

# Smart Installations

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# Smart Installations

Responding to challenges and leveraging advances in technology

A Smart Installation improves operational readiness by providing shared understanding of all the operations on an installation.



# Effective Installation Management

## Supporting Operational Readiness and Efficiency

- **Complying with Government Regulations and Directives**
- **Energy Efficiency and Resiliency**
- **Responding to Emergencies**
- **Transparency and Accountability**



Energy Efficiency

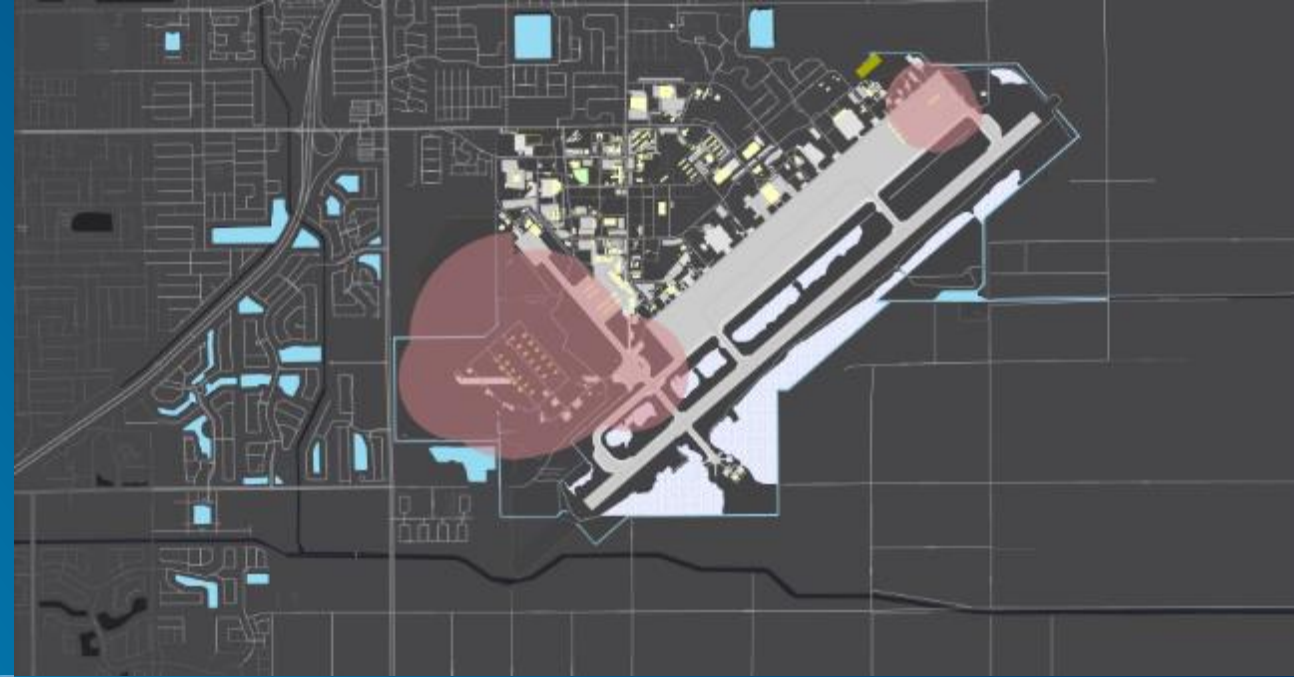


Security and Resiliency



“ Effectively managing an installations requires effective collaboration across departments and levels of command

# What is a Smart Installation?



- **Accurate and Up-to-Date Inventory of Assets**
- **Integrated Systems for Cross-Department Coordination**
- **Real-Time Situational Awareness at all levels of command**
- **Consistent centralized view of all installation operations**



