What's New….
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ArcGIS 10.2 for Desktop

Major Themes

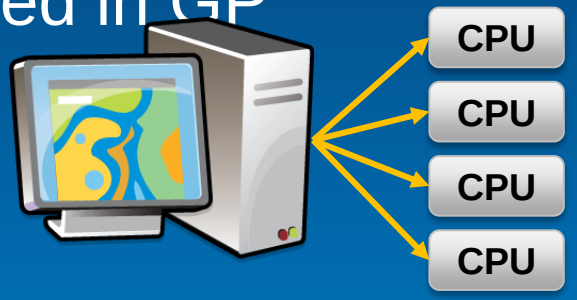
Why should I use ArcGIS 10.2 for Desktop?

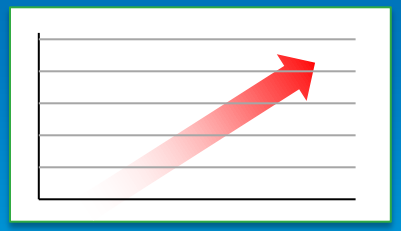
- Quality & Performance
- Authentication & Security
- Geodata
- New Analytics
- Mapping and Reporting
- 3D GIS
- Publishing

Quality & Performance

- +600 software issues addressed

- Parallel processing expanded in GP
  - Reclassify
  - Weighted Overlay
  - Weighted Sum
  - Zonal Statistics
  - Zonal Statistics as Table

