

Federal GIS Conference 2014

February 10–11, 2014 | Washington DC



# ArcGIS for the Military – Land Operations

Ben Conklin

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# Vision

Esri's Platform for Military Operations

# GIS Changes How We Think and Act

Integrating Geographic Science in Support of Military Operations

Decide

Evaluate

Plan

Design

Prepare

Act

Predict

Manage

Analyze

Measure

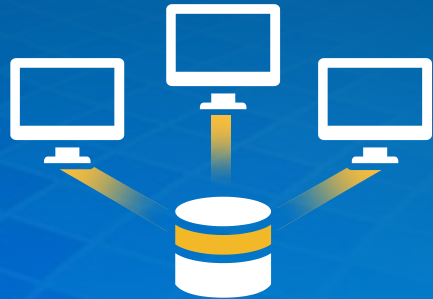
*Enabling Warfighting Functions*

# ArcGIS Supports Multiple Implementation Patterns

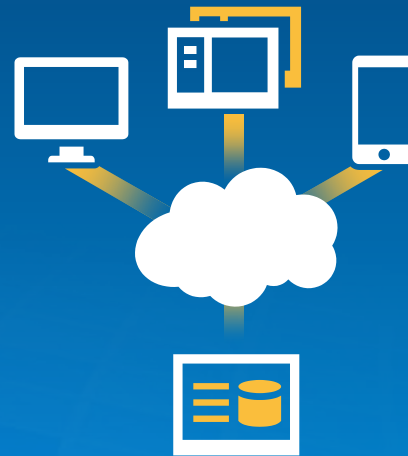
Leveraging Common Computing Architecture