DATA DRIVEN

SECURE

INNOVATIVE

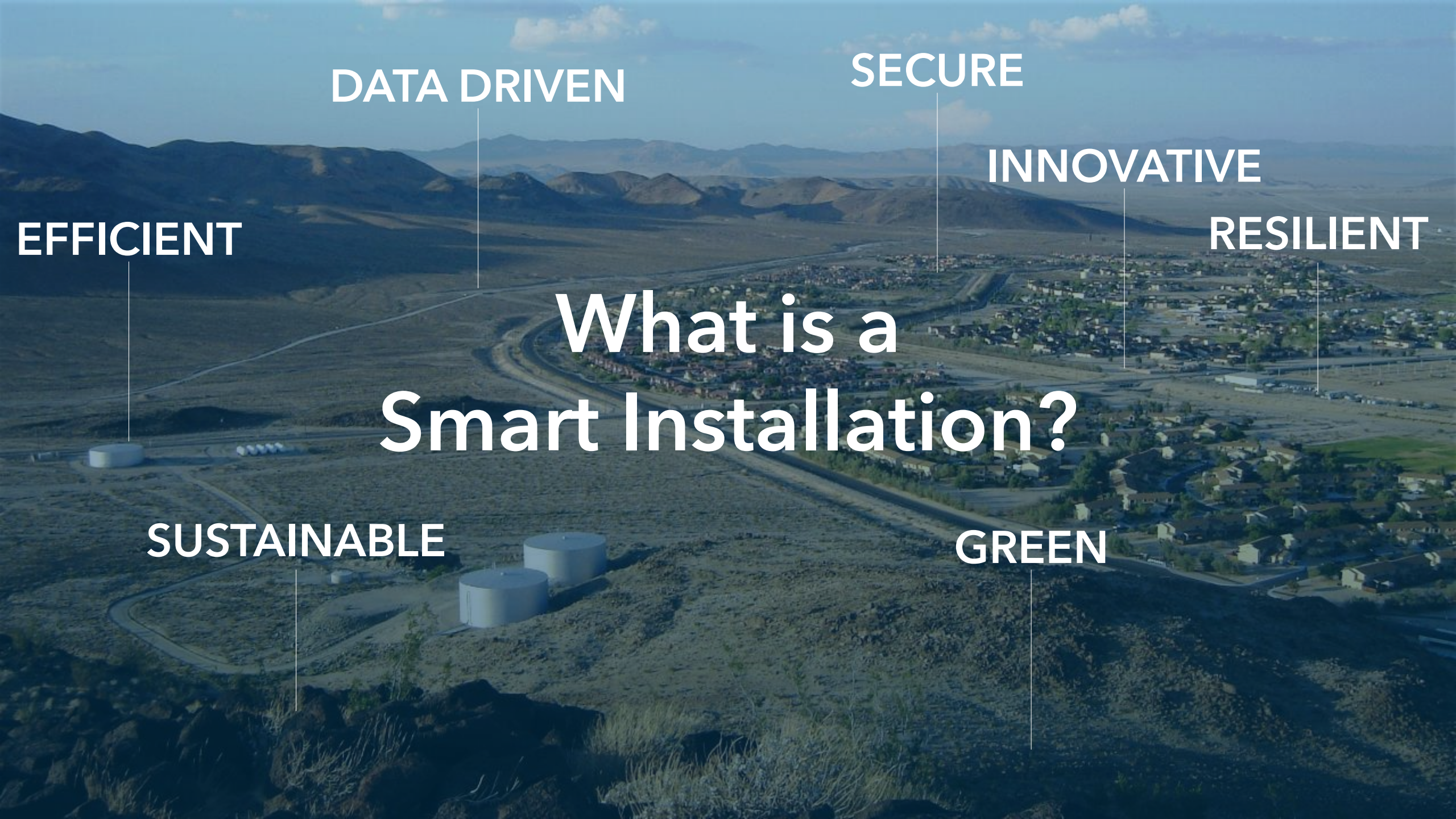
RESILIENT

# What is a Smart Installation?

EFFICIENT

SUSTAINABLE

GREEN







ASSET MANAGEMENT

UTILITIES

TENANTS

TRAINING

ENERGY

# What is a Smart Installation?

SECURITY

ENVIRONMENT



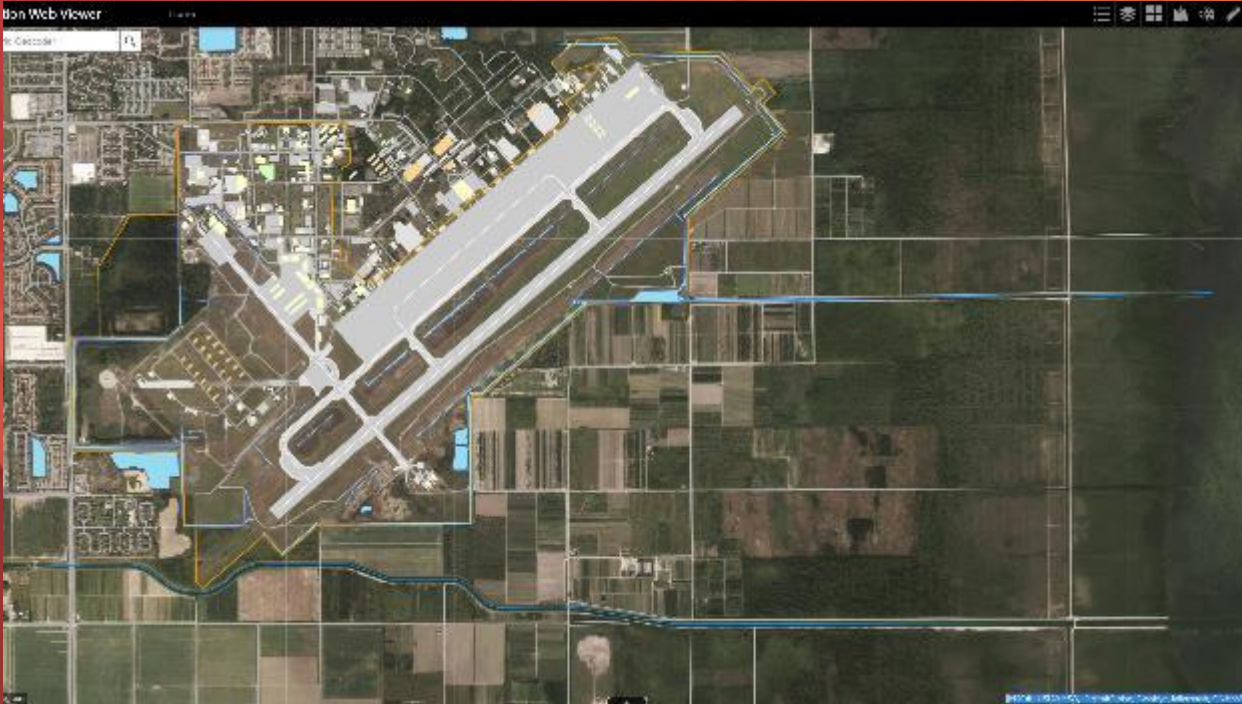


FORWARD THINKING



# Smart Installation Plan

Integrated Master Plan using GIS





# power of GIS





# USES TECHNOLOGY



Sensors



Open Data



Mobile



Cloud  
Computing



Big Data







# Delivering GIS Content Using the Web GIS Pattern



*Build web maps then configure apps to meet use pattern...*

## Authoritative Data



Desktop



Spreadsheets



Databases



Real-time Data



.csv



3D Data



Basemaps



AGO Data

## Build a Web Map in your Portal



- Analysis
- Symbology
- Filter & Query
- Pop-Ups
- Notes
- Security

## Configure 1...n Apps Around Web Map



Dashboards



Mobile Apps



Desktop Apps



Story Maps



Web Apps

## Supports GIS Use Patterns



Decision Support



Constituent Engagement



Field Mobility



Analysis



Data Management

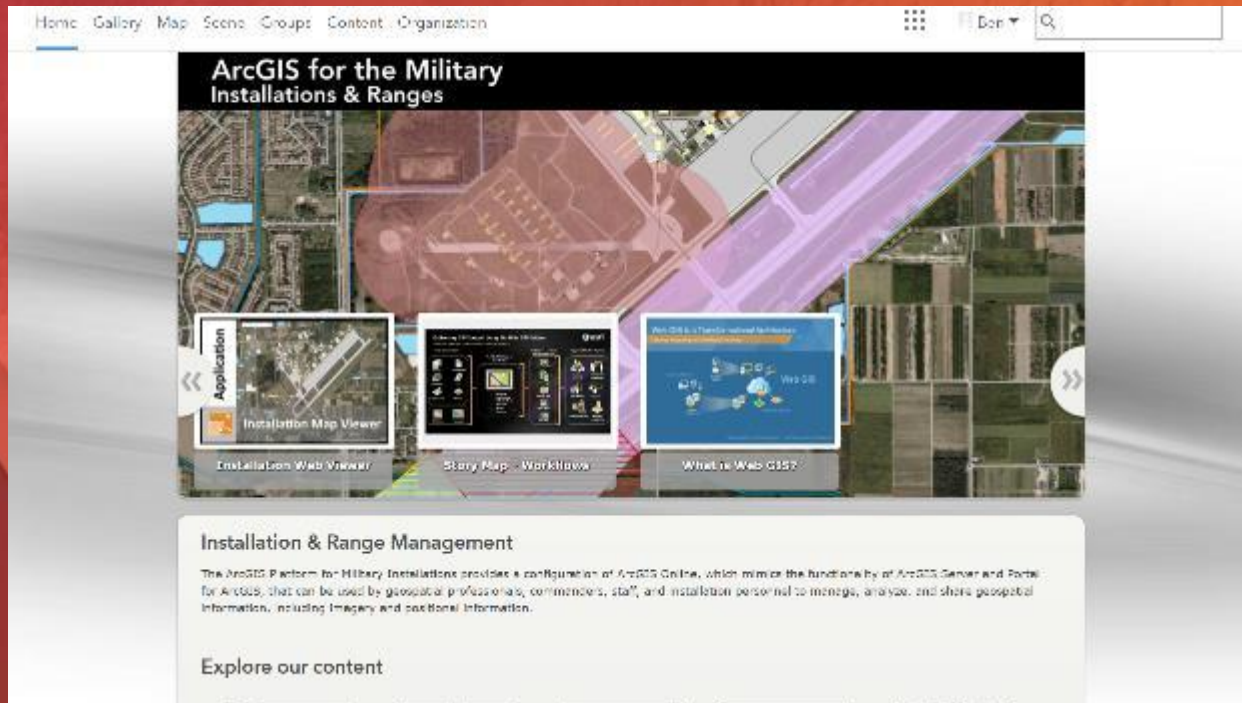


Location Enablement



# Location Platform for Installations

ArcGIS Enterprise - Portal



# What Changed? Internet of Things



= Sensors



= Data

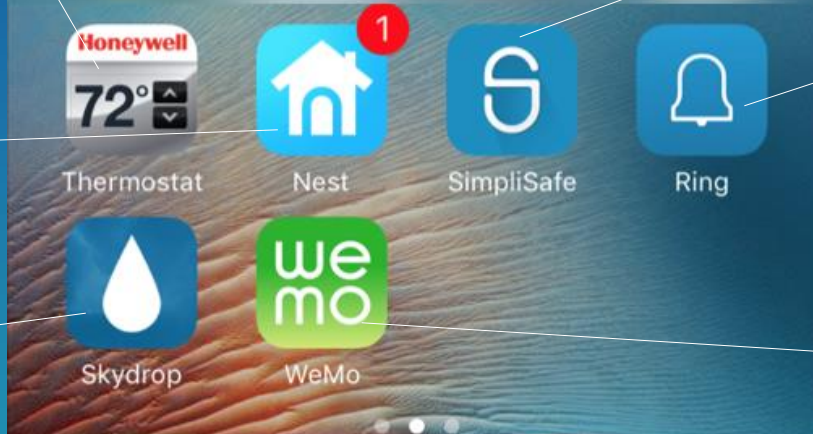


Wouldn't/Couldn't do that 3 years ago...