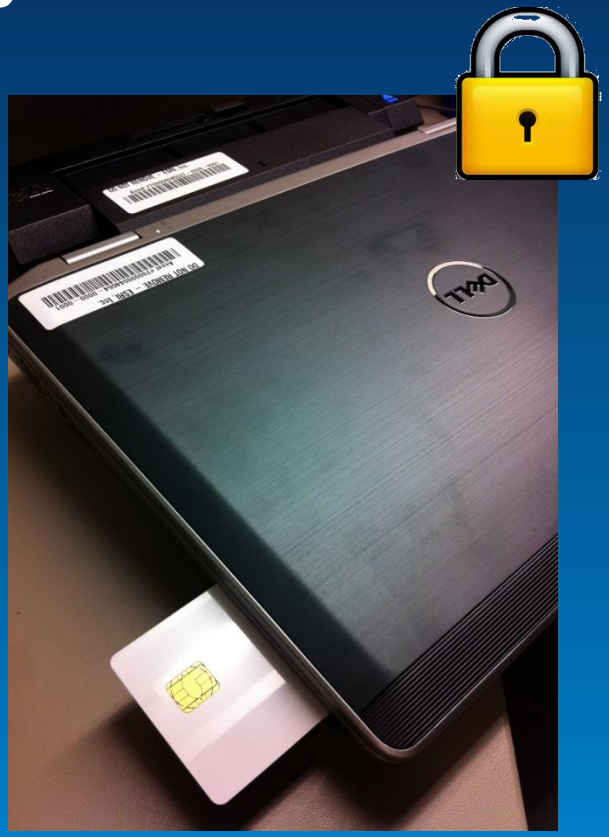




- 25% faster Geoprocessing against ArcGIS for Server Linux

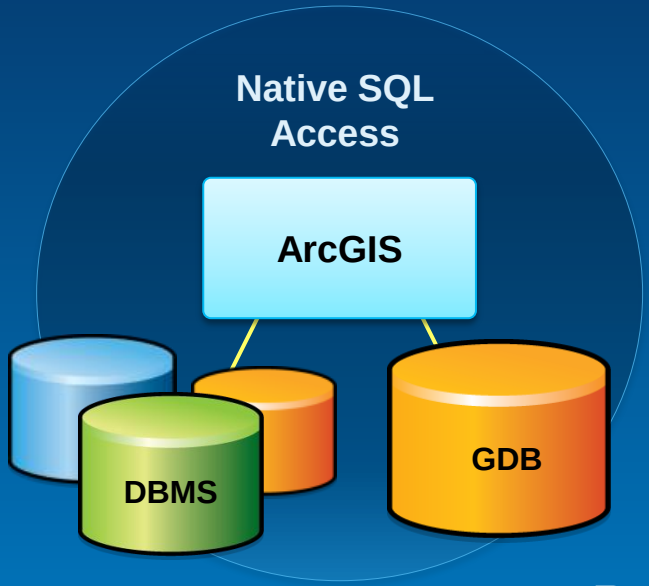
Authentication & Security

- PKI Support
- Single Sign On
- Standardized SQL Parser



Geodata

Support for new workspaces

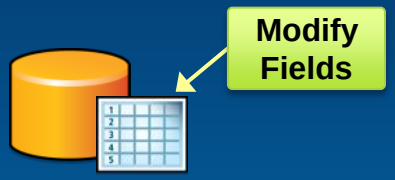


- IBM Netezza 7.0, INZA 2.5
  - Netezza Spatial Esri Package
- Teradata
- SQLite
- **PostgresSQL 9.2**

Geodata

More flexibility, More functionality

- Modify field properties

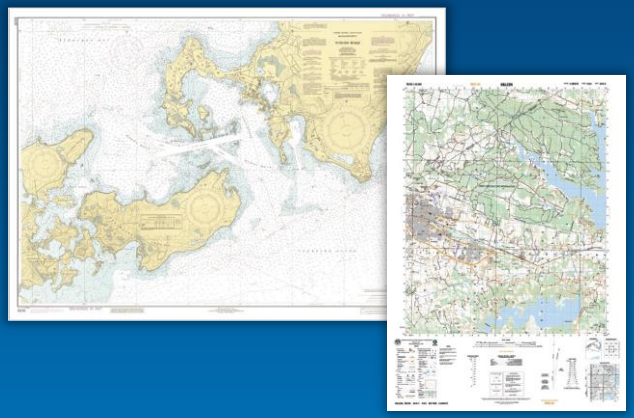


- Archive non-versioned geodatabases

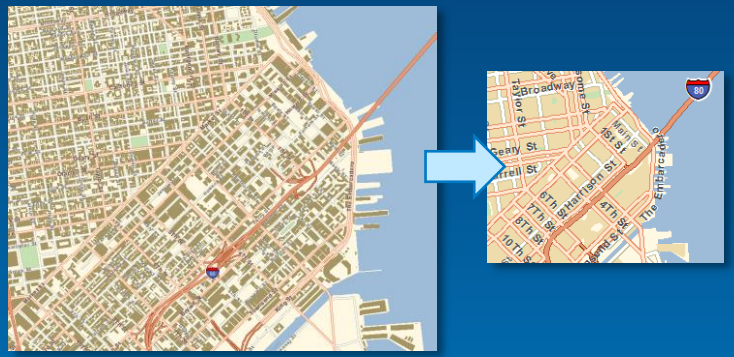
- Publish feature services from native spatial types
  - DB2, Informix, Oracle, PostgreSQL, SQL Server

Better Mapping and Reporting

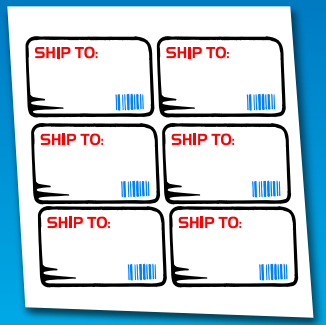
Improved PDF export



Generalization improvements



Mailing label generation

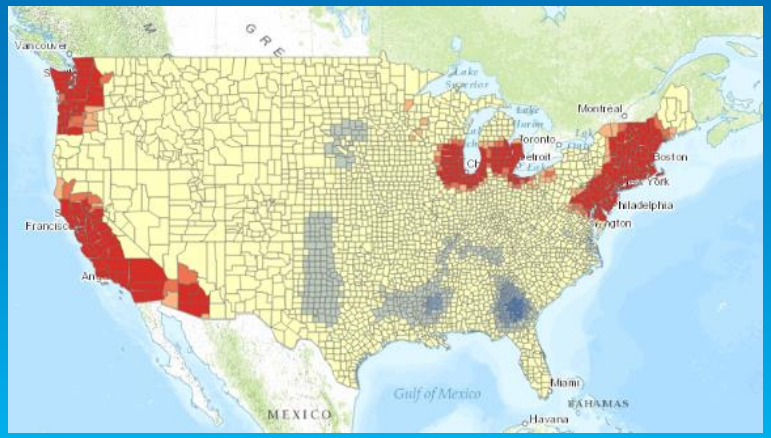


New Analytics

Expanding GI Science

- 16 New Geoprocessing Tools
  - 74 new or modified parameters

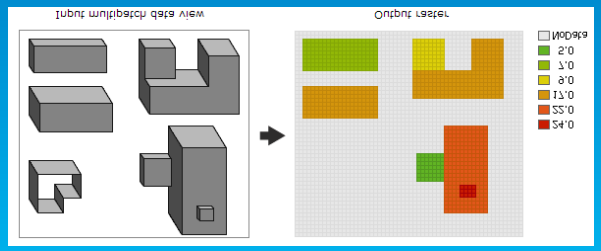
- New Optimized Hot Spot Analysis tool
  - Interrogates data for optimal settings
  - Statistics background not required
  - Science remains valid