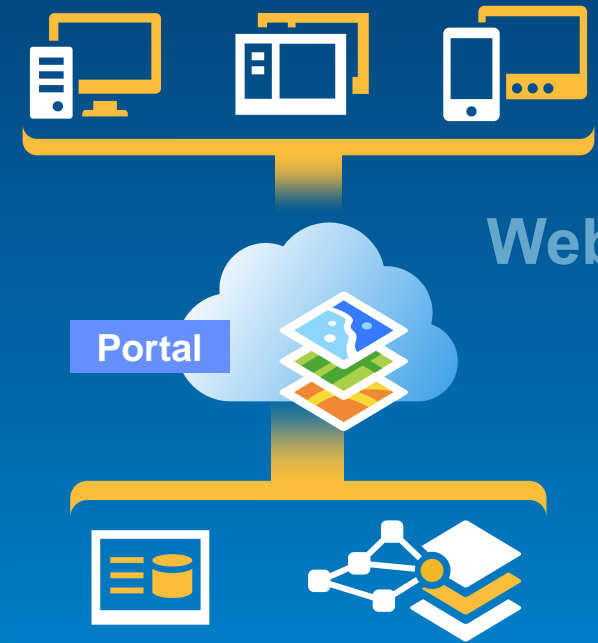
File Based



Database Centric



Server Centric



Web Centric

# ArcGIS Is a Platform

Enabling Web GIS Everywhere

Simple  
Integrated  
Open



*Available in the Cloud . . .  
. . . and On-Premises*

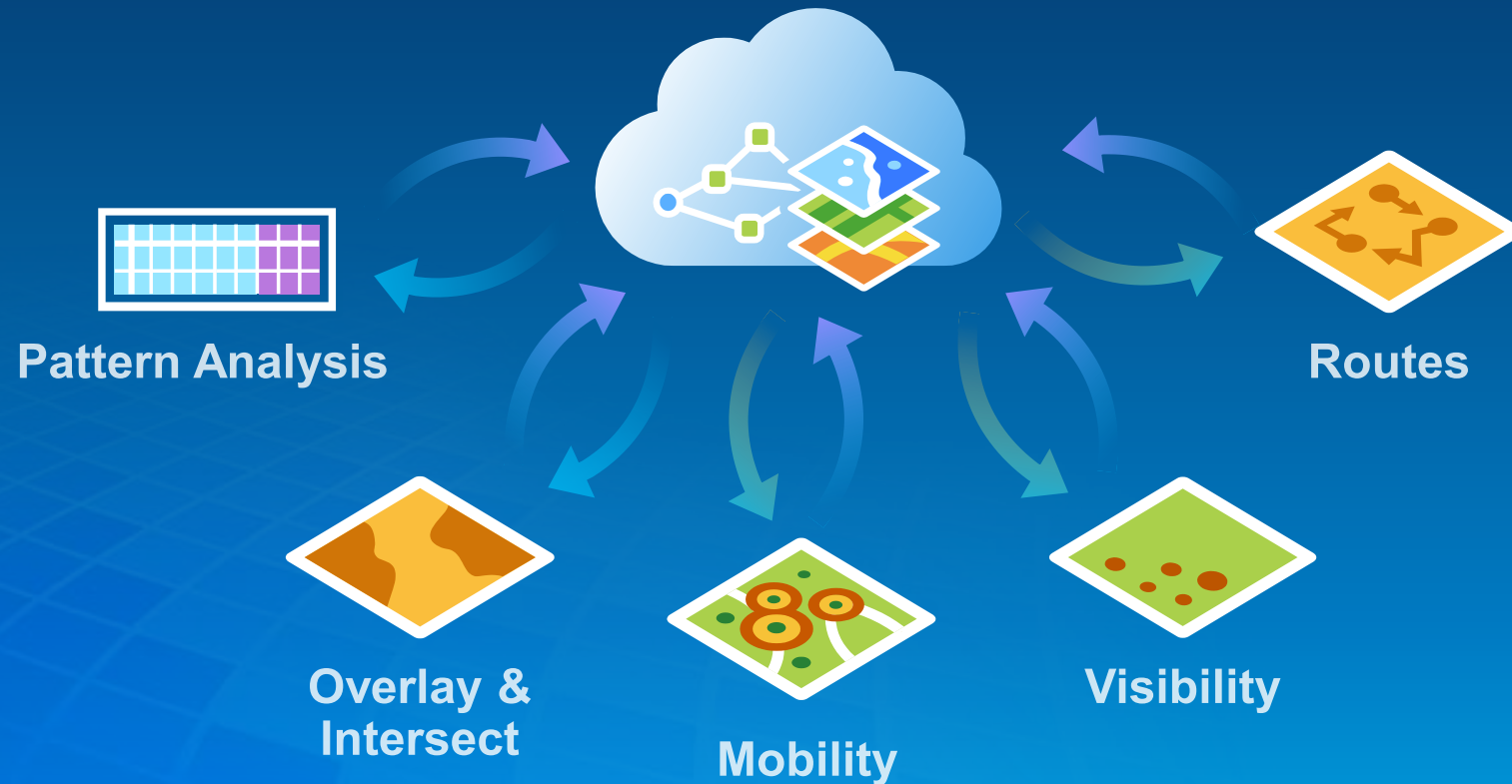
# Web GIS Can Represent All Data Types

As Web Maps and Web Services



*Providing a New Medium for GIS*

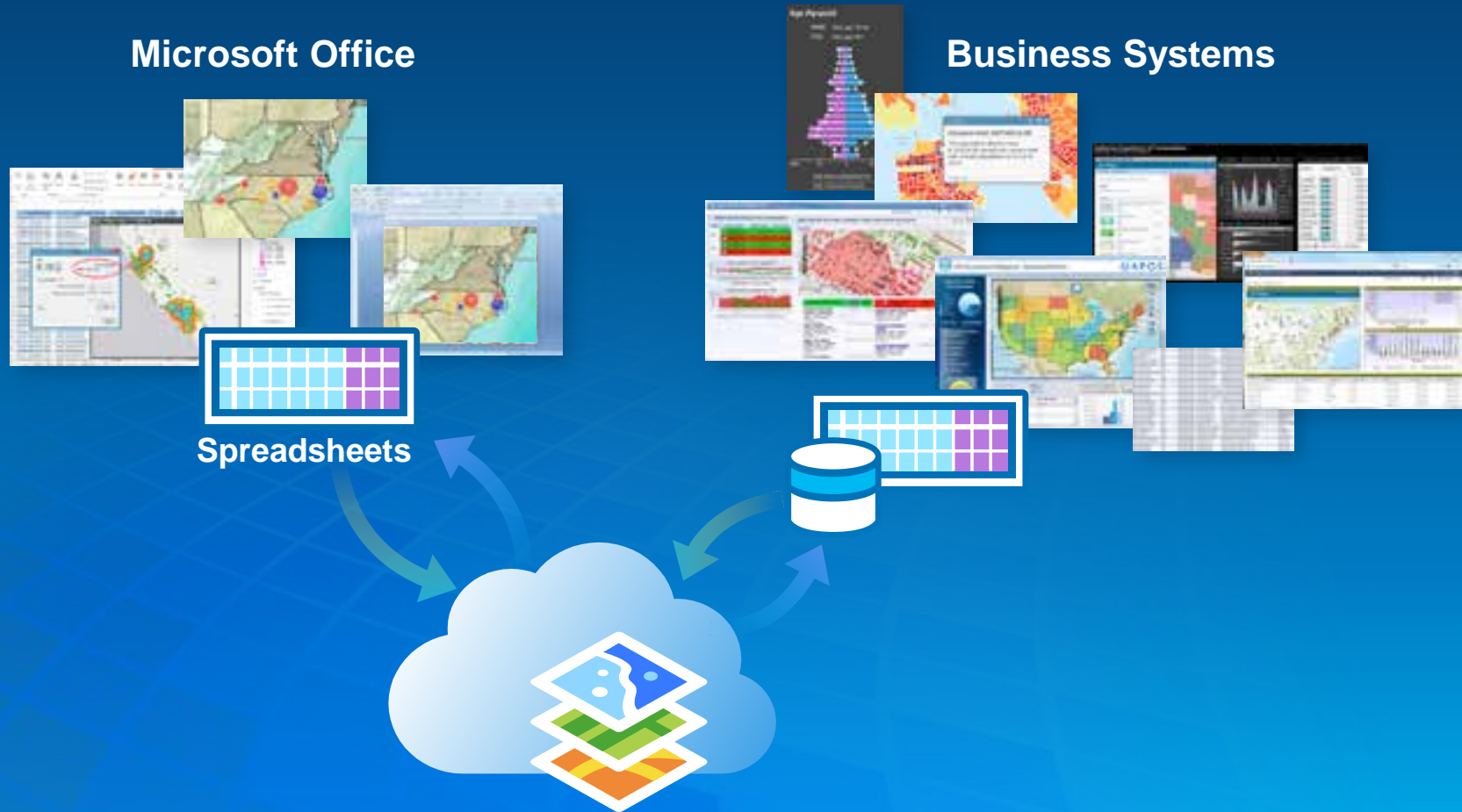
# Web GIS Includes Analytic Services



... Geocoding, analysis, and geo-enrichment functions