AC / Heating

Smoke Alarm

Sprinkler

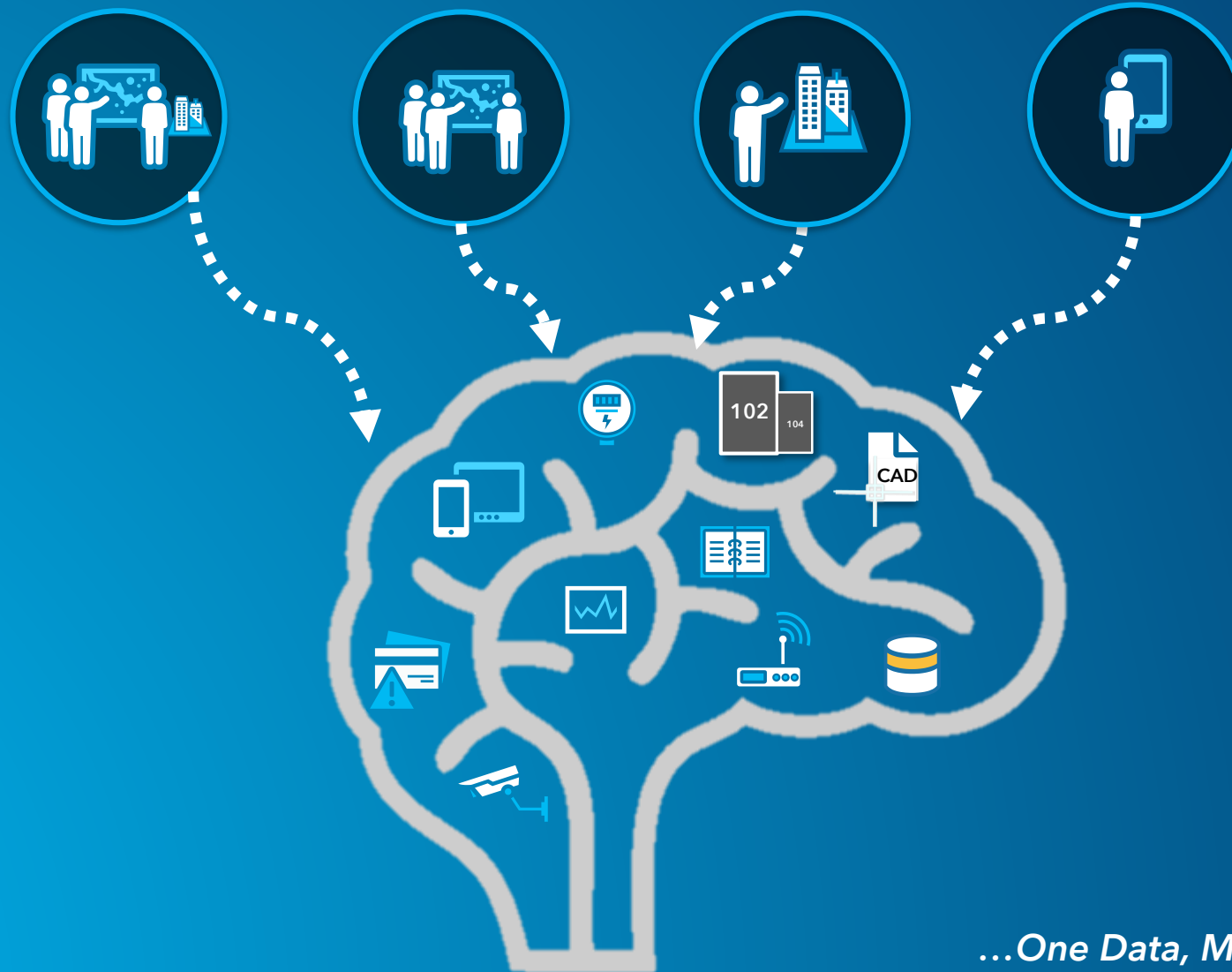


Alarm

Door Bell

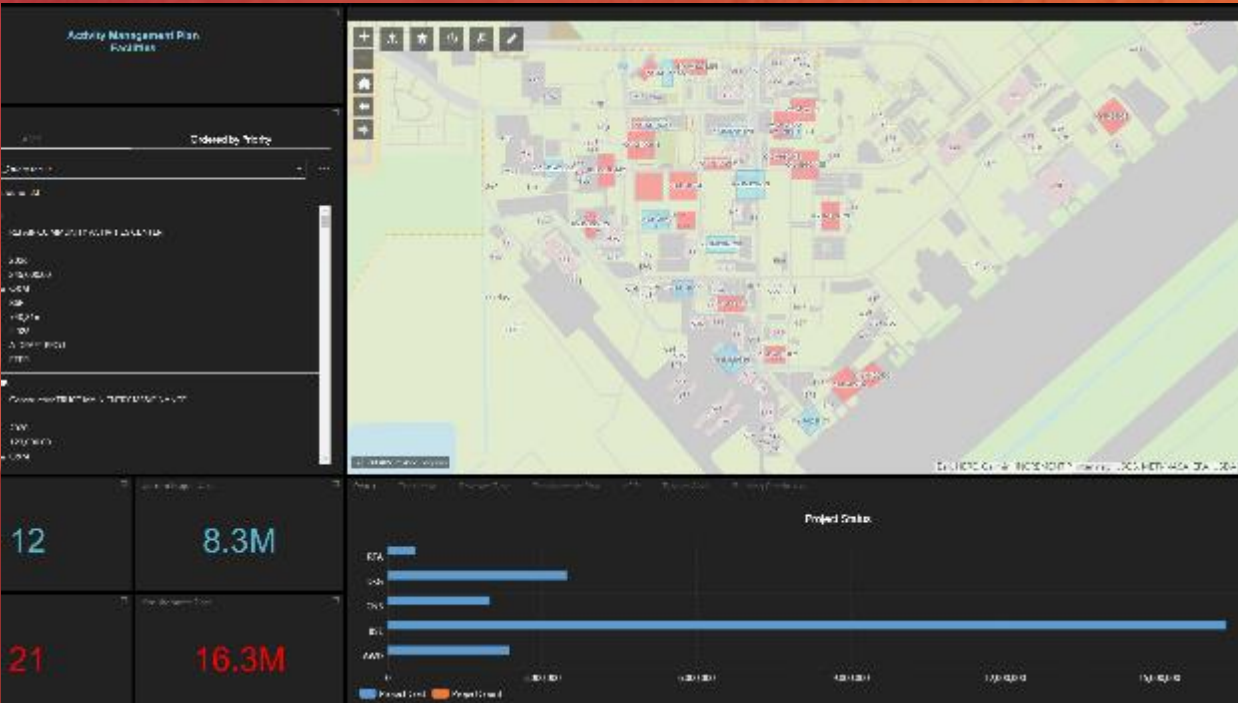
Light Switch

# Shared Pattern + Map



*...One Data, Many Uses + Perspectives*





# Reporting Dashboards

Web App Builder

# How do you become a SMART INSTALLATION?

- ✓ Problems to Solve
- ✓ Willingness to Start
- ☐ Understanding  
Where to Begin



Every Installation can be a  
SMART INSTALLATION?