New Analytics

Spatial Analyst, 3D Analyst

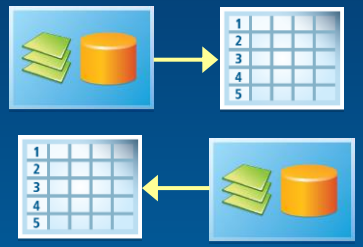
- Local function
  - Pixel-by-pixel map algebra in a single band
- Visibility
  - Supports user-specified values for parameters
- Intervisibility
  - Flags sight lines obstructed by intermediate features
- Multipatch to Raster



New Conversion Tools

Big enhancement request

- Table to Excel
- Excel to Table

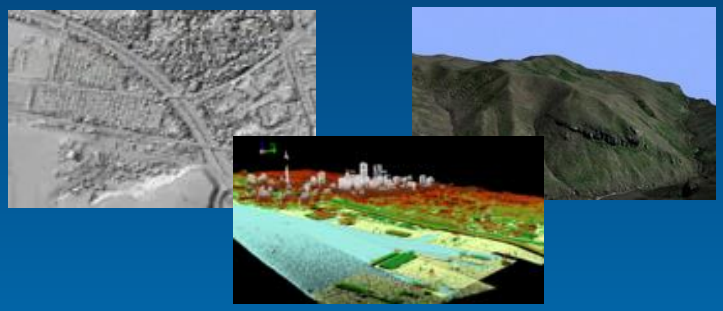


- Feature Class to JSON
- JSON to Feature Class

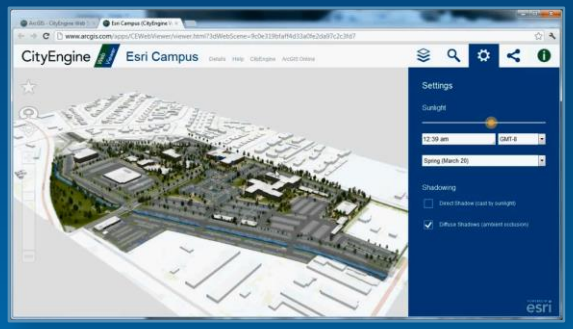
{"displayFieldName":"","fieldAliases":{"OBJECTID":"OBJECTID","Title":"Title","Magnitude":"Magnitude","Location":"Location","Time":"Time","AgeInHours":"AgeInHours","URI":"URI"},"geometryType":"esriGeometryPoint","spatialReference":{"wkid":102100,"latestWkid":3857},"fields":[{"name":"OBJECTID","type":"esriFieldTypeOID","alias":"OBJECTID"},……

Advancing 3D GIS

LiDAR is faster



Share 3D Web Scenes



Generate rule-driven 3D content

ArcGIS for 3D Cities

Publishing

Desktop is the primary authoring tool for maps, features, and analysis

The Big Takeaways

Why should I use ArcGIS for Desktop 10.2?

ArcGIS for Desktop 10.2:

- is an important part of the ArcGIS Platform
- enhances quality & performance
- improves system authentication & security
- provides big advances in 3D GIS
- lets me publish directly to my Portal

ArcGIS for Server

Powerful GIS capabilities

Delivered as Web services

To help real people solve real problems

10.2

New Capabilities

- More support for databases
- Real time GIS (GeoEvent Processor)

Quality Release:

- Better administration
- Enhanced security
- Issues fixed

Enables Web GIS

- Builds a human-friendly interface on top of your server
- Self-Service Mapping
- Supports new applications

10.2 is an incremental update to 10.1

Better Administration

1) ArcGIS Server Manager improvements
    1) Disable copying of data when publishing new services
    2) Discover data sources used by your services
    3) Sharing services with an ArcGIS organization

