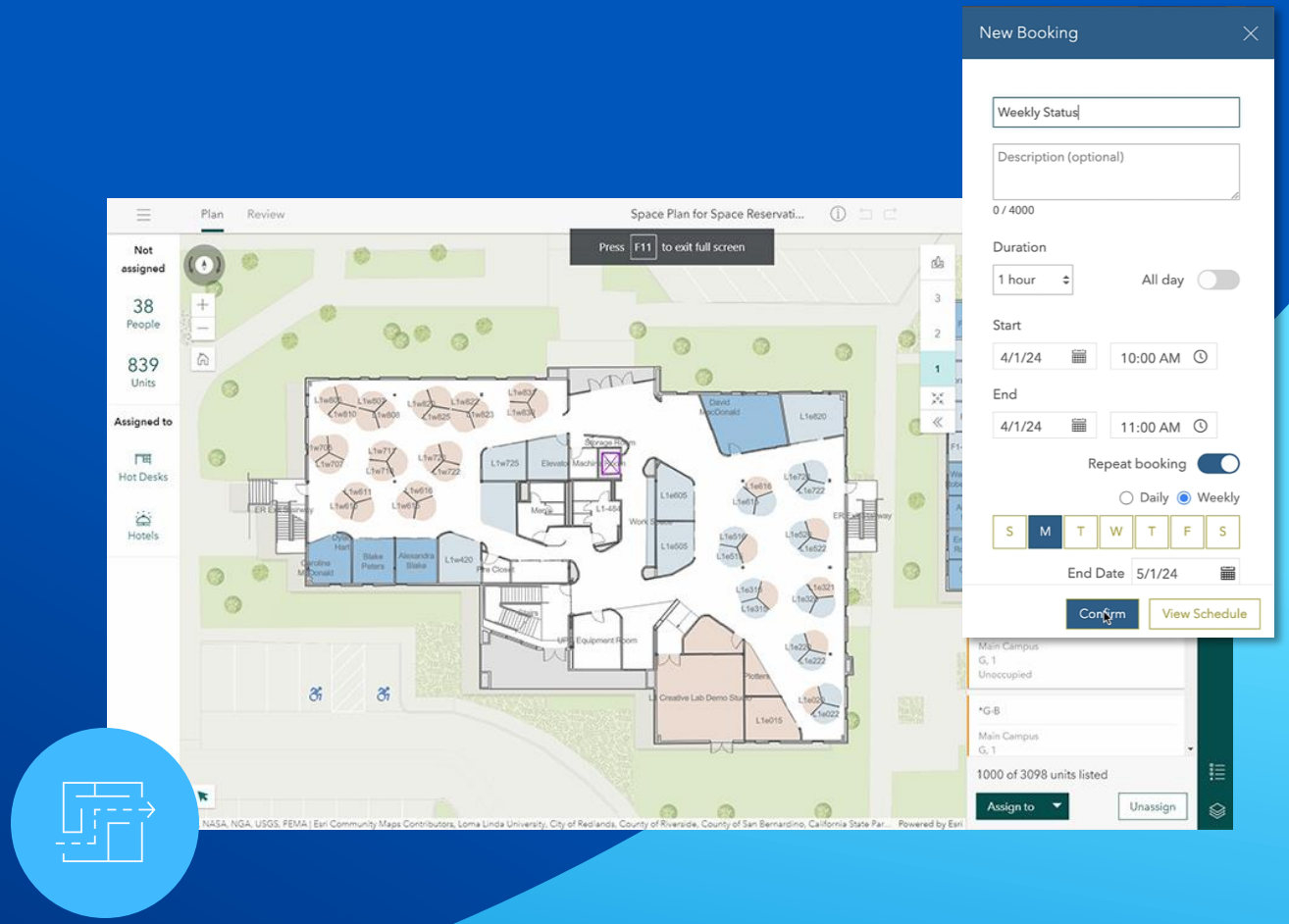
Web and mobile apps streamline access and sharing to users anywhere on any device.



Indoor wayfinding & space reservations enable hybrid workplace experiences.

Employees can explore, search, navigate, request, and reserve accommodations to make their visits to the workplace painless.