IN JUST

4

STEPS

1

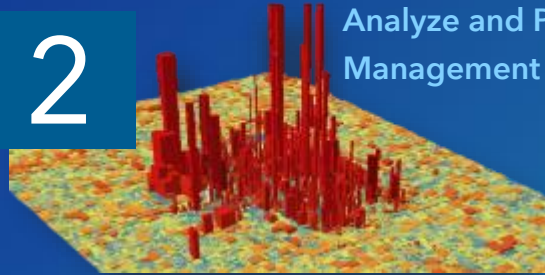
Track assets with Accuracy



USE a World-CLASS  
GIS PLATFORM

2

Analyze and Plan  
Management Strategy



BUILD A  
LOCATION  
STRATEGY

3

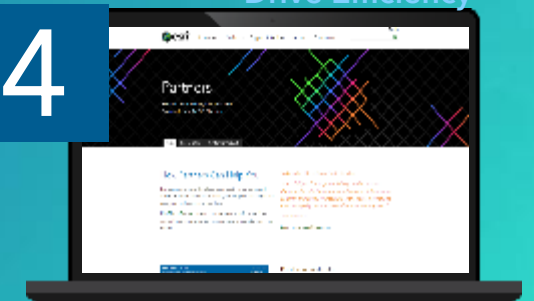
Control Operations



DELIVER REAL  
SOLUTIONS

4

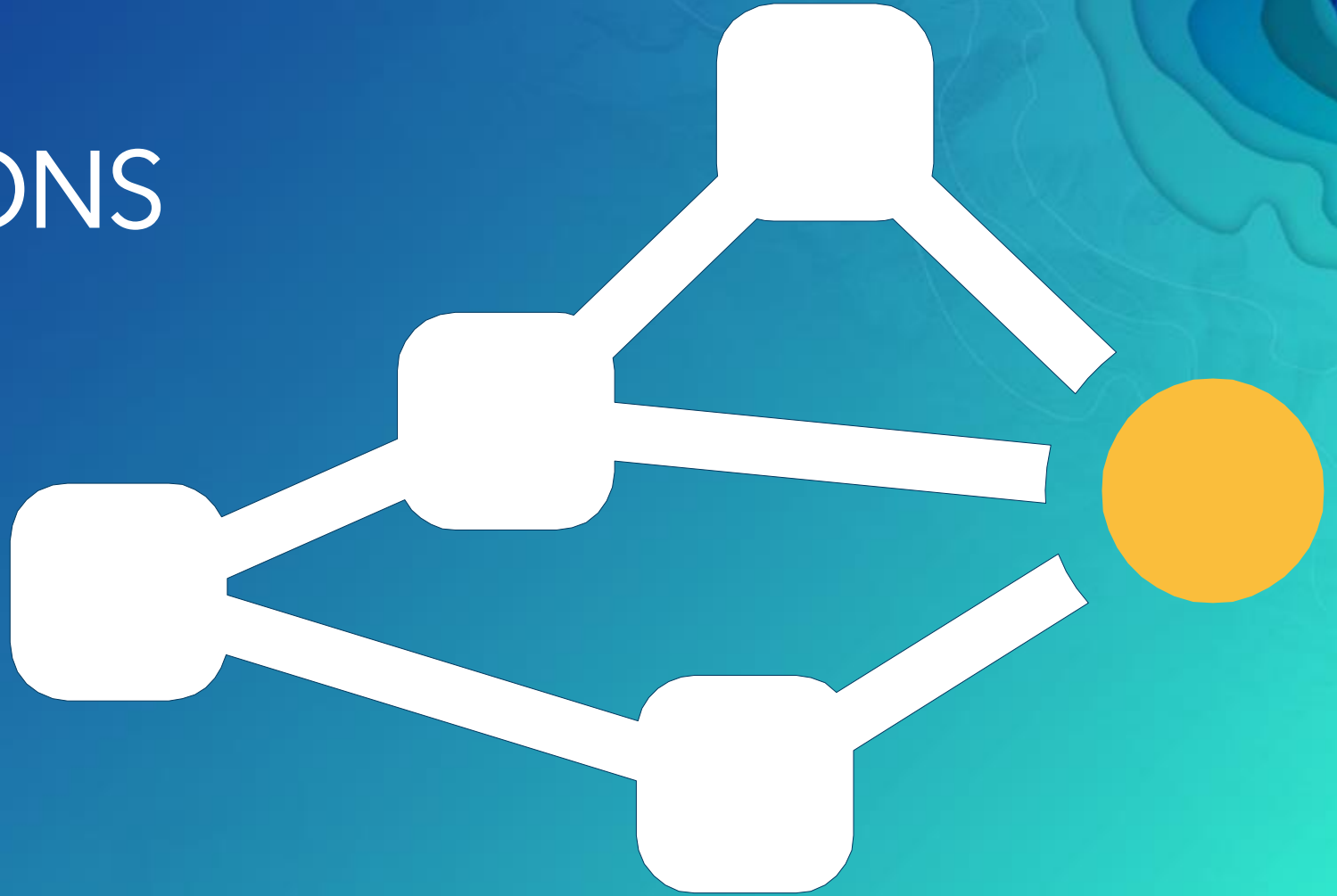
Drive Efficiency



DEVELOP STRONG  
PARTNERSHIPS



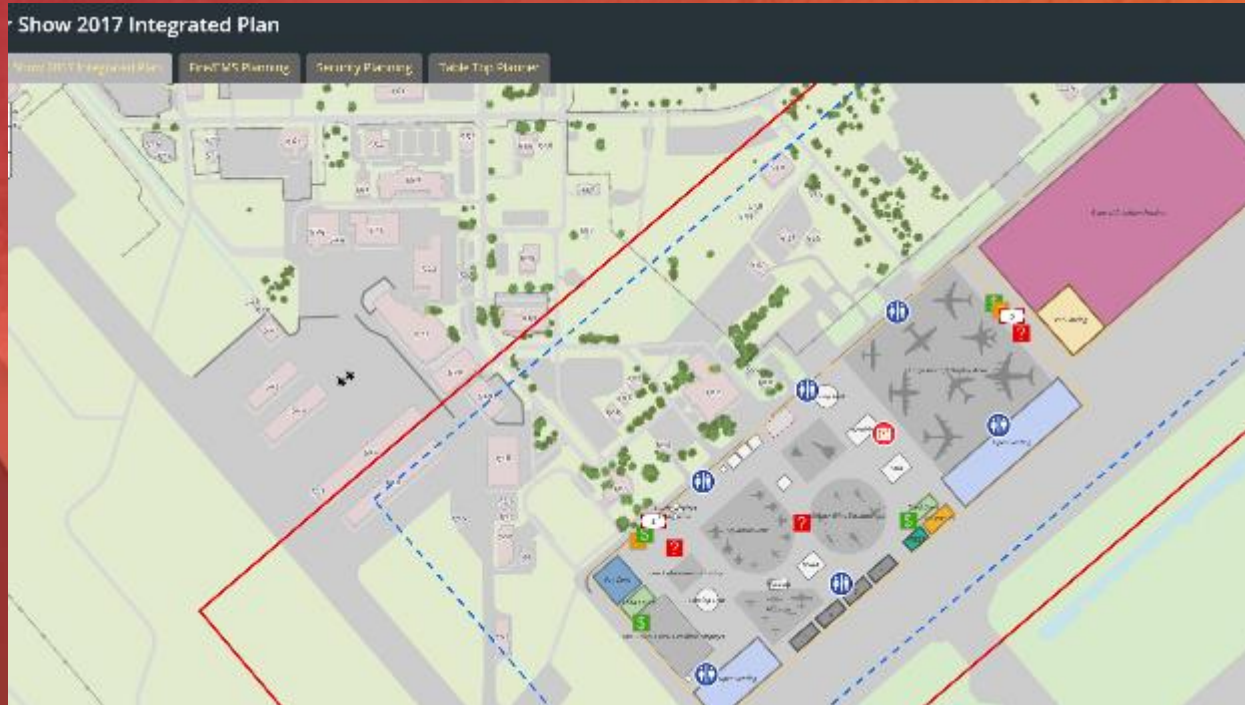
# FINDING SOLUTIONS



PRODUCTIVE  
EFFICIENT  
TRANSPARENT  
COLLABORATIVE







# Planning and Operations

Jim Bauer

# Esri Smart Workplace

Workplace Technology for Planning and Operations

## Interior Space Planning



Harvard



Riverside County



## Installation Planning

Tulsa



## Predictive Maintenance



## Risk Planning



Seoul, Korea

## Space Management & Security



Fulton County, Georgia

## IoT Sensors



Dubai Design District

## Facilities Management



State of Hawaii

## Evacuation Planning



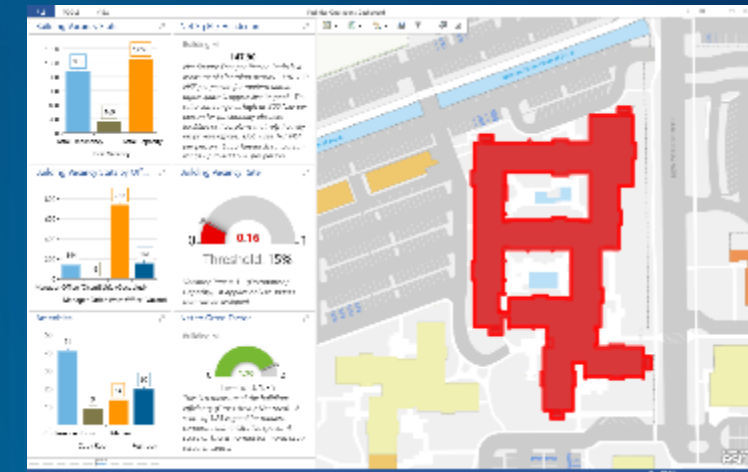
California



# Space Management



Locator, Viewer, Collector, Space Dashboards



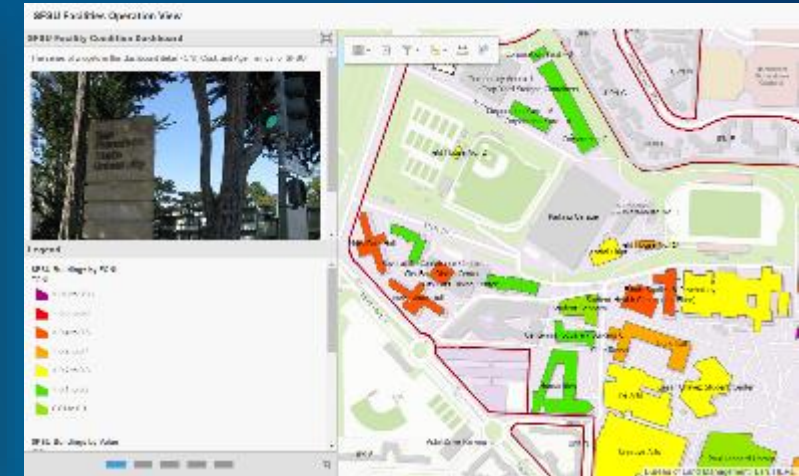
Improve Space Optimization and Reduce OPEX for Related Workplace Services