2) Command-line utilities

    Backup and Restore your ArcGIS server site

Better database support

1) Direct database read-write capabilities

2) Netezza and Teradata (read only)

3) OleDB support

Better integration for Windows Active Directory

1) Complete support for Windows Integrated Authentication

(SSO for using and administering ArcGIS Server services)

2) Supports Public and Private services with Web Tier authentication

(Before only supported with token based authentication)

3) Support for Windows Active Directory Nested Groups

4) Support for Active Directory Forests

Support for PKI

- Public Key Infrastructure
- Single Sign On
- Requires Web Adaptor

Security hardening and best practices documentation

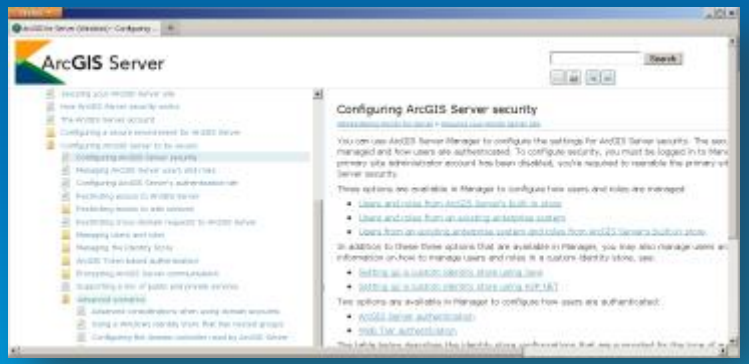
0) Continued Security Audits

1) More protection against SQL Injection vulnerabilities

Standardized Queries setting

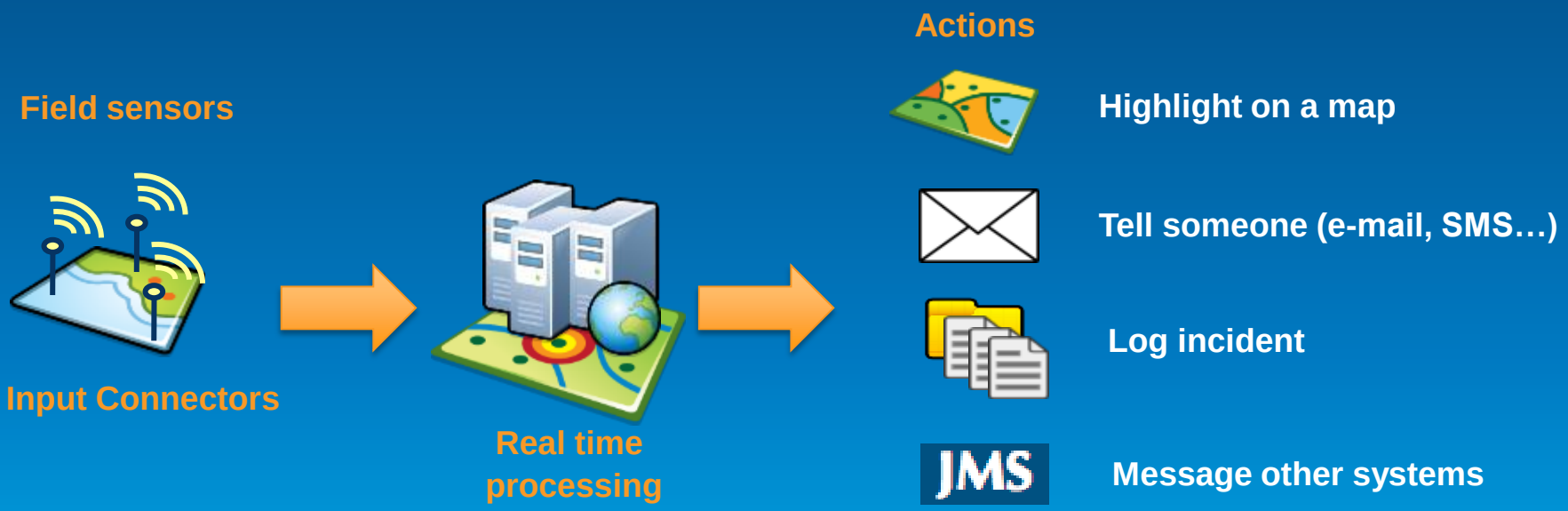
2) Enhanced security topics in the help

Always use online help for the latest



GeoEvent Processor

- New extension
- Enables real-time processing



Bring real time GIS into decision making support tools

Real time GIS

is useful across many different industries

Industries

Aid and Development
- Humanitarian Aid
- Sustainable Development

Business
- Banking and Financial Services
- Insurance
- Media and Press
- Real Estate
- Retail

Defense and Intelligence
- Defense and Force Health Protection
- Enterprise GIS
- Geospatial Intelligence
- Installations and Environment
- Military Operations (C4ISR)

Education
- Libraries and Museums
- Schools (K—12)
- Universities and Community Colleges

Government
- Federal, State, Local,
- Architecture, Engineering and Construction (AEC)
- Economic Development
- Elections and Redistricting
- Facilities
- Land Administration
- Public Works
- Surveying
- Urban and Regional Planning

Health and Human Services
- Public Health
- Human Services
- Hospital and Health Systems
- Managed Care
- Academic Programs and Research

Mapping and Charting
- Aeronautical
- Cartographic
- Nautical
- Topographic

Natural Resources
- Agriculture
- Climate Change
- Conservation
- Environmental Management
- Forestry
- Mining
- Oceans
- Petroleum
- Water Resources

Public Safety
- Emergency Call Taking and Dispatch
- Emergency/Disaster Management
- Fire, Rescue, and EMS
- Homeland/National Security
- Law Enforcement
- Wildland Fire Management

Transportation
- Aviation
- Highways
- Logistics
- Railways
- Ports and Maritime
- Public Transit

Utilities and Communications
- Electric
- Gas
- Location-Based Services
- Pipeline
- Telecommunications
- Water/Wastewater

Key ArcGIS components for WebGIS

WebGIS Deployment Patterns

Apps

Portal

GIS Servers

Ready to use Content

SaaS

Software

ArcGIS Online (Portal)	ArcGIS Online (Hosted Servers)	ArcGIS Online Services
Portal for ArcGIS	ArcGIS Server	ArcGIS Data Appliance

ArcGIS Online

Highlights

- Enterprise Logins
- Credit Management
- Security and Compliance
- User Experience Improvements
- Portal 10.2
- Geocoding
- Image Services
- Analytics

Geospatial Platform

Provides GIS Across the Entire Organization

Enabling Access by Everyone

Release Plans

- 3 Updates per year

- Minor releases (bug fixes, patches) at other times
- Not every product updated at each release

ArcGIS Online Release Themes

June's release addresses core areas

- **Platform for organizations to embrace GIS and mapping**
  - **Administration and management**
  - **Security and compliance**
  - **UX/UI improvements**
- **Platform for developers**
  - Information to facilitate understanding/use
  - Subscriptions for developers
  - Management and Marketplace
- **Expanding the ArcGIS platform's cloud services**
- **Advanced analysis and visualization**

Enterprise Logins

- Uniform security and credential management
- User convenience
- Based on SAML 2.0 Web Single Sign on standard

Utility Services

Security

Anonymous Access

☑ Allow anonymous access to your organization.

Sharing and Searching

☑ Members can share content outside the organization.

☑ Members can search for content outside the organization.

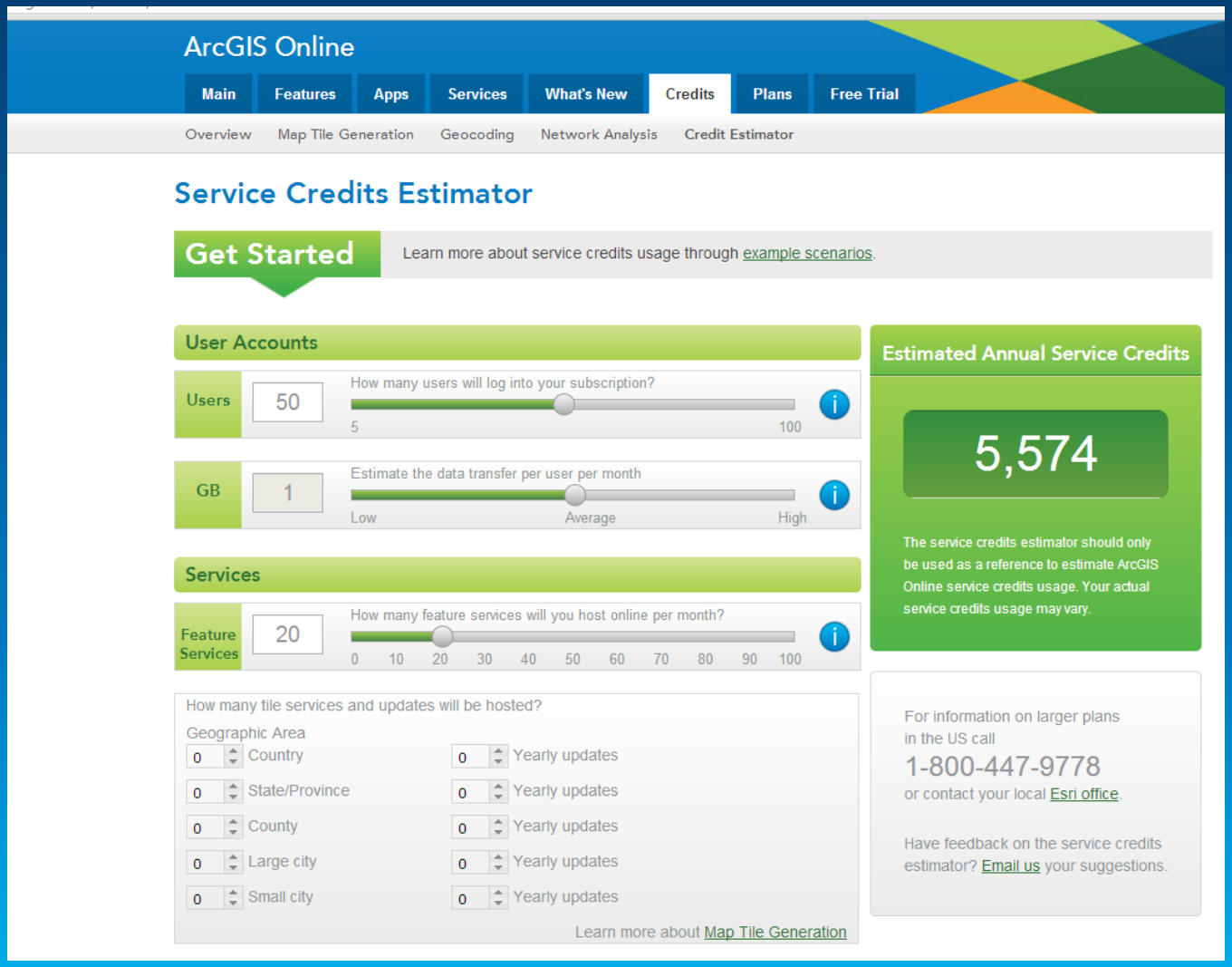
Enterprise Logins (Beta)

You can set up your Organization so that your users will be able to sign in to ArcGIS using the same username and password that they use with your existing on-premises systems.

The key to this is through a technology known as identity federation that this section will help you set up through two actions.

Set Identity Provider | Get Service Provider

Credit Management

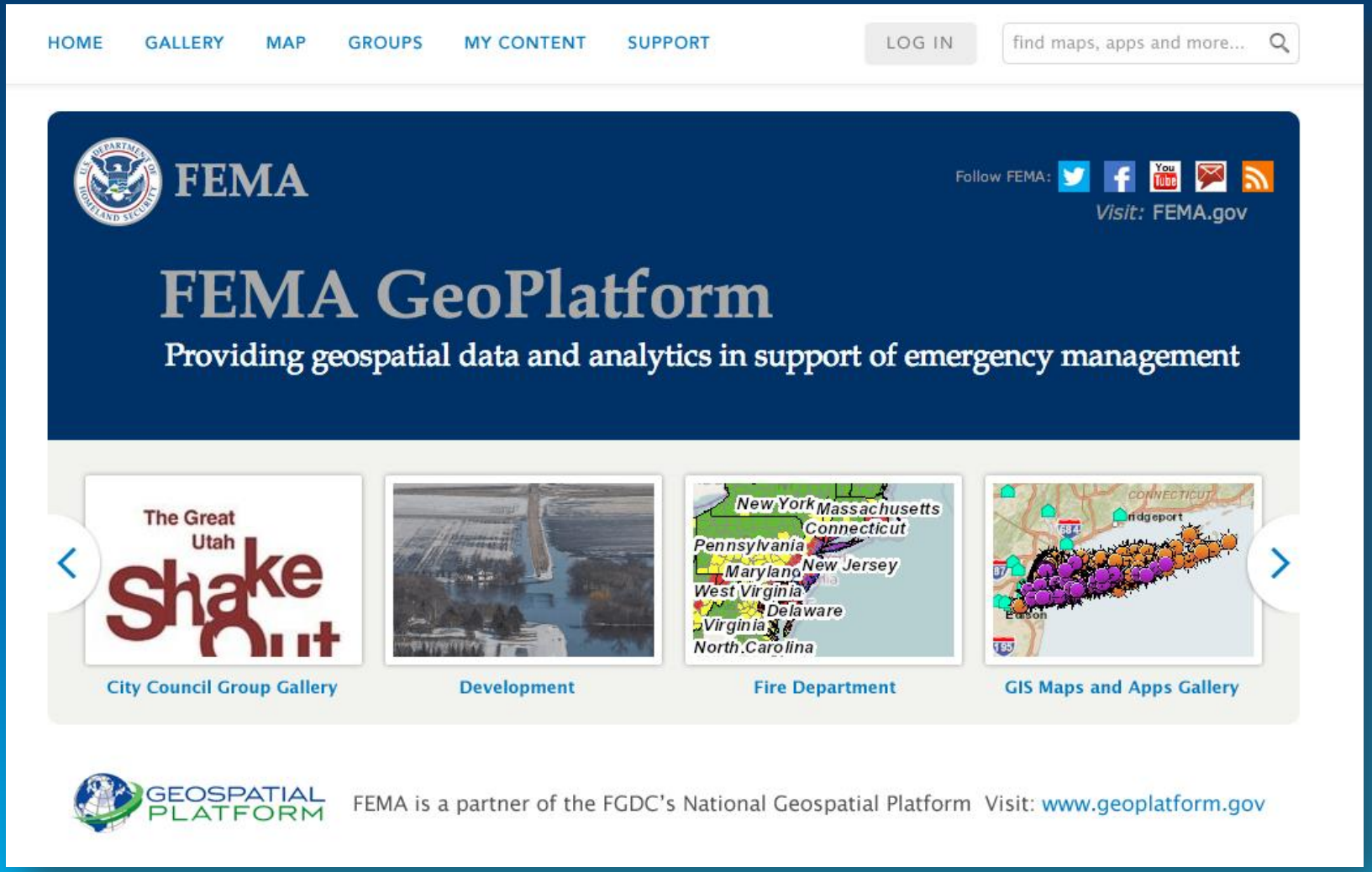


Security and Compliance

- FISMA (September)
- SafeHarbor (June)

- Accreditation, Certification

User Experience



The Mapping Platform for Your Organization

Create interactive maps and apps and share them with the rest of your organization. Be productive right away with ready-to-use content, apps and templates available for the web, smartphones, and tablets.

30-DAY FREE TRIAL

Reach Your Users

Share your maps and data on your web pages, blogs, social media, or custom apps.

Go Mobile

Access your maps and information from anywhere.

Ready-to-use Content

Choose from a variety of content rich and authoritative basemaps to kick-start your projects.

Get Started Quickly

Get started today with little to install or setup.

Powerful out-of-the-box Apps

Take advantage of ready-to-use apps for

Integrate

Add the power of dynamic mapping to your BI, CRM, and ERP system with Esri's

The Location Platform for Apps

Quickly add geo to your apps using Esri's cloud services. Develop in the API of your choice and deploy on any device.

TAKE A TOUR FREE TRIAL

Power your applications with ArcGIS technology

Use maps, content and APIs from ArcGIS in your web and mobile applications.

Mapping and analysis for organizations

Build custom applications to help your organization visualize, create and share spatial data.

Get started with ready-to-use open source apps

Use Esri's sample code on Github as a starting point to build applications for your users or organization.

UPLAN is an interactive mapping platform that supports UDOT by helping visualize our data, track our assets and strengthen our transportation planning with better analysis and collaborative information. Click on any item above for more information.

UDOT is about more than roads, repairs, and maintenance. Our mission is to preserve infrastructure, optimize mobility, zero fatalities and strengthen the economy.

UDOT GIS Page →
UDOT Home Page →

Every effort is made to provide and maintain accurate, complete, and timely information on this Web site. However, some data may be incom http://creