The Underutilization of GIS & How to Cure It

Adam Carnow & Keith Cooke

Esri

Government—Public Safety

Seasonal Tornado Density

Federal Emergency Management Agency Region V
Chicago, Illinois, USA
By Thomas Griffin

Contact
Jesse Rozelle
jesse.rozelle@fema.dhs.gov

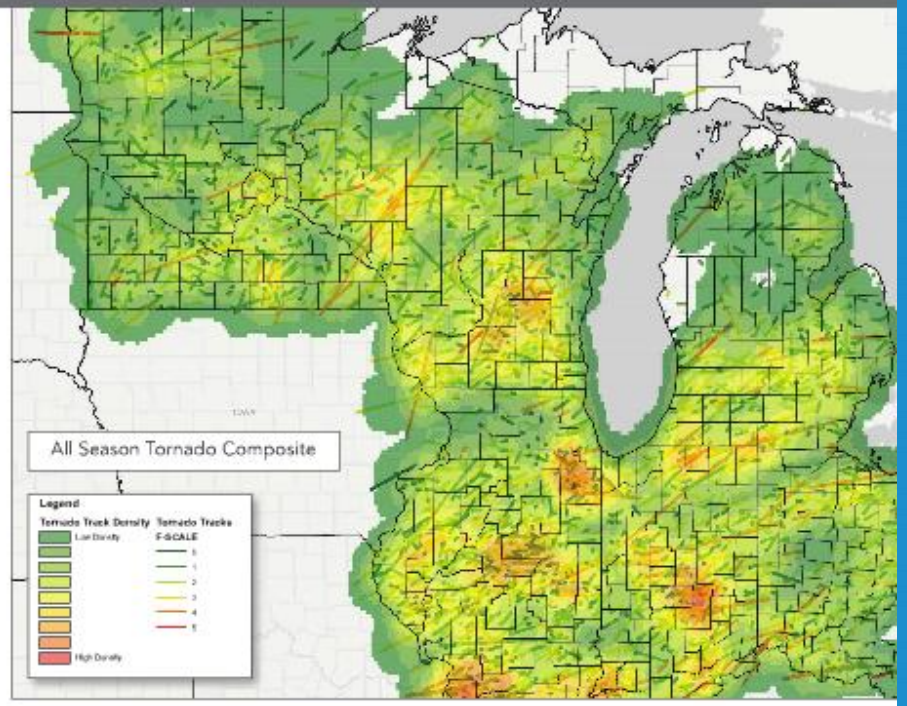
Software
ArcGIS 10 for Desktop

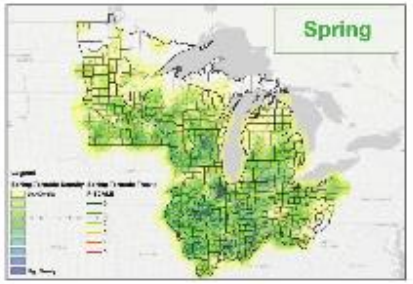
Data Sources
Esri, NOAA, FEMA

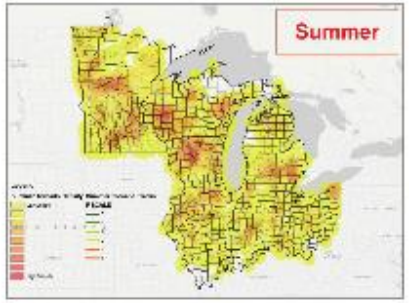
This seasonal tornado density map displays an analysis for Federal Emergency Management Agency (FEMA) Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin). Data was taken from the National Oceanic and Atmospheric Administration (NOAA) website about every recorded tornado since 1951. The track for every tornado that entered a Region V state was collected, and a line density was created. The data for these tornadoes also included information on when each tornado occurred, allowing the tornadoes to be further analyzed based on the season in which they occurred.

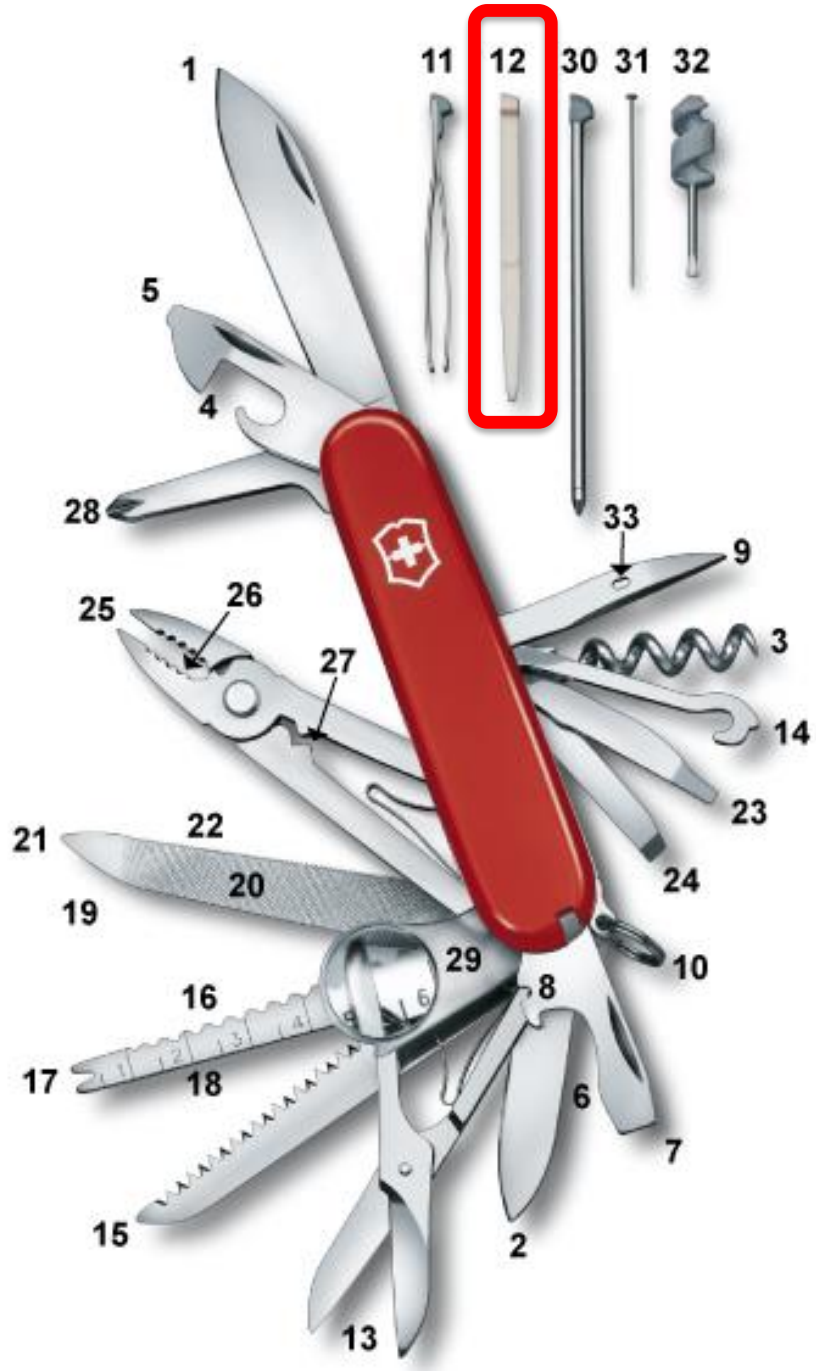
The purpose of this map was to identify any possible trends, take a closer look at relevant data, and tell a story through the use of GIS. Though tornadoes are very difficult to predict with any degree of accuracy, interesting assumptions can be deduced quickly and easily by looking at the data when it is visually represented. For instance, the map shows that tornadoes occurring during the winter months tend to be farther south where the weather is warmer, while tornadoes occurring during the summer months tend to spread farther north. The ability to see and understand this type of information better using GIS is potentially life-saving and is being used within FEMA more and more every day.

Courtesy of Federal Emergency Management Agency Region V.





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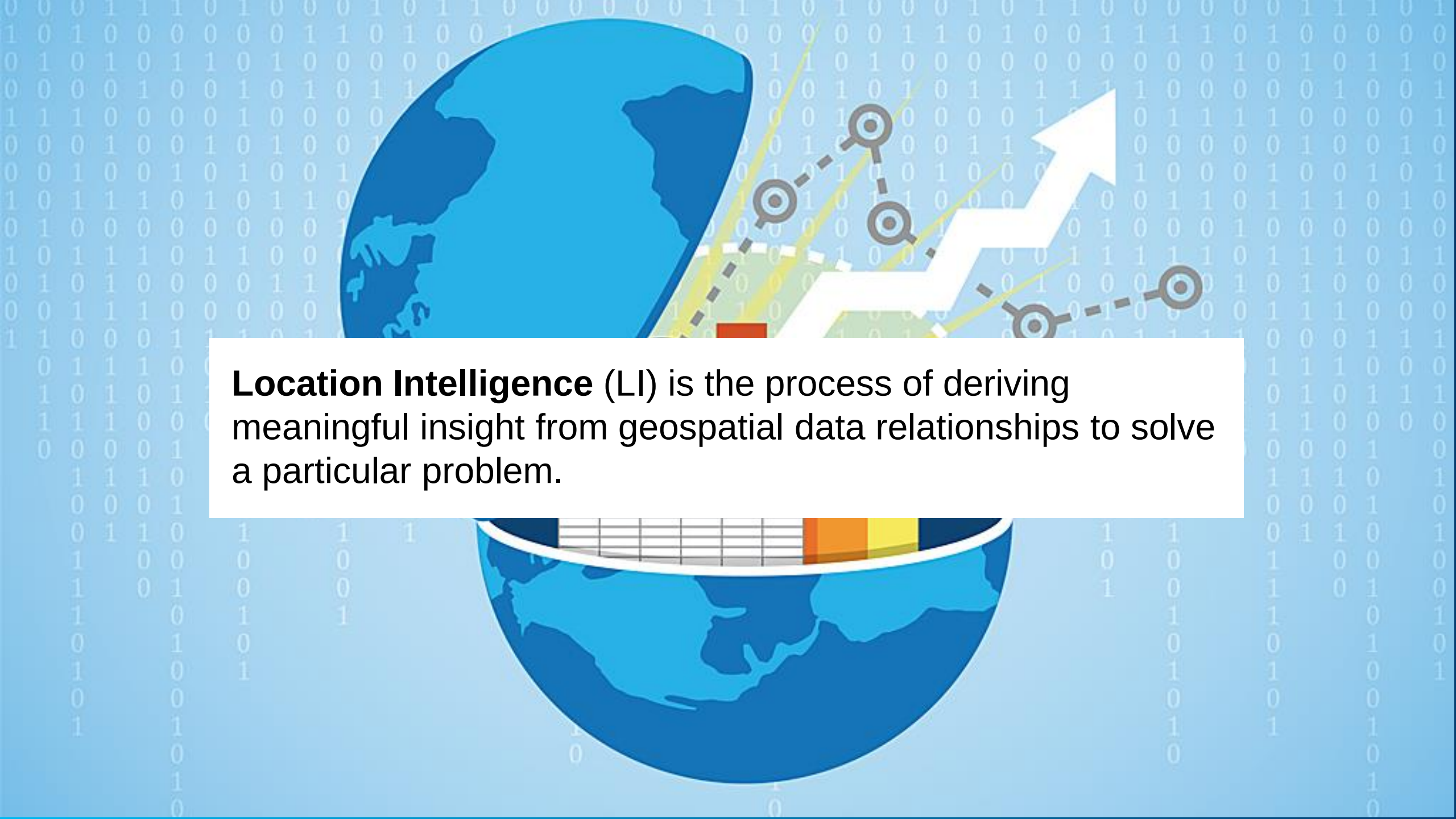
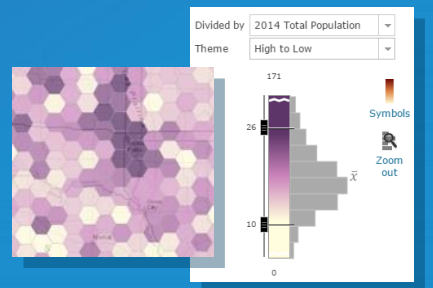
Business Intelligence (BI) is the set of techniques and tools for the transformation of raw data into meaningful and useful information for business analysis purposes.

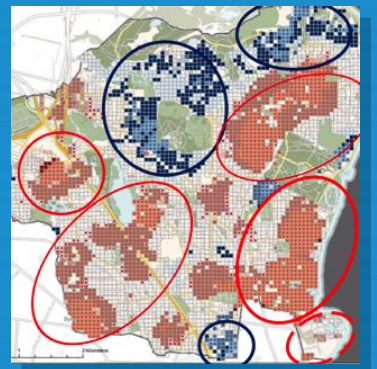


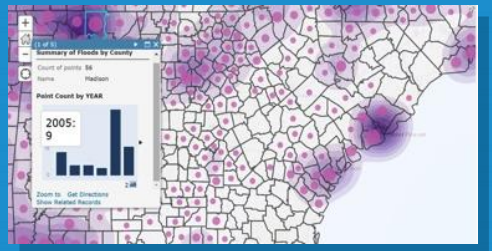
Location Intelligence (LI) is the process of deriving meaningful insight from geospatial data relationships to solve a particular problem.

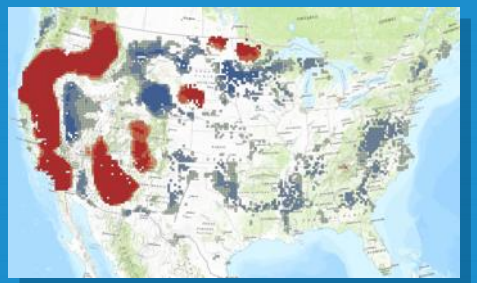
GIS was Created to Perform Spatial Analysis

- Understanding Where
- Measuring Size, Shape & Distribution
- Determining How Places are Related
- Finding the Best Locations & Paths
- Detecting & Quantifying Patterns
- Making Predictions









ArcGIS enables **every** employee and contractor to easily discover, use, make, and share maps from any device, anywhere, anytime.

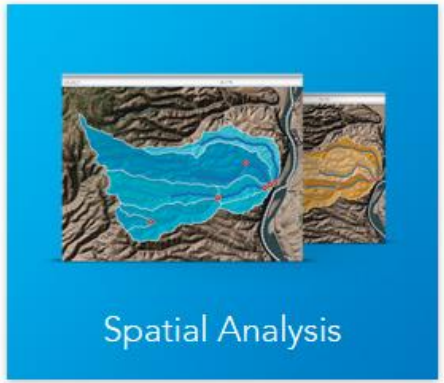
STOP
UPDATING
START
EVOLVING
Benjamin Niaulin
http://www.slideshare.net/benjaminniaulin/stop-updating-start-evolving-the-digital-workplace-truth
#DigitalWorkplace

We’re stuck in a routine…

Esri wants to help you transform…

Your Possibilities Are Endless

Regardless of your industry or the size of your organization, you can use the ArcGIS platform to apply geography to solving problems and making decisions.


Spatial Analysis

Apps

Content

Real-Time GIS

Big Data

Mapping and Visualization

Imagery and Remote Sensing

3D

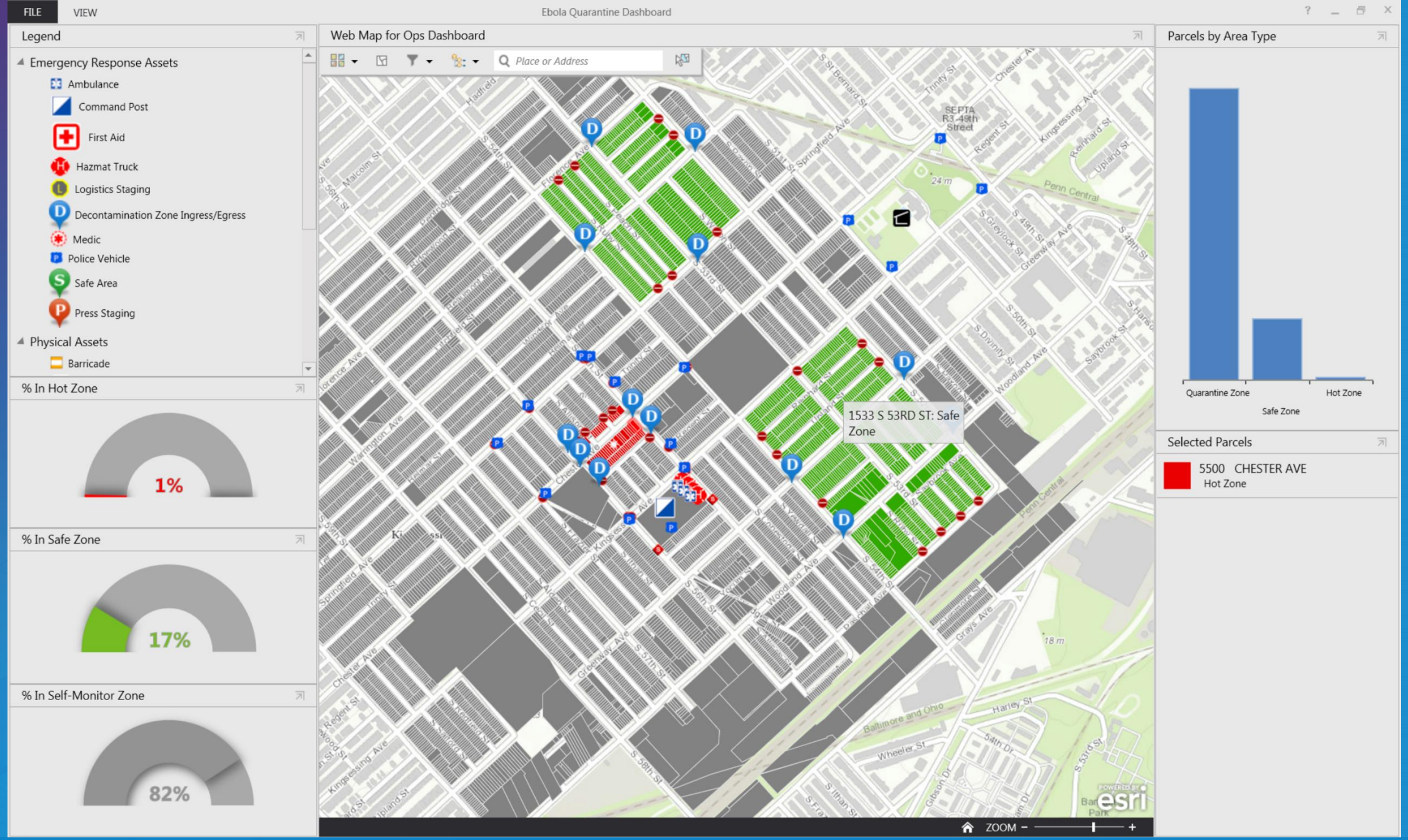
CAD

Data Management

Geodesign

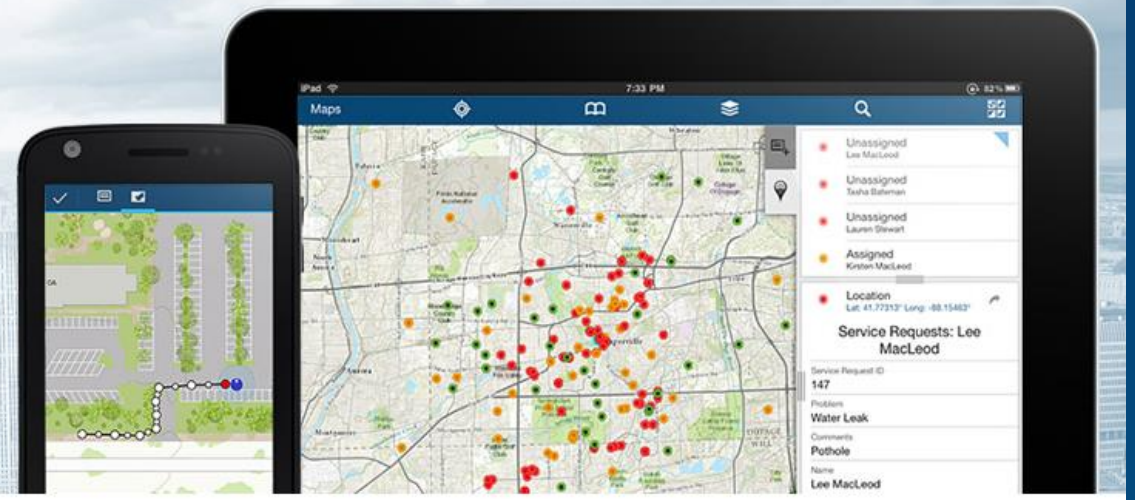
Community Engagement

This is not a battle between On-Premises and The Cloud…



It's about providing different services…different experiences…

Web and Mobile Apps



Apps That Fit the Work You Do, No Matter Where You Are

Mapping Apps

Mapping apps provide focused workflows and tools for your day-to-day tasks. With these apps, you can track assets, create operational dashboards, publish open data, and more.