*...Save Costs Through Strategic Management + Increase Occupant Productivity*

# Asset Management



Locator, Viewer, Collector, Facility Dashboards



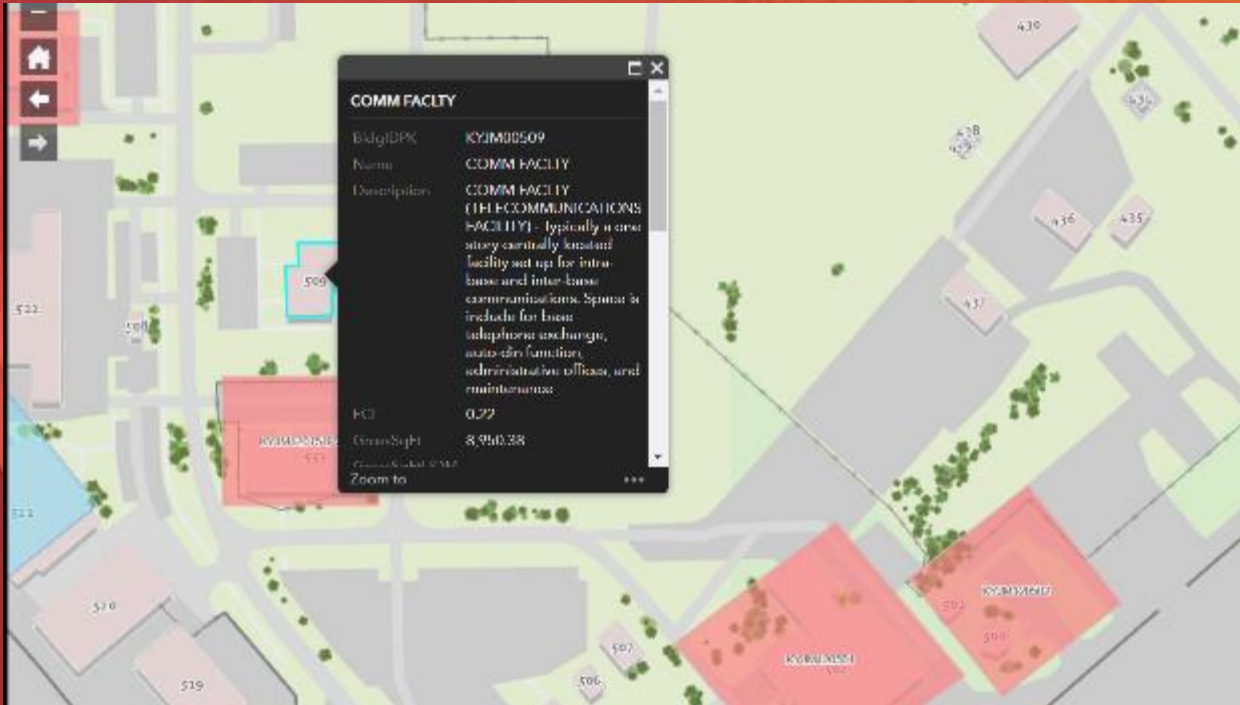
Reduce OPEX for Energy and Maintenance

*...Save Costs Through Strategic Management*

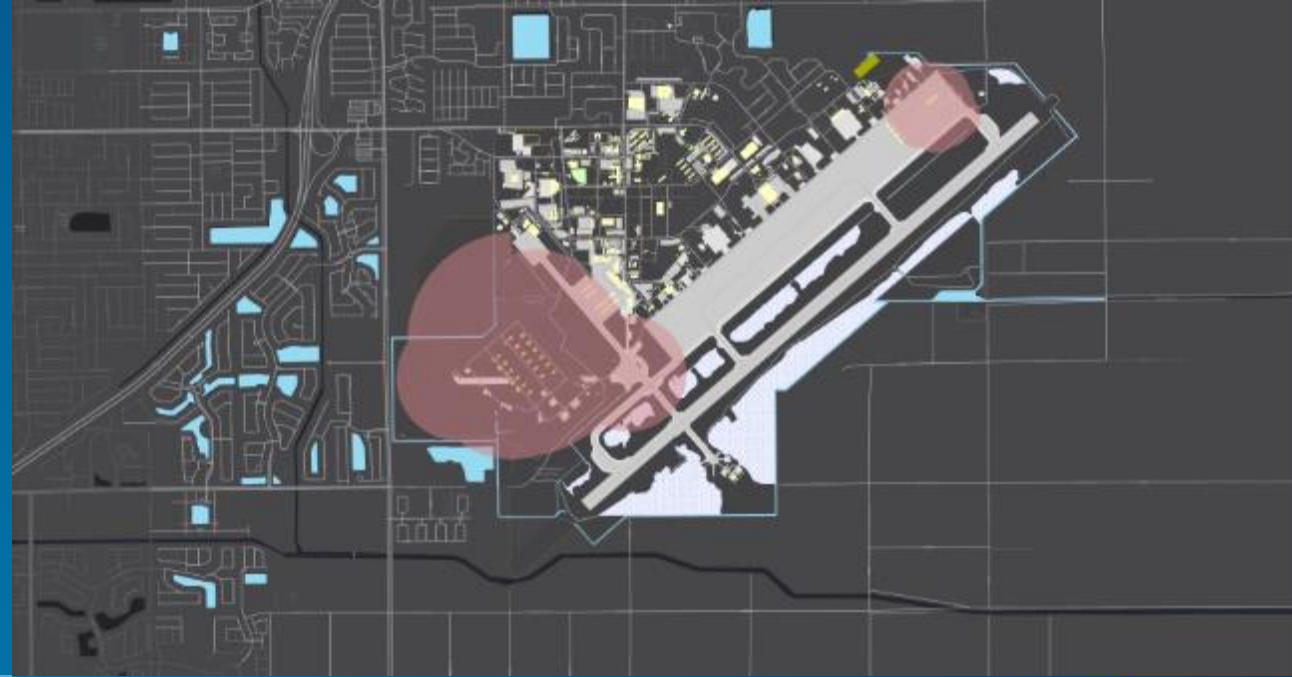


# Visualize your Entire Portfolio

Jim Bauer



# A Smart Installation Enables?



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- **Integrated Systems for Cross-Department Coordination**
- **Real-Time Situational Awareness at all levels of command**
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# Smart Installation Management

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- **Efficient and Resilient**
- **Respond to Emergency**