# The Platform Geo-enrichs Enterprise Systems

Providing Mapping, Spatial Analysis, and Reporting



## Esri Maps for . . .

- SharePoint
- Office
- IBM Cognos
- MicroStrategy
- SAP
- Dynamics



# Web GIS Integrates Organizations and People

Breaking Down the Barriers

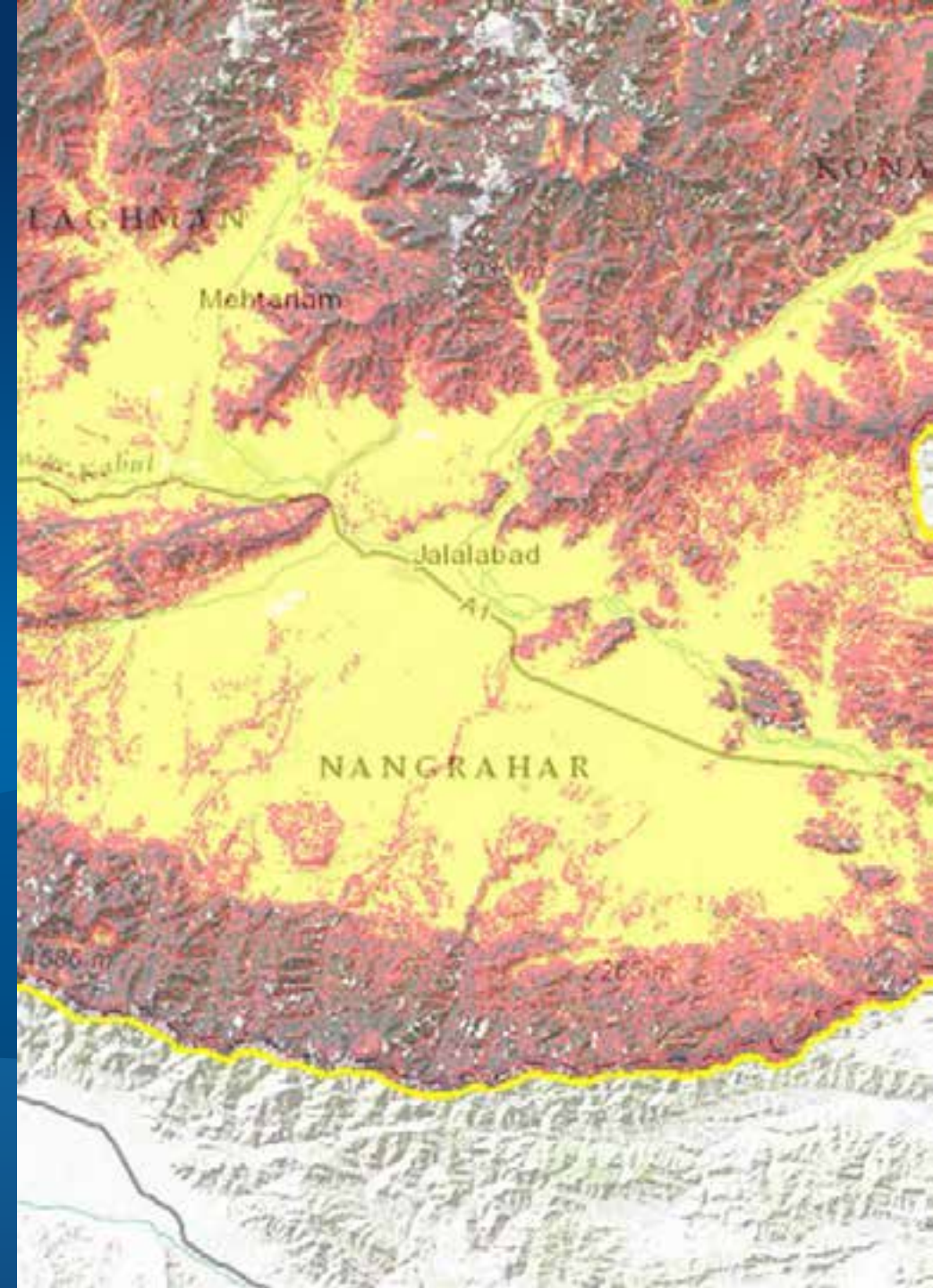


**Creating New Relationships**

*Sharing Information . . .  
. . . Supporting Collaborative Approaches*

# ArcGIS for the Military Land Operations

- 1 Overview of Platform
- 2 Supporting Analysis and Planning
- 3 Supporting Operations