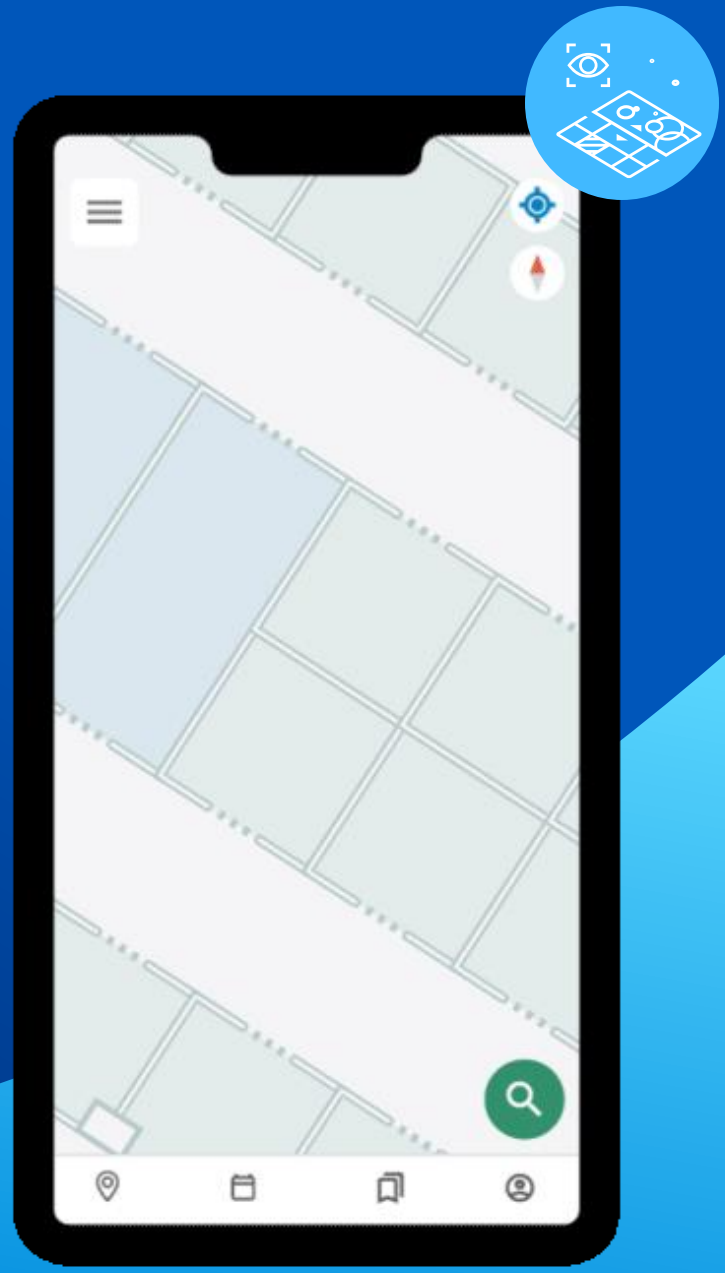
Indoor map data can be stored and accessed locally and in the web for optimal performance at scale.



Indoor positioning systems give end users real-time location awareness

Maps open instantly to an end user’s location, routes generate from anywhere, and users can securely share their real-time location with coworkers.

Location sharing drives space use insights and rapidly informs public safety or physical security.



You don’t need sophisticated CAD, BIM, or GIS expertise to **create foundational indoor basemaps** & **operationalize your indoor data**.