- **Transparency and Accountability**



Energy Efficiency



Security and Resiliency



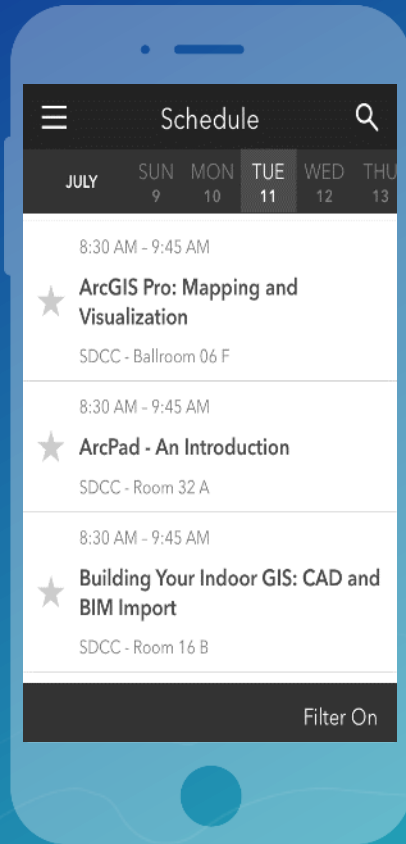
“ Effectively managing an installations requires effective collaboration across departments and levels of command

# Please Take Our Survey on the Esri Events App!

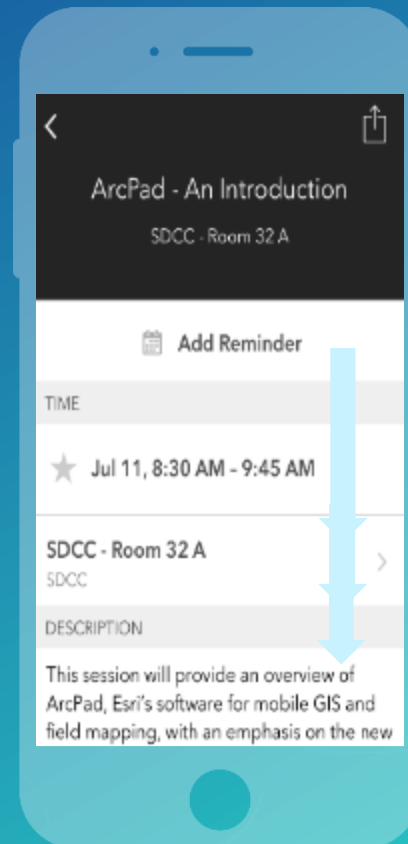
Download the Esri Events app and find your event



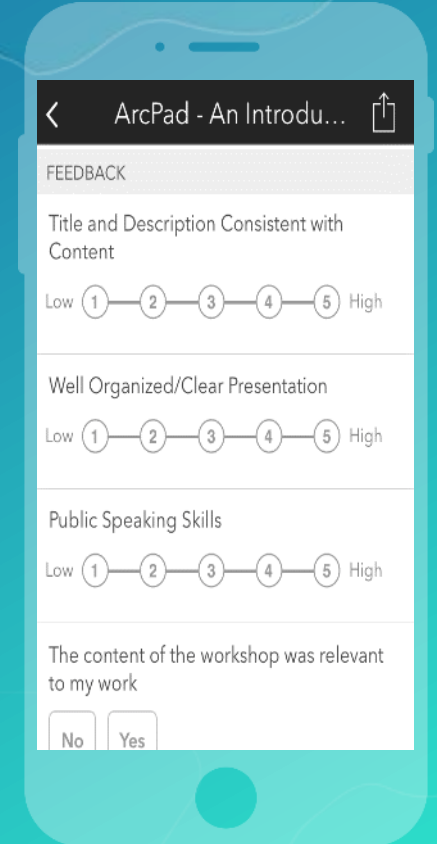
Select the session you attended



Scroll down to find the survey



Complete Answers and Select "Submit"








esri

THE  
SCIENCE  
OF  
WHERE

# Aspect Ratio Test



If this shape does not appear as  
a perfect circle, adjust the aspect  
ratio of your display until it does.

Try the resolution 1920x1080 for  
16:9 displays.