# ArcGIS for the Military – Land Operations



**Information Sharing enables Decisive Action**

*Transforming the Role of GIS*



# ArcGIS for the Military – Land Operations

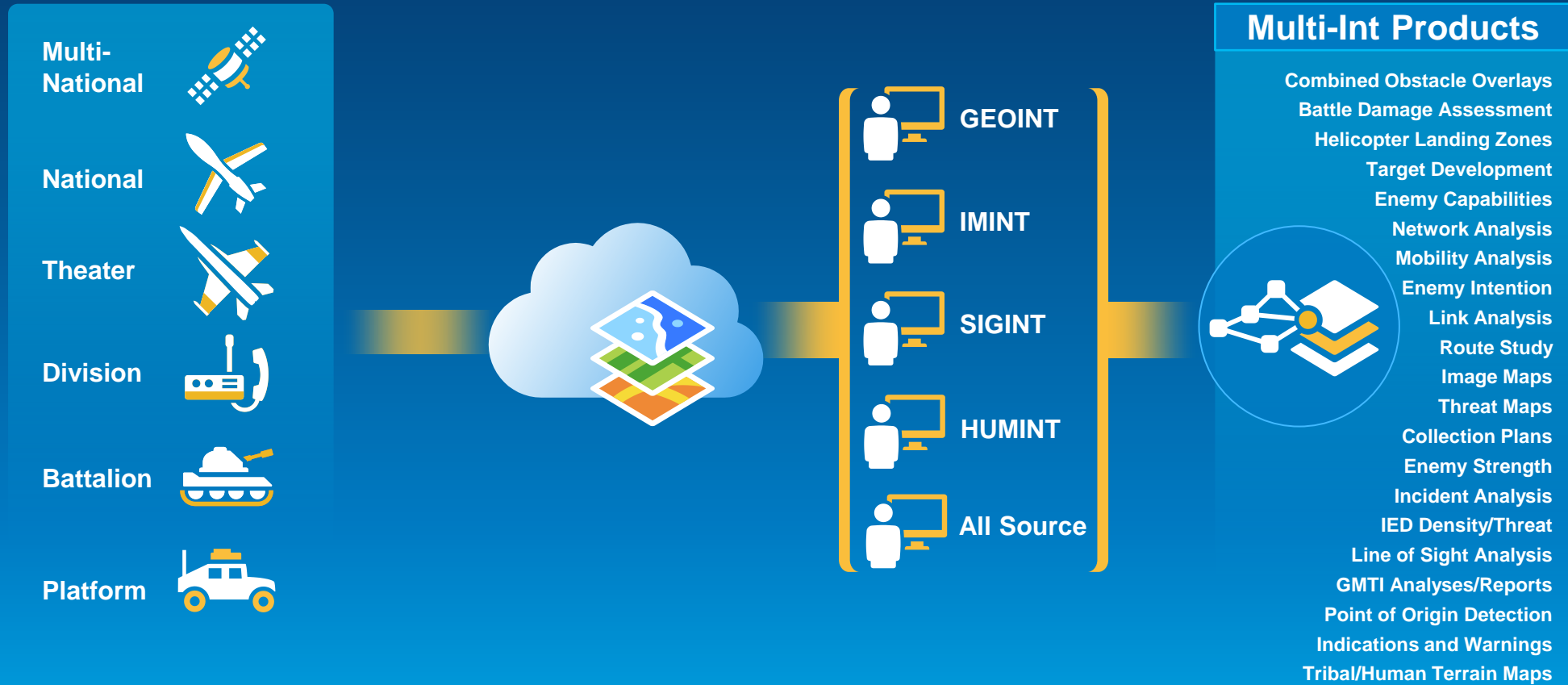


**Integrating Information**

*Enabling true collaboration*

# Intelligence Platform

ArcGIS Can Provide the Intelligence Platform



From Raw Data to Finished Intelligence

# Recent Template Development related to Land Operations

Making Geospatial Easier to Use

Helicopter Landing

CCM

Visibility and Range

Incident Analysis

Compound Mapping

Lines of Communication

Drop Zone

Engagement Area

Lodgment Planning

Observation Post

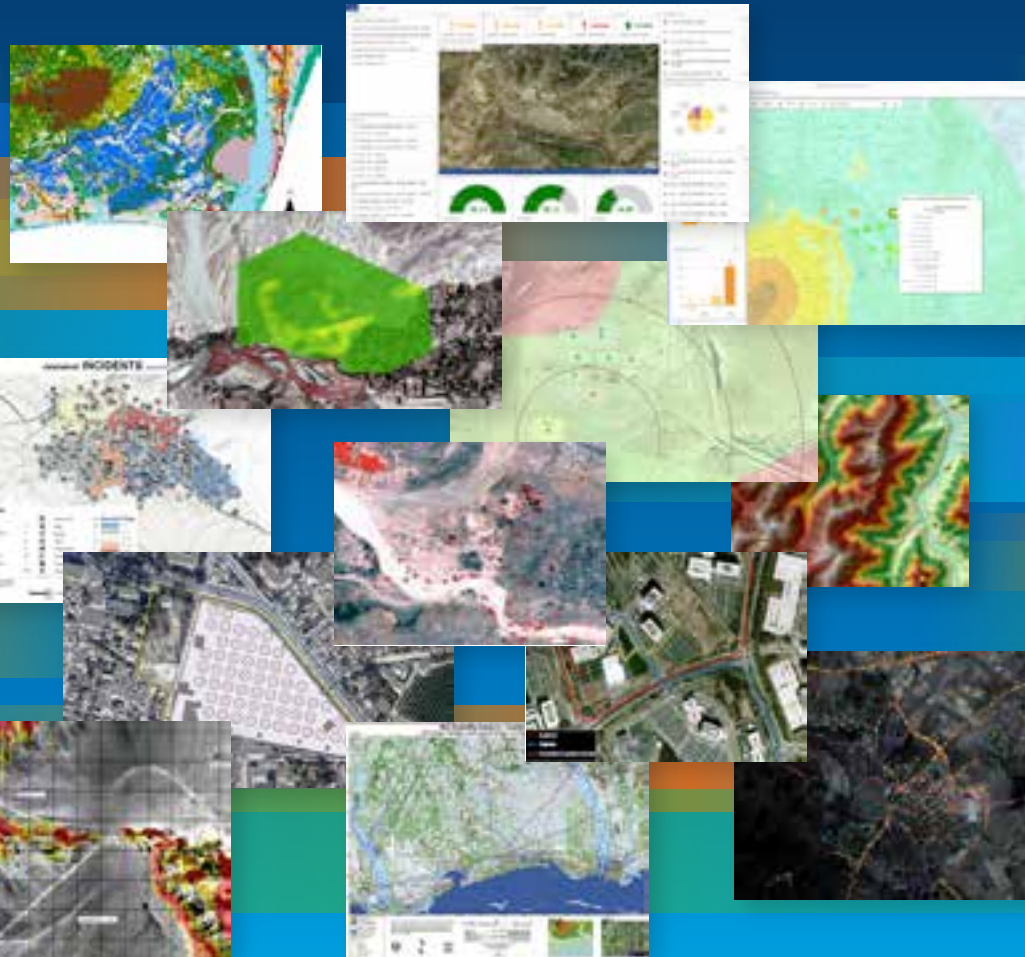
Position Analysis

Vehicle Checkpoint

Point of Origin

Village Clearing

Sun Position Analysis



*Available for 10.0 SP2 on Military Networks*

# What is a Template?

Fully documented and open source

- **Maps**
  - Useful examples of standard information products
  - MPK, Web Maps etc..
- **Tools**
  - Standalone Tools or scripts
- **Services**
  - Map, Image, Geoprocessing, Event Processing
- **Application Configurations**

**Templates are not new technology!  
They build on what you already have and use.**

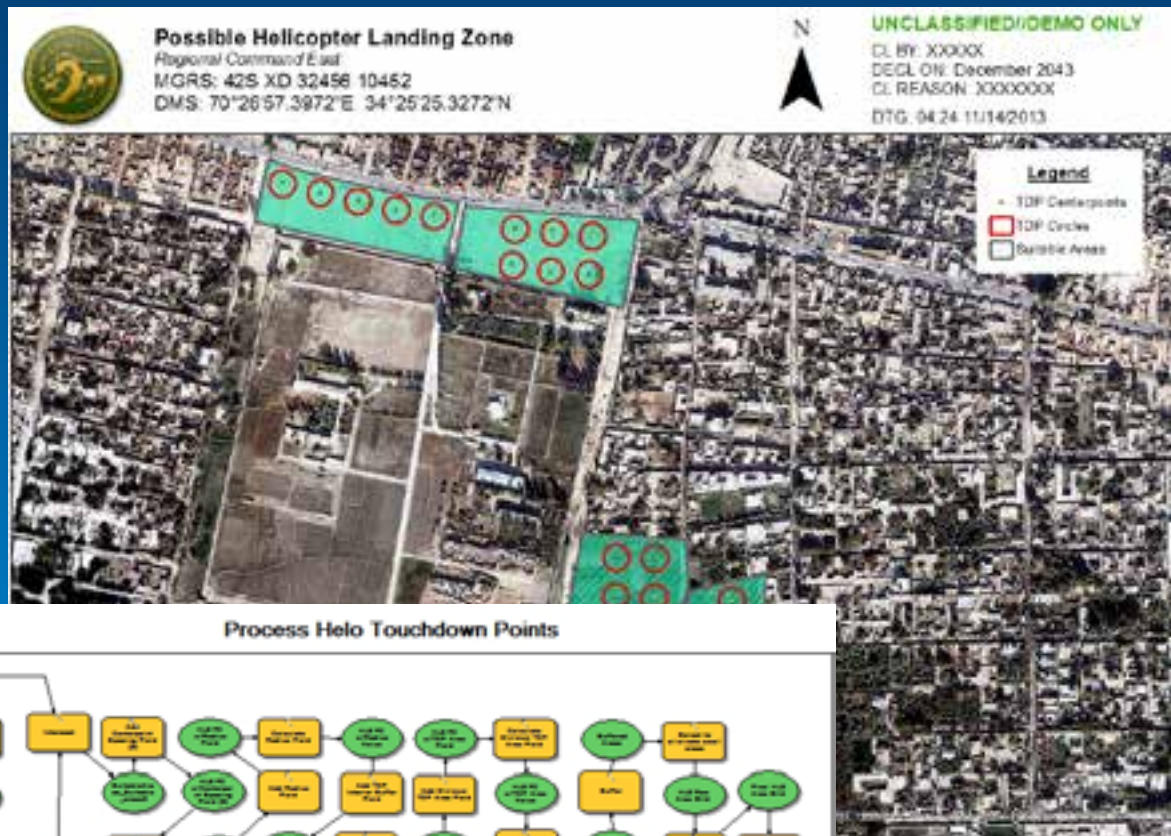


# HLZ Map and Tools

Scott Cecilio



# Helicopter Landing Zones



Based on readily available terrain data

Models eliminate non-suitable areas

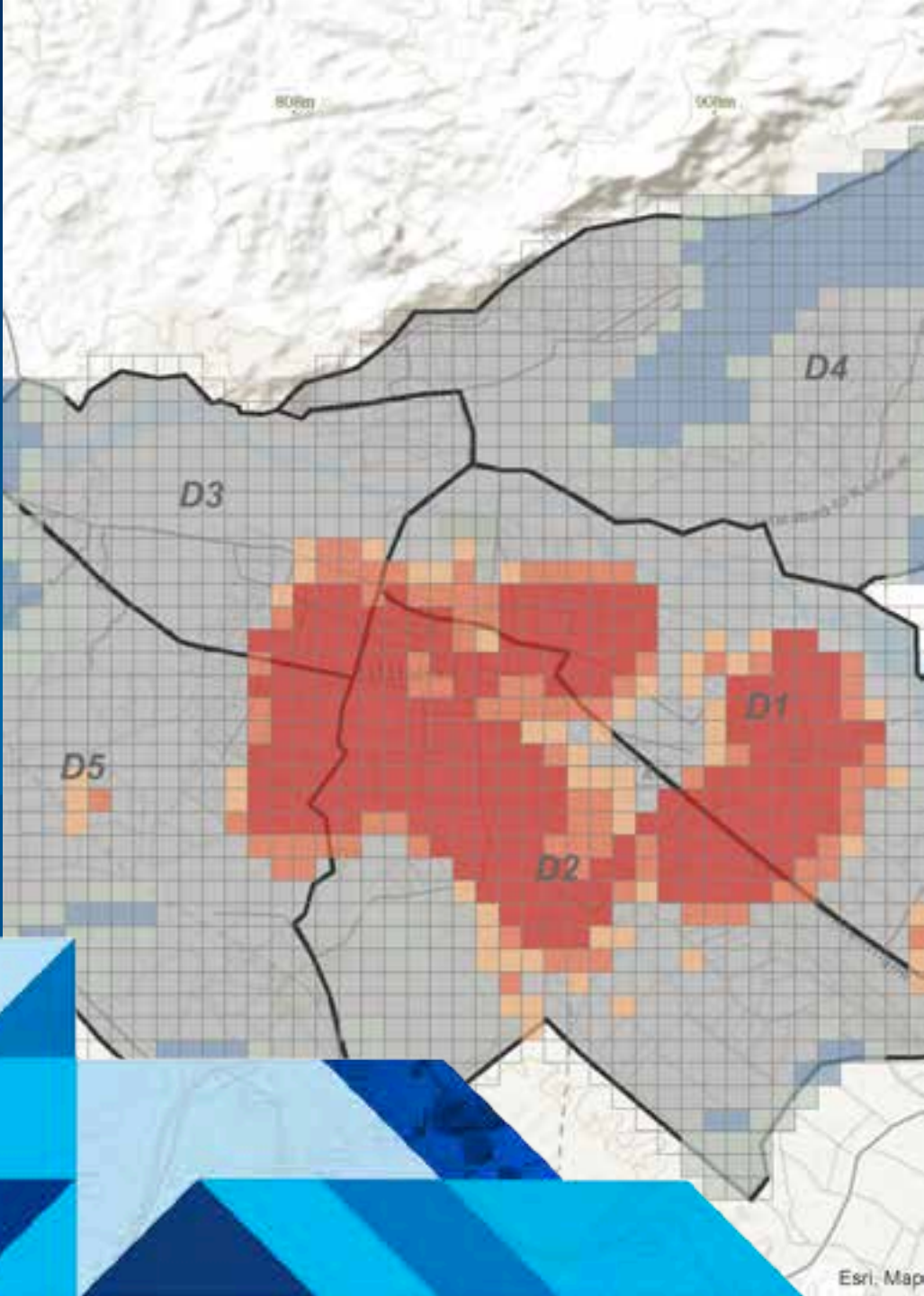
Factors-slope, vegetation, aspect, dimensions

Factor's Airframe Requirements

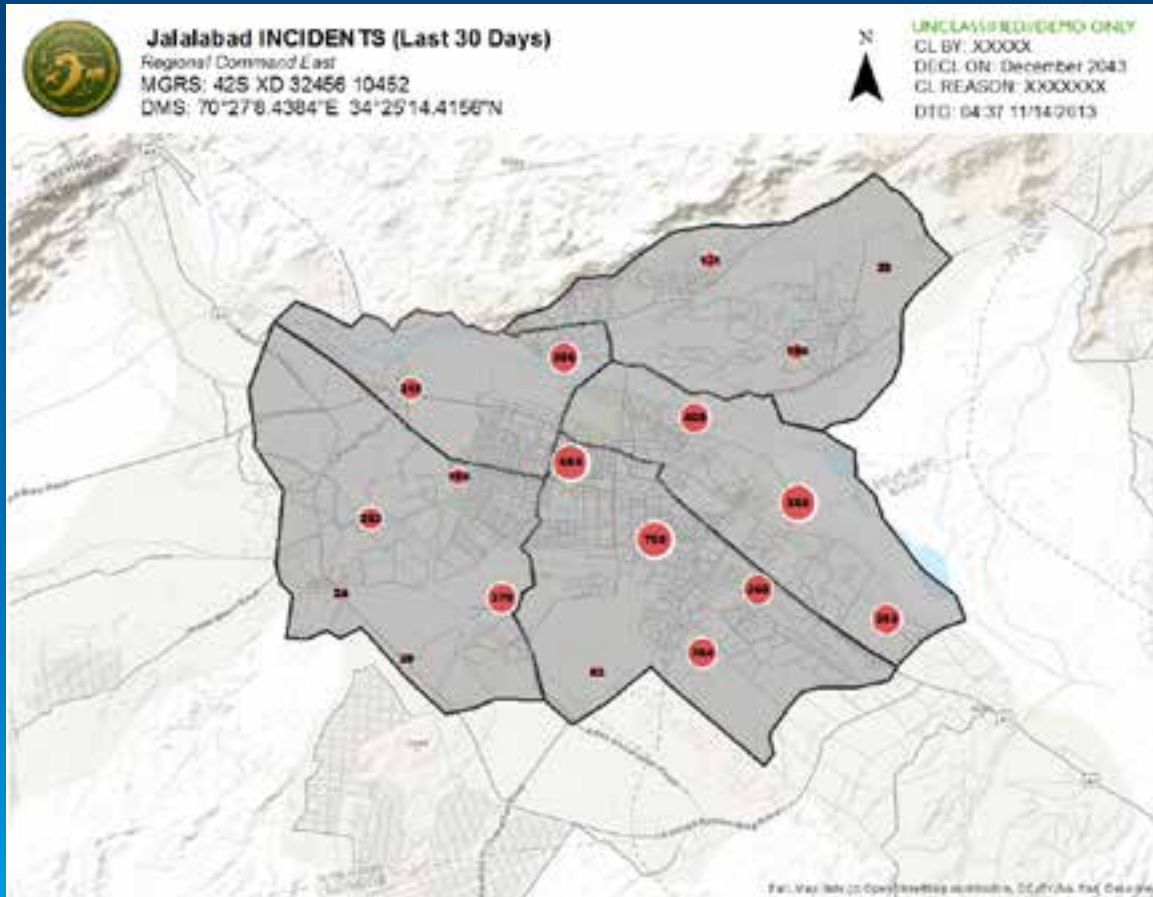
Automated HLZ capacity assessment

# Incident Analysis

Scott Cecilio



# Incident Analysis



Five Analytical Products

Density and Clustering Analysis

AOR - Regions - Communities

Weighted Features - Statistical Analysis

Trends and Pattern Analysis

# GIS is an Integrating Function



- 1 Define the Battlefield / BattleSpace**
- 2 Describe the Operational Environment**
- 3 Evaluate the Threat / Adversary**
- 4 Determine Course of Action**