- Collector for ArcGIS
- Explorer for ArcGIS
- Operations Dashboard for ArcGIS
- Open Data
- GeoPlanner for ArcGIS
- Community Analyst
- Navigator for ArcGIS

Business Apps

Easily add mapping to your existing business processes. By analyzing your data on a map, you get a more complete picture and better insights than you would from just looking at spreadsheets.

- Esri Maps for Office
- Esri Maps for SharePoint
- Esri Maps for IBM Cognos
- Esri Maps for MicroStrategy
- Esri Maps for Salesforce
- Esri Business Analyst Online

Configurable Apps

Want apps with your own look and feel? With ready-to-use templates and widgets, you can share these apps inside your organization or use them to engage with your customers or the public.

- AppStudio for ArcGIS
- Web AppBuilder for ArcGIS
- Story Maps
- ArcGIS Web App Templates

It's about providing different services…different experiences…

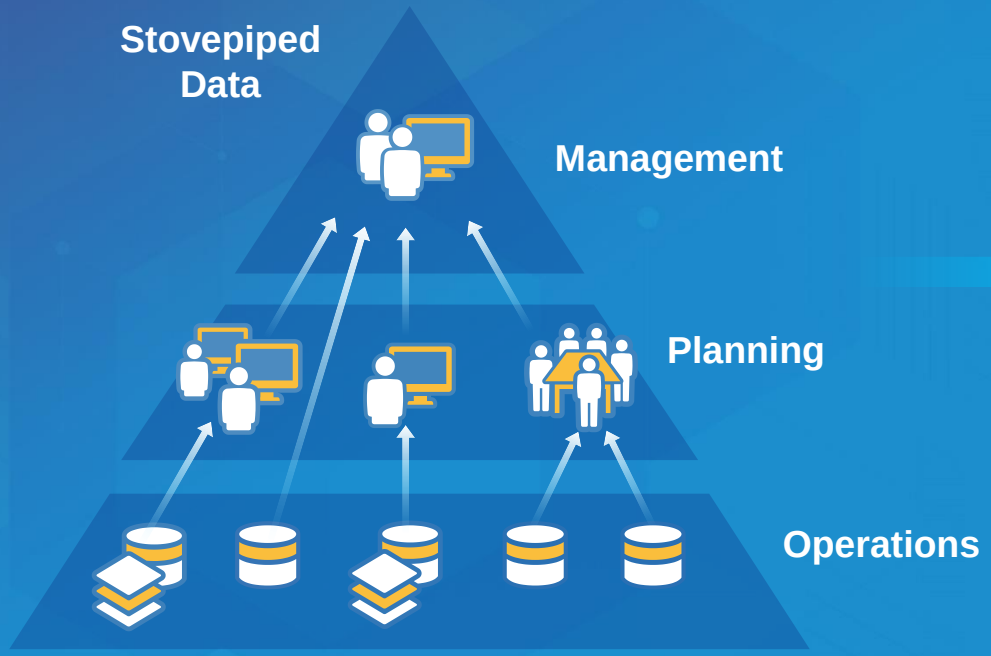
WHAT they want, WHEN they want, WHERE they want, RIGHT AWAY…

Use GROUPS to enable staff to collaborate…

Web GIS Transforms Organizations

Creating Shared Information & Facilitating Collaboration

Hierarchical



Networked

Opening Access & Engaging Everyone

Using easy-to-use, focused apps that are MOBILE & READY-TO-GO…

Goal:

Give everyone **alternatives,** but keep them in a **known, controlled and secure environment,** while using the **latest and most authoritative data.**

We want to help the business get the work done…

By giving them choices…

Time for us to WAKE UP…

Time for us to TRANSFORM…

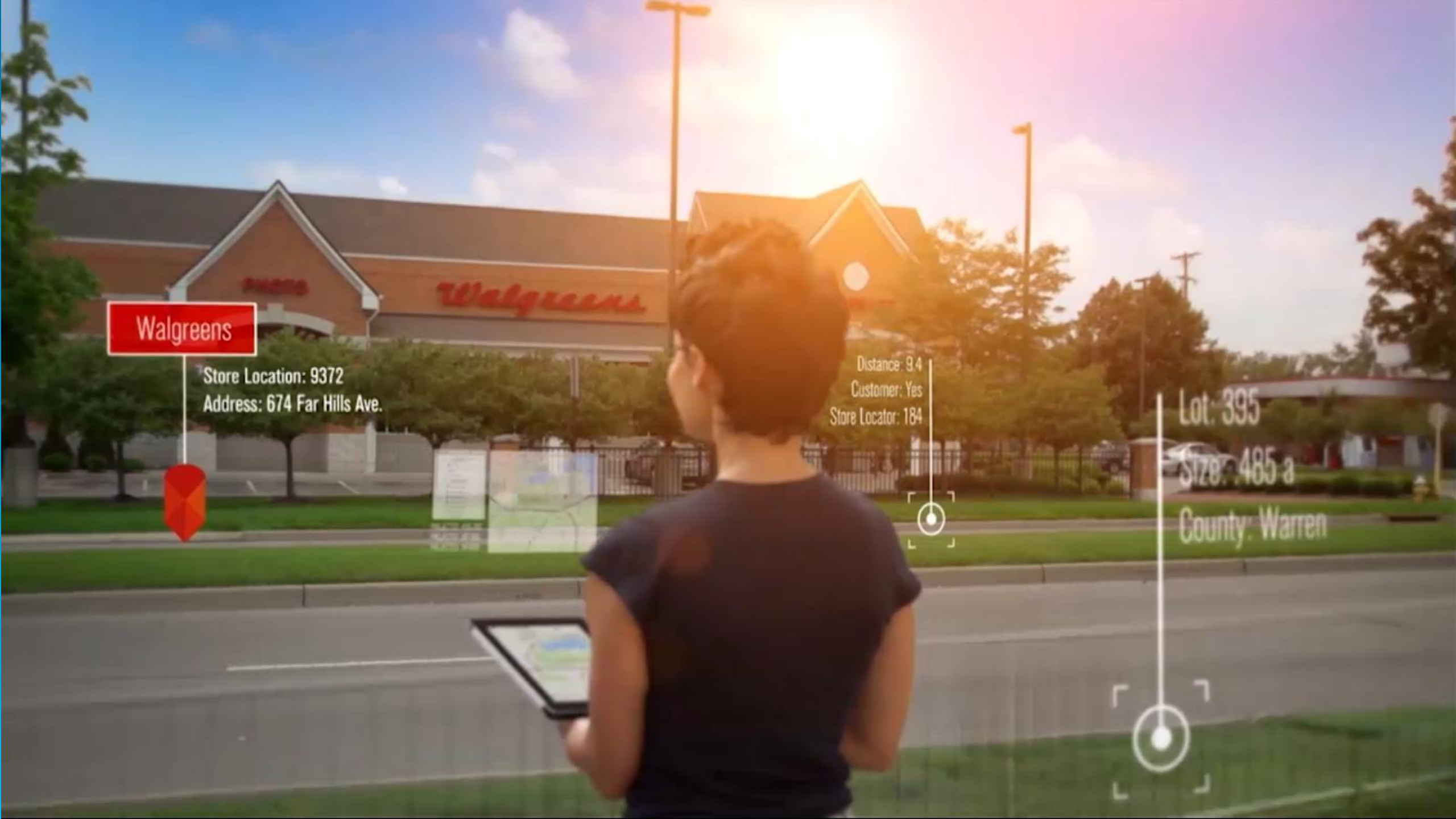
Government of South Australia
Department for Communities and Social Inclusion