Indoor GIS Patterns of Use

Asset Management

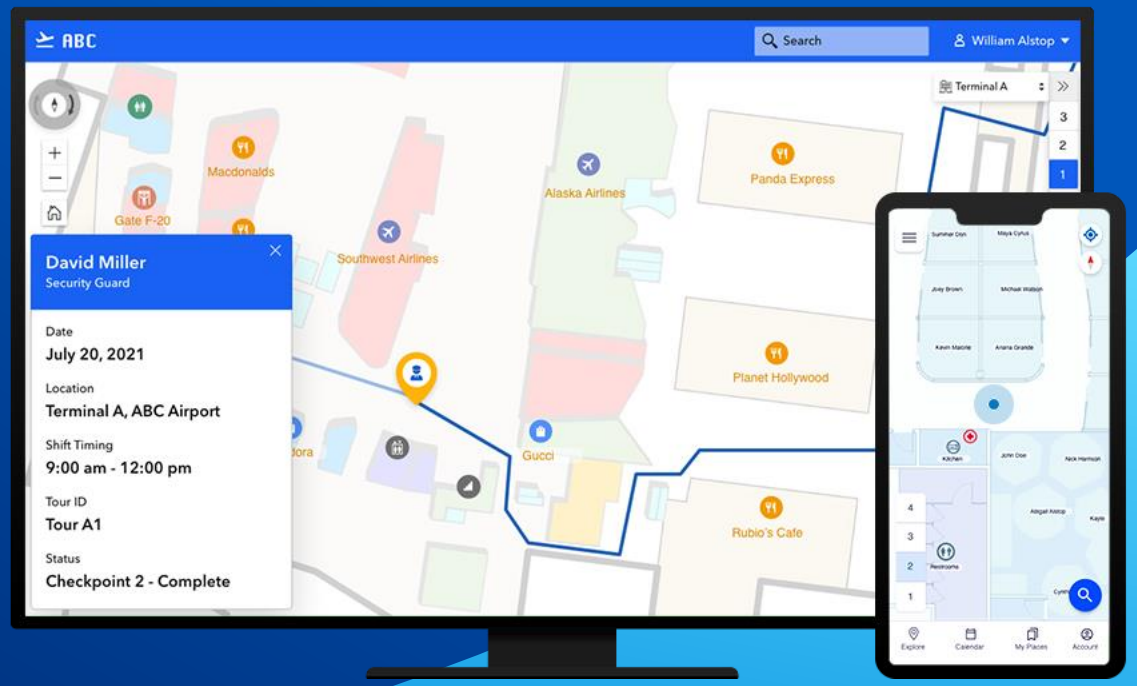
Space Management

Safety & Security

Occupant Experience

Indoor GIS

Interactive Demonstration



Asset Management

- Map indoor asset locations
- Tie indoor locations to work order management systems
- Streamline inspections
- Resolve work orders more efficiently

Space Management

- Evaluate space use
- Assign and reserve spaces
- Plan occupant relocations
- Design what-if scenarios
- Enable a hybrid workplace

Safety & Security

- Map people, spaces, & assets
- Mark exits & evacuation routes
- Improve situational awareness
- Create safety & security plans
- Provide maps to first responders

Occupant Experience

- Locate people, spaces, assets, & events
- Get routes & directions indoors
- Report incidents and submit work orders
- Reserve workspaces & meeting rooms
- Enhance indoor location discovery and navigation with indoor positioning