# ArcGIS for the Military – Land Operations



**Providing Access to Information**

*Enabling collaboration*

Demo

# Urban Mission Rehearsal

Scott Cecilio



# ArcGIS for the Military – Land Operations



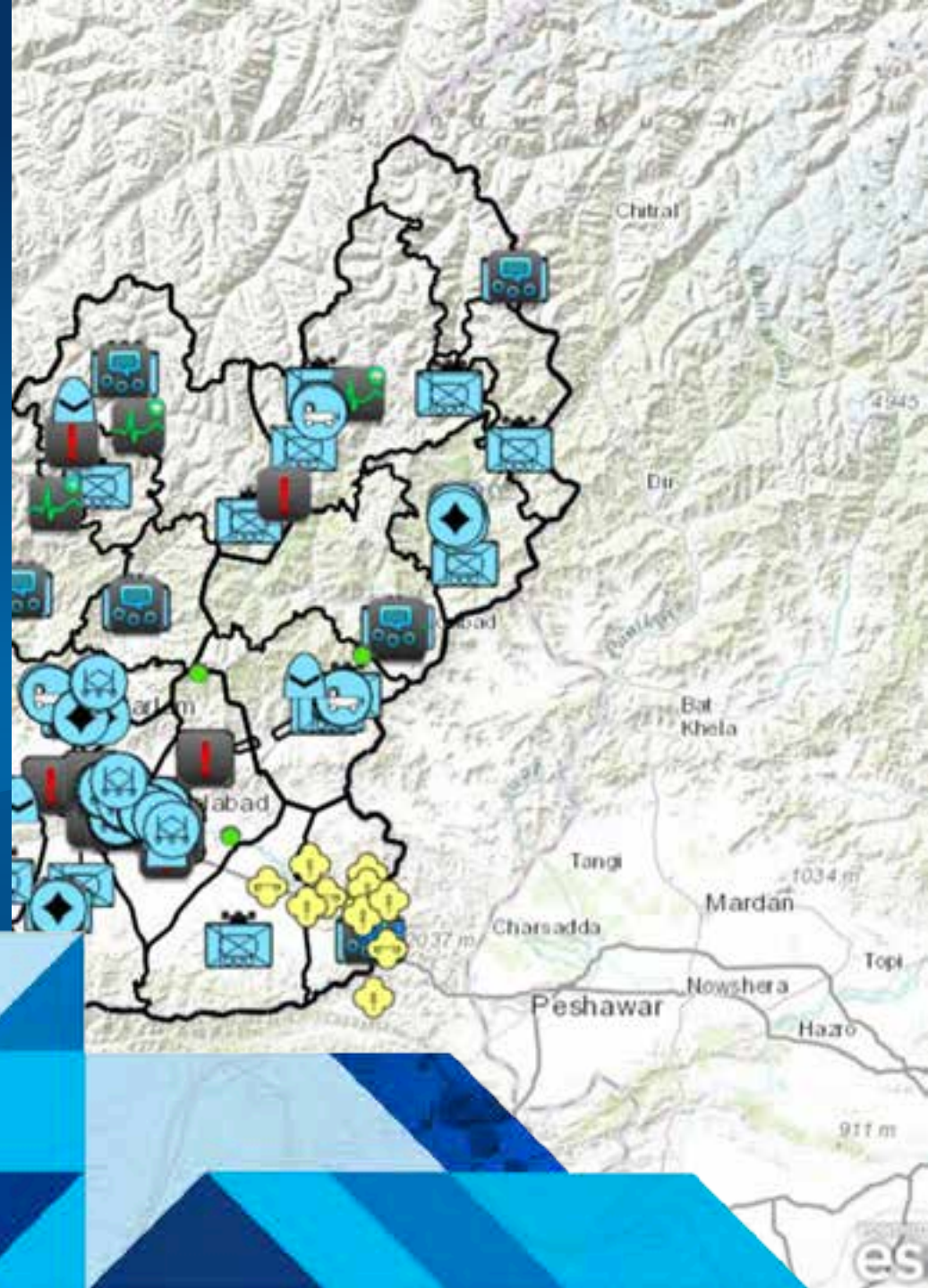
**Integrating Information in Real-Time**