City of Los Angeles California

THE CITY OF RANCHO CUCAMONGA, CALIFORNIA
INCORPORATED NOV. 30, 1977
A World Class Community

CHARLOTTE WATER

Hartsfield-Jackson Atlanta International Airport®


Walgreens
Walgreens
Store Location: 9372
Address: 674 Far Hills Ave.
Distance: 9.4
Customer: Yes
Store Locator: 184
Lot: 395
Size: .485 a
County: Warren

DCSI Geospatial Strategy

Coordinate
Facilitate collaboration

Simplify
Improve business practices

Innovate
Smarter service offerings

Enable
Informed decision makers

Charlotte Water Map Room before their GIS implementation

Charlotte Water Fitness Center in their old Map Room

Hartsfield-Jackson
Atlanta International Airport®

Ingrid Bruce
GIS Manager, City of Rancho Cucamonga

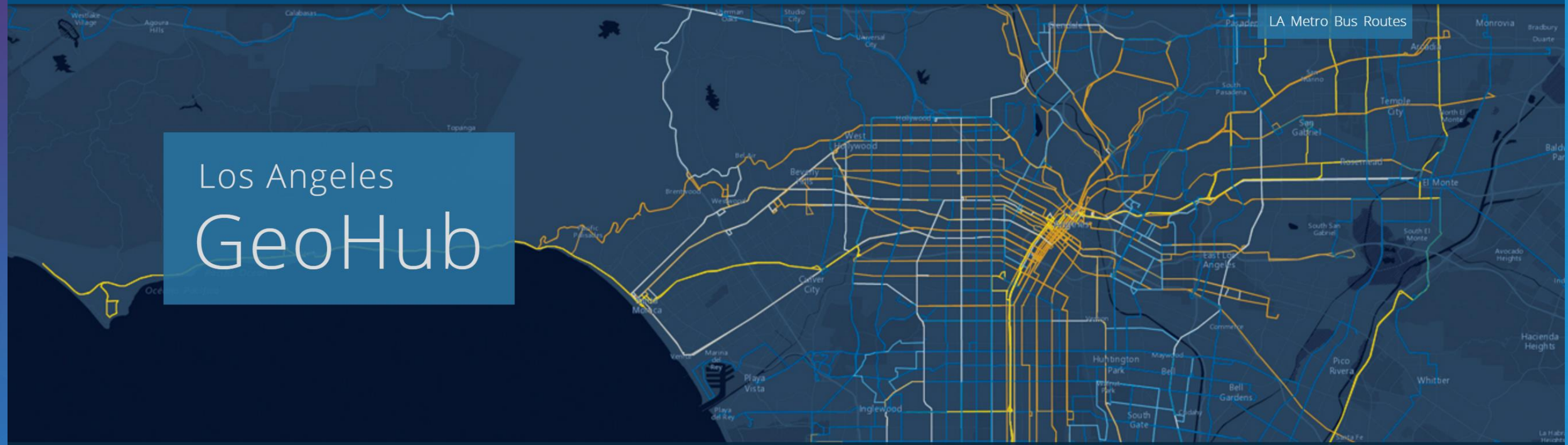
LOS ANGELES

311

DATA L.A.