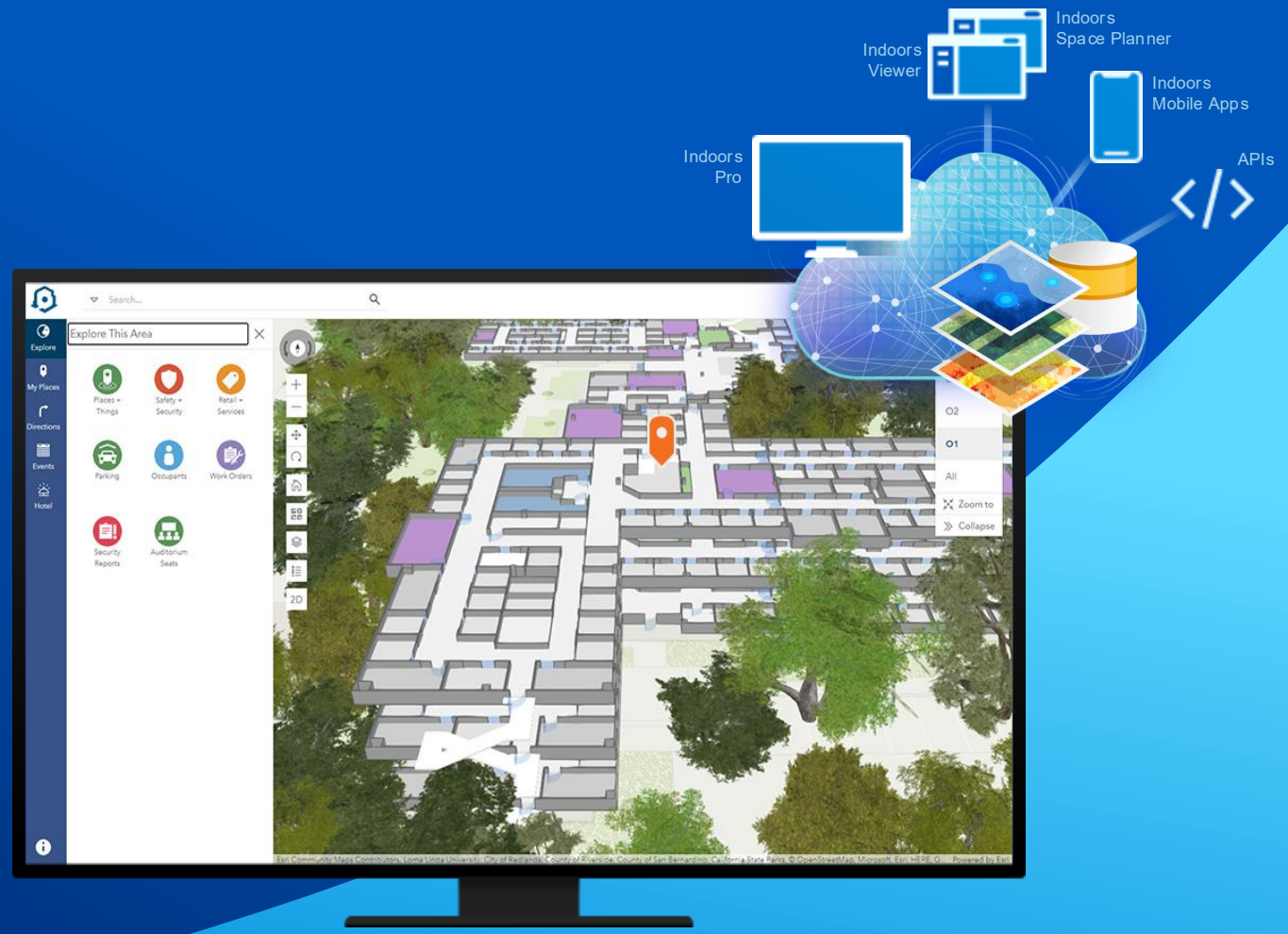
Indoor GIS

Getting Started

ArcGIS Indoors

Indoor Mapping, Wayfinding & Space Planning

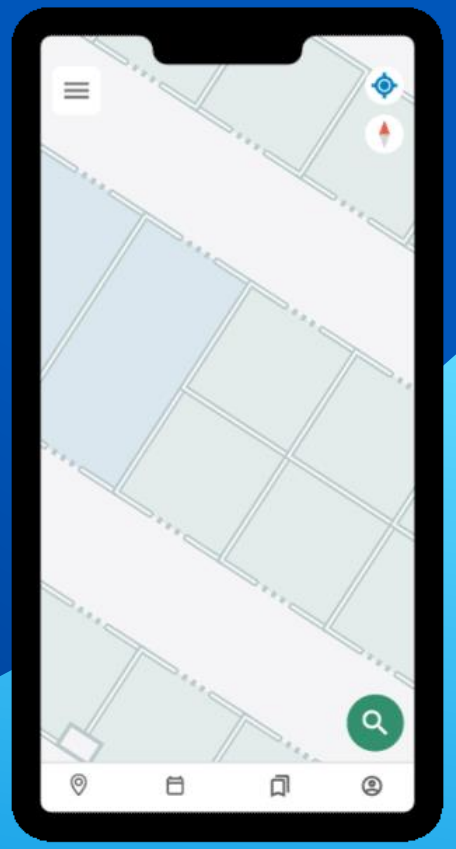
- Enable indoor maps in ArcGIS Online or Enterprise
- Convert and curate indoor maps for occupants
- Support interactive navigation and space reservations



ArcGIS IPS

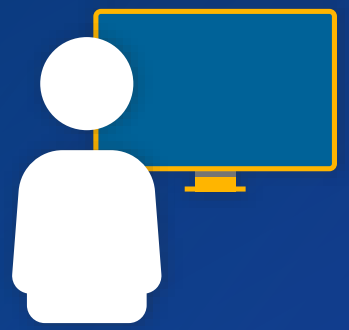
Indoor Positioning

- Easily set up indoor positioning systems
- Enhance indoor apps with indoor location services
- Streamline communication and collaboration



ArcGIS Indoors Pro

build and share floor-aware maps



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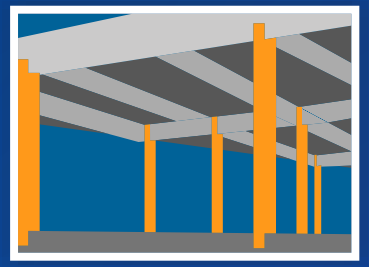


Import floor plans:
Build routable networks
Share maps

Add data: occupant, events, work orders or other POIs

ArcGIS Indoors Maps

share with your organization

Enables all organizational Pro users to build floor-aware maps

Indoors Viewer and Mobile

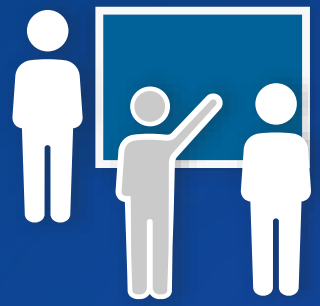
Unlimited Viewer and Mobile use with Indoors User type

Maps – Apps - Users

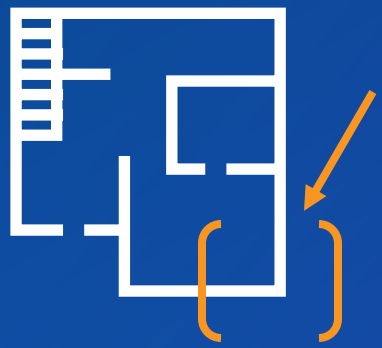
ArcGIS Indoors Spaces

plan and manage your space

Workspace Reservations



Space Planner Application



Floor Plan Editor Application

Indoor GIS

Q & A