*In the Headquarters and the Field...*

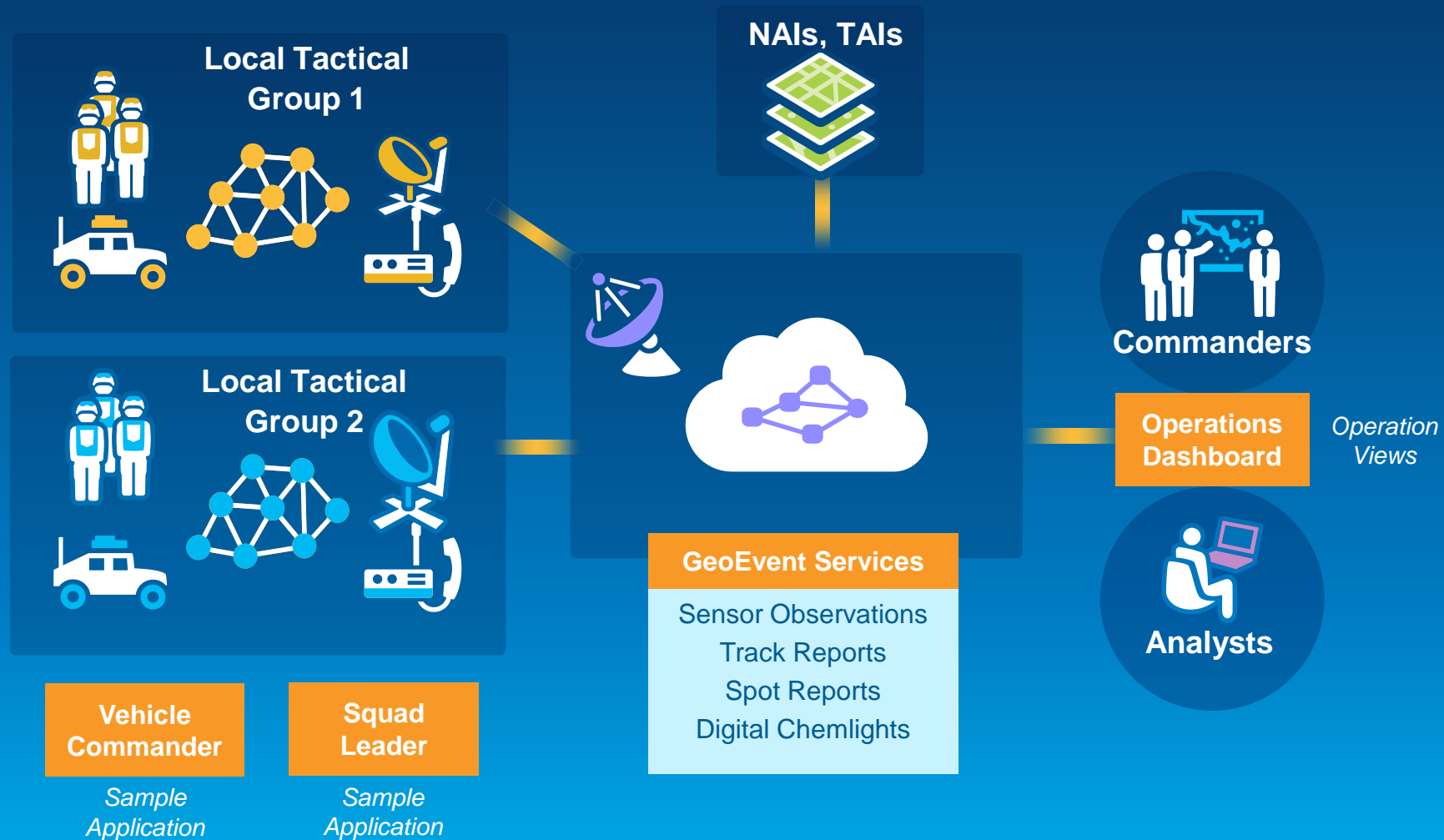


# Situational Awareness

Gary Sheppard

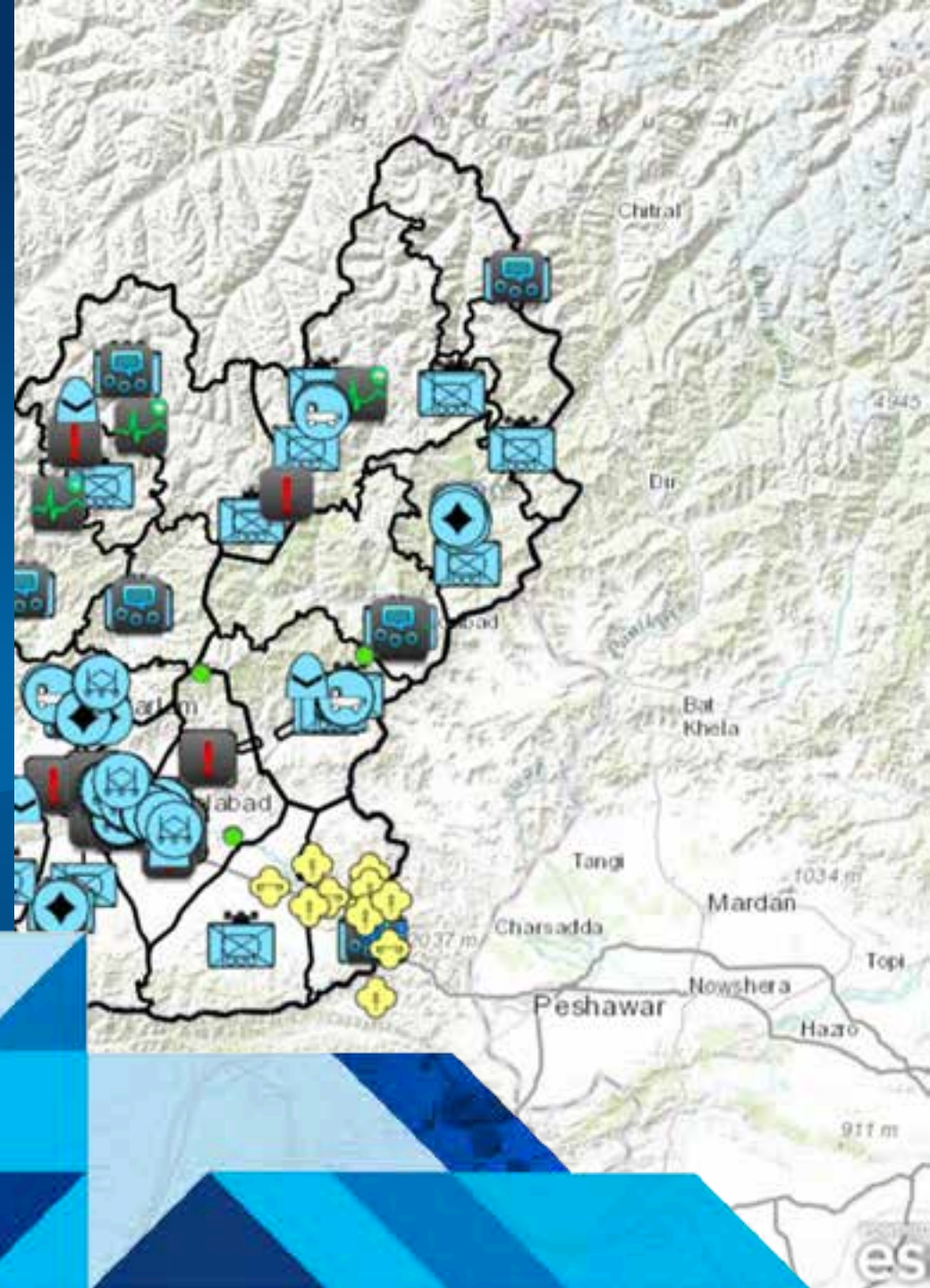


# Unified Command Picture

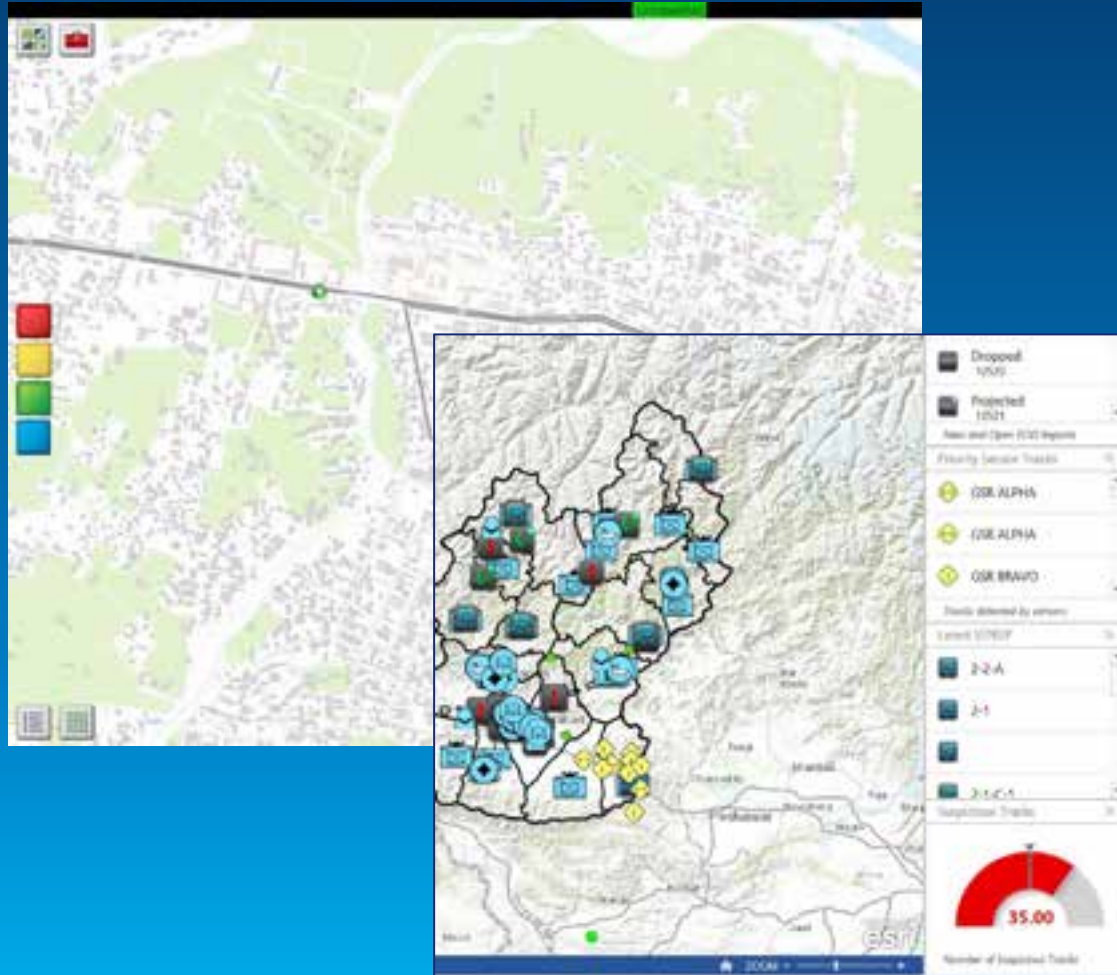


# Operations Dashboards

Gary Sheppard



# Operations



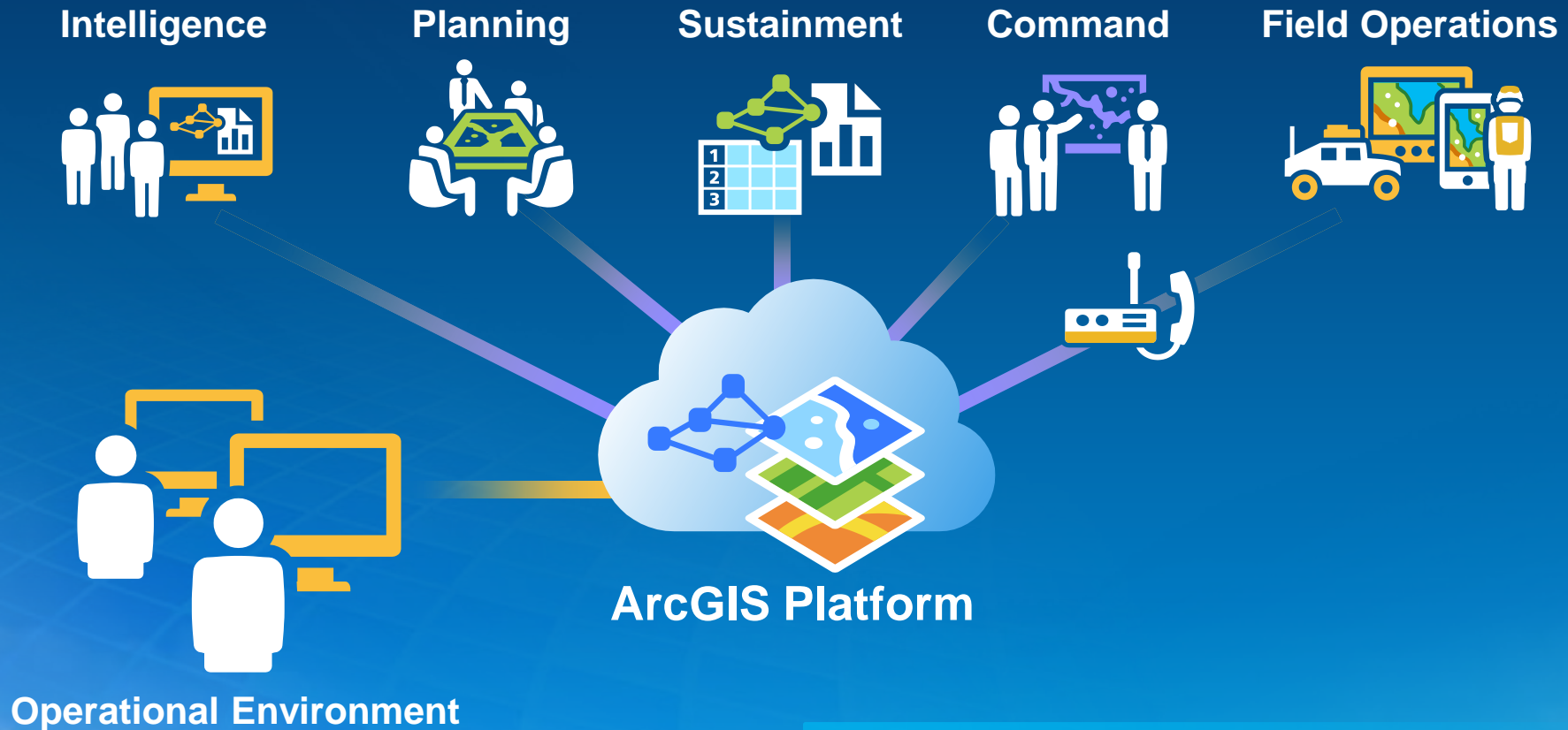
Tailored views for decision making

Automated monitoring of critical indicators

Focus on critical mission requirements

Users can bring mission data to the field

# ArcGIS for the Military – Land Operations



**Information Sharing enables Decisive Action**

*Transforming the Role of GIS*

Demo

# Briefing Products

Scott

# ArcGIS for the Military – Land Operations



**Information Sharing enables Decisive Action**

*Transforming the Role of GIS*

**Questions?**



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**Don't forget to complete  
a session evaluation form!**

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# Networking Reception

## Smithsonian National Museum of Natural History

Tuesday, 6:30 PM–9:30 PM

Bus Pickup located on L Street

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# Print your customized Certificate of Attendance!

Printing stations located in Hall B  
and the 140/150 Room Concourse.

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# GIS Solutions EXPO, Hall B

Monday, 12:30 PM–6:30 PM

Tuesday, 10:45 AM–4:00 PM

- Exhibitors
- Hands-On Learning Lab
- Technical & Extended Support
- Demo Theater
- Esri Showcase

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## Interested in diving deeper into Esri technology?

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Understanding our world.