Data Catalog Developer Resources News & Updates

My Activity



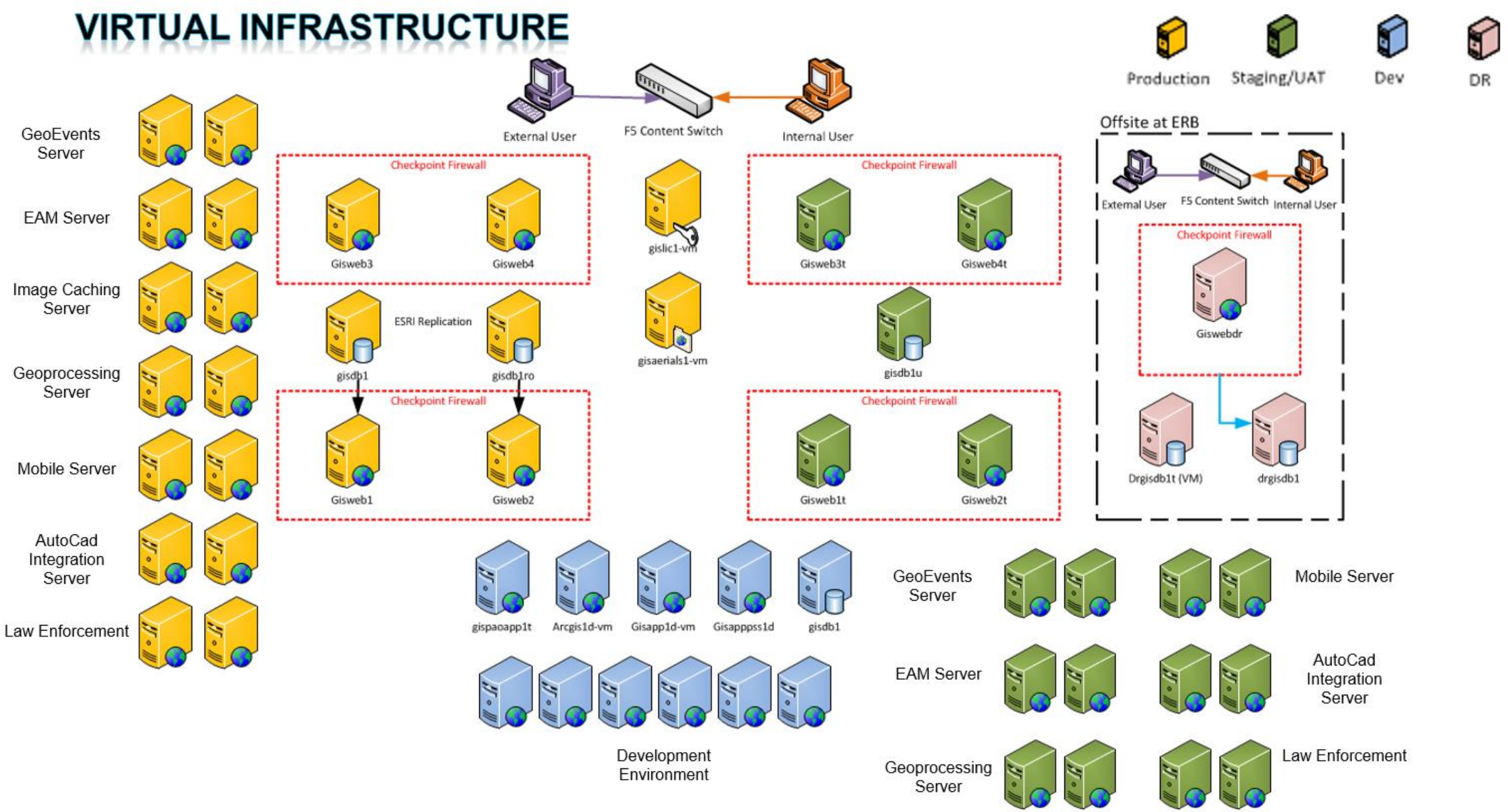
Los Angeles GeoHub

The GeoHub is the City's new public platform for exploring, visualizing, and downloading location-based Open Data. You can also analyze and combine Open Data layers using maps, as well as develop new web and mobile applications. Let's make our great City even better, together!

Find Data

Do we need to rebrand GIS to Location Intelligence?

VIRTUAL INFRASTRUCTURE



If you're going to raise your game, you need to upgrade your infrastructure…

The Underutilization of GIS Technologies – 2011

…Generally, people outside of GIS think of GIS just as “maps” or a graphic product, or the younger brother of CAD…

- **Promote the System**
- **Get a “GIS Health Check-Up”**
- **Use a Best of Breed approach**
- **Consider Software as a Service (SaaS) i.e., cloud**
- **Set GIS up as the Central Hub**

Mapping the Cause: Using GIS to Determine Potential Causes for Cancer

AUGUST 27, 2015 BY TROY LAMBERT

***White Paper** White Paper Reveals 12 Hidden Gems in GeoExpress Software*

Much talk lately in the tech world is related to Big Data and how useful it really is. The debate centers not only around making relationships, but how to determine which relationships are significant. How do we make all the demographic data we've gathered meaningful?

Check out the March 03, 2016 Edition of GISuser Today!

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GISuser
BEYOND THE MAP

GOLDENSOFTWARE
Introducing Surfer®13
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Learn More
Demo for Free

GIS is often seen as “maps” or a visual graphics product, and the more advanced capabilities are ignored because they remain unknown to key departments and decision makers.

Much talk lately in the tech world is related to Big Data and how useful it really is. The debate centers not only around making relationships, but how to determine which relationships are significant. How do we make all the demographic data we've gathered meaningful?

Category Archives: *Managing GIS*

Building an Actionable GIS Change Management Plan

by Dave Schneider on October 27, 2015

Change Management is a topic that leaders have been challenged with since the beginning of time. Pretty much all change faces at least some resistance. As such, scholars have been researching the psychology of this entrenched resistance for years to establish best-practices for managing this resistance. Emphasis on "managing" as eliminating resistance is an unrealistic goal. One such scholar in this field is Dr. Peter Gollwitzer at New York University. The theory developed is one that takes into account why plans fail. He determined that broad goals, while sounding nice, lack the needed connection to tactics. In other words, stakeholders lack the clear direction on how to execute on the plan. The prescribed solution from the research in this arena is having a plan communicated in *Implementation Intention* format. Simply stated, this creates a plan that is communicated in "if-then" statements. For the sake of building your GIS strategy, think of this as "Action-Outcome" statements to define the actions that the team will take with the ArcGIS Platform to generate a stated outcome. When doing this, make sure to include in the action part of the statement when the said action will occur. For example:

"If we implement ArcGIS Online by Q2 2016, then we'll be able to utilize Story Maps to communicate our project work with the public to support our public outreach strategic initiative."

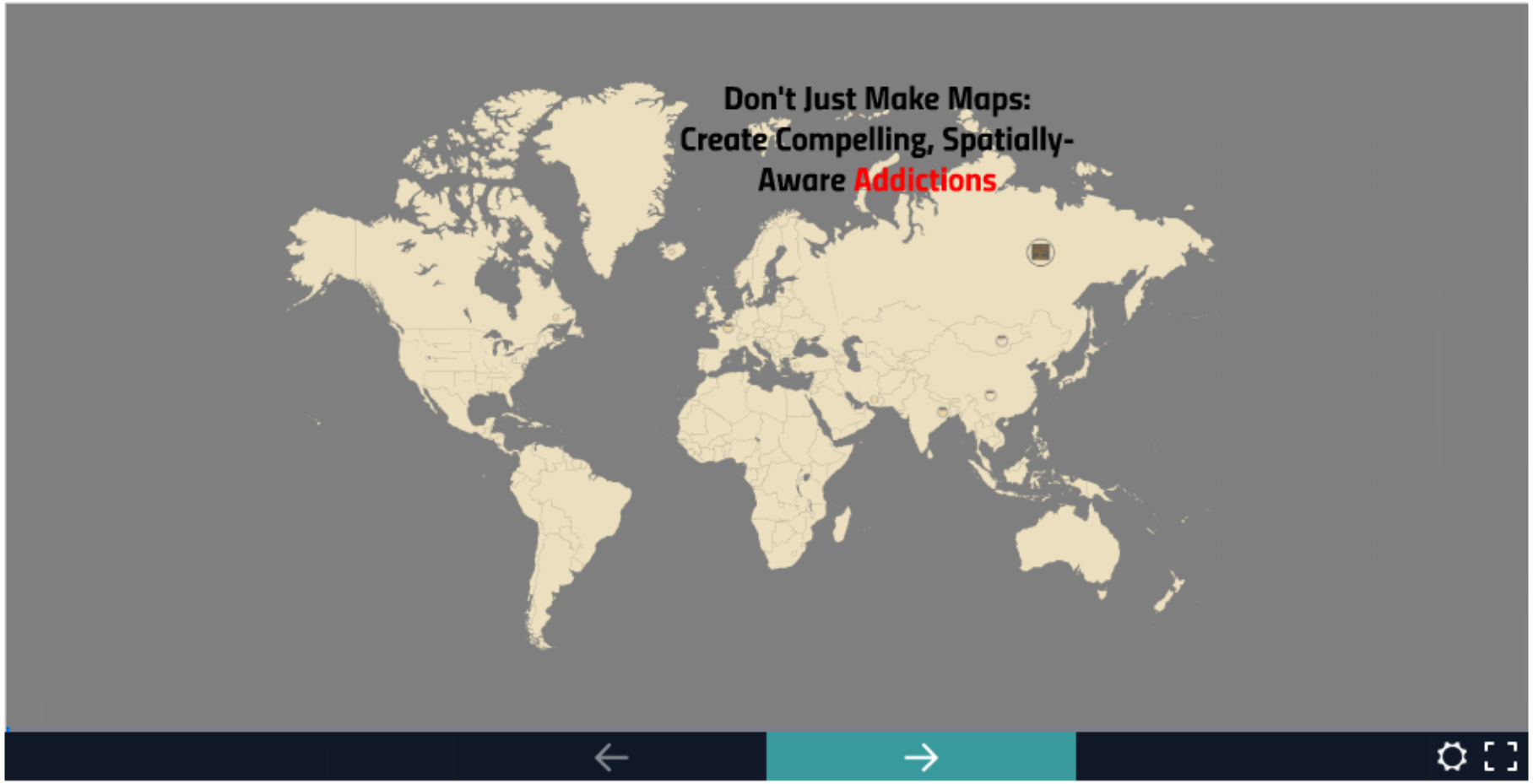
Continue reading →

4 Comments

Jack Dangermond
Esri President

Bern Szukalski
Esri Product Manager and Technical Evangelist

Andrew Turner
CTO, Esri R&D Center, Washington, D.C.



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Public

Don't Just Make Maps: Create Spatially-enabled Addictions

No description

by Wade Kloos on 19 October 2015 • 526 Tweet

More presentations by Wade Kloos

Our GIS Emphasis Should be Business Outcomes not Maps

by web maps, ArcGIS Online, No Comments

Nov 9

Its time again to revisit maps. In the surprisingly popular blog post "Please stop calling me the mapping guy" I took exception at being pigeon-holed. I (we) are far more valuable to organizations than simply being seen as producers of maps. We are solution providers. Maps are simply a key output from our work: intuitive and easy to understand. In this post I will broaden the conversation.

Search for people, jobs, companies, and more... Advanced
Home Profile My Network Jobs Interests Business Services Try Premium for free
Websites 4 school systems - Centrally controlled CMS, up to 50 schools - each site unique and editable

Pulse

Publish a post

Web GIS is no longer optional (unlike your IT department)
Gareth Smith

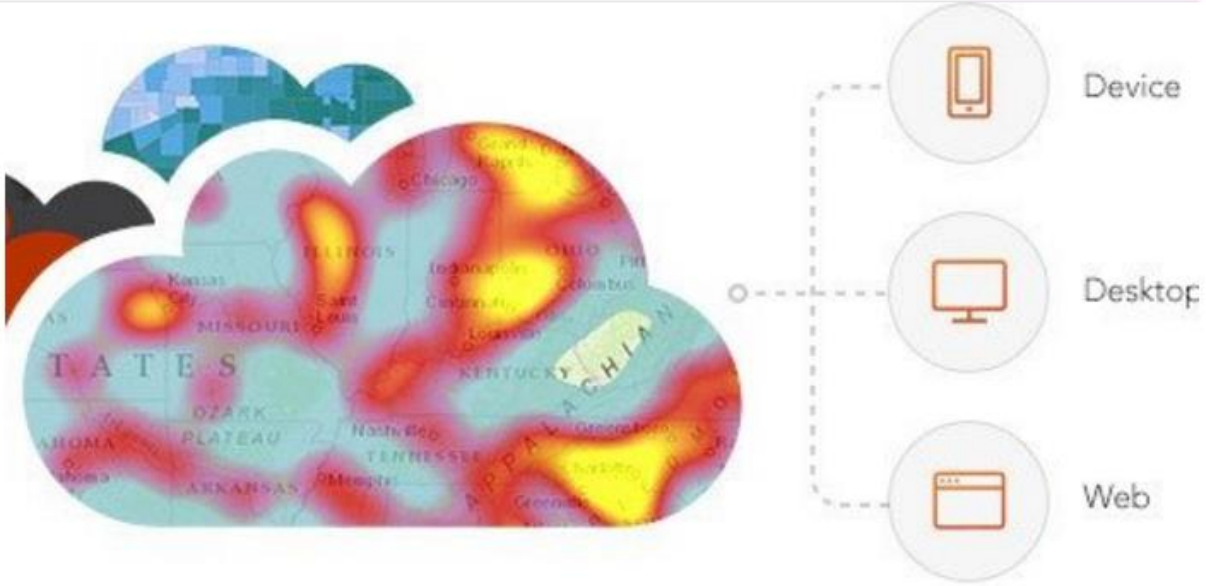
Apple Moves to Middle Age
Bob O'Donnell

What I learned from Andy Grove
Betsy (Elizabeth) Corcoran

Opinion: Small is the new Big aka Apple Has Run Out of Ideas
Doug Winnie

We Talk About Engagement. We Talk About Turnover. Why Can't We Talk About This?
Dr. Maria Gottschalk

Use Technology to Demonstrate Empathy
Don Peppers



Gareth Smith
MD, Exprodat Consulting

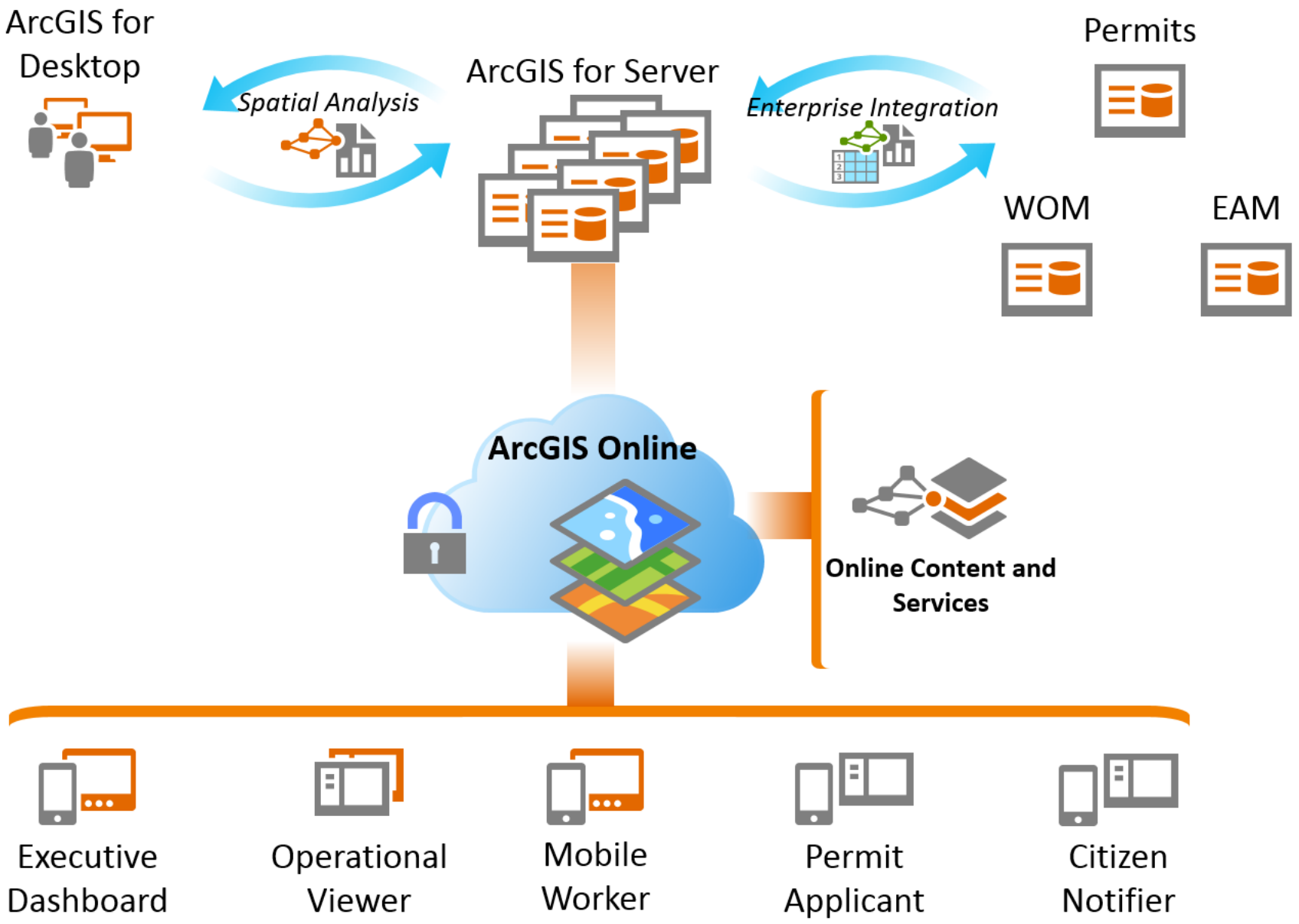
Following

Web GIS is no longer optional (unlike your IT department)

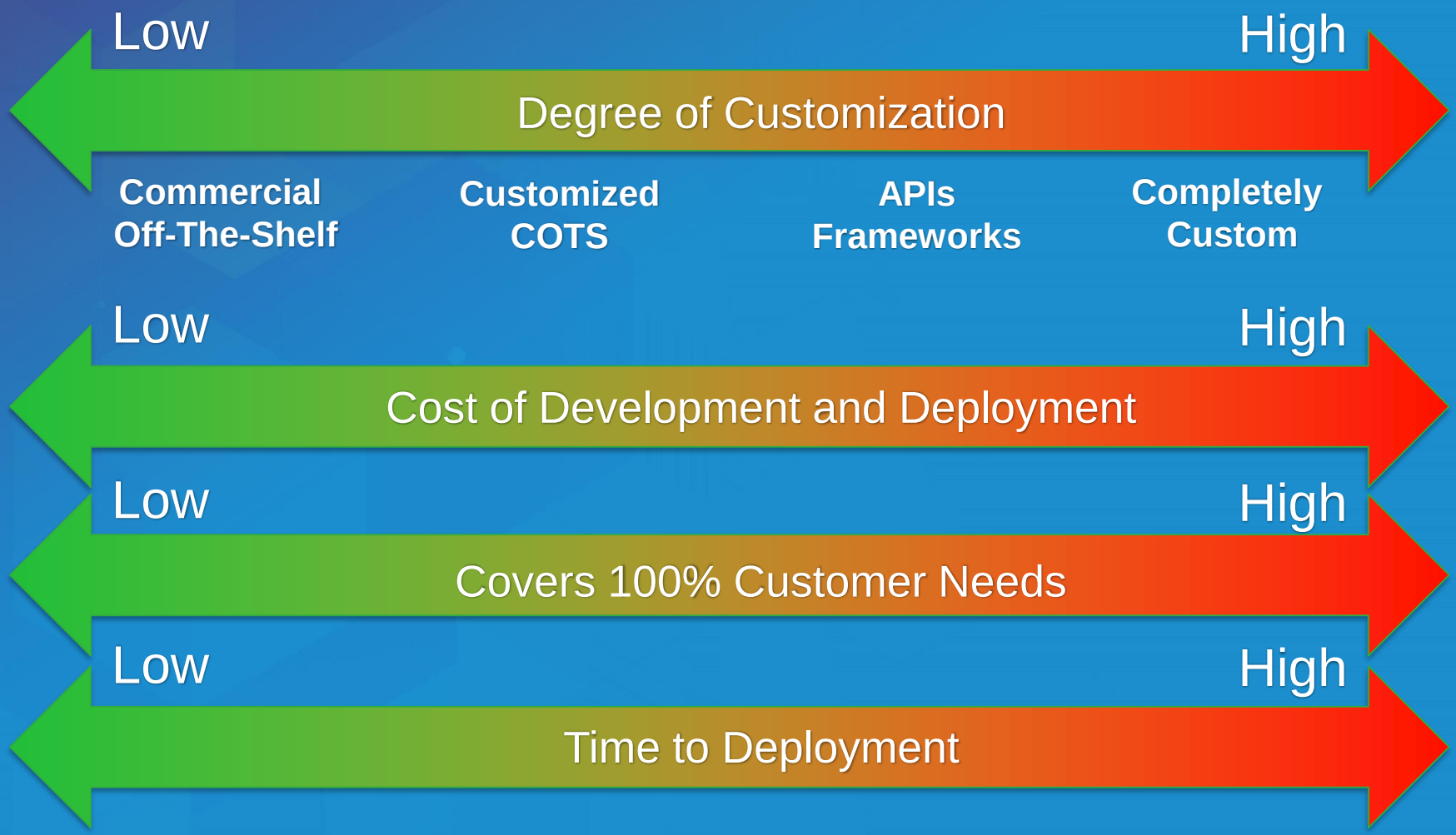
Mar 22, 2016 | 105 views | 19 Likes | 4 Comments

ArcGIS is a Web GIS system

ArcGIS as a Location Platform



Commercial off the Shelf or “COTS”



ArcGIS COTS Solutions

- ArcGIS Online
  - Web App Templates
  - Web App Builder
  - Collector
  - Navigator
  - Workforce
  - Explorer
  - Operations Dashboard
  - Open Data
  - ArcGIS Maps for Office
  - Story Maps & Snap2Map
  - Community Analyst/BAO
  - GeoPlanner
  - Survey 1-2-3

- ArcGIS Solutions (Local/State Gov., etc.)
- Partner Solutions
- ArcGIS Marketplace

ArcGIS enables **every** employee and contractor to easily discover, use, make, and share maps from any device, anywhere, anytime.

It’s time to seize the opportunity Esri is placing in front of you.

We are here to help you with this. Please contact your Esri Account Manager and/or one of our Partners for assistance in transforming your GIS beyond the map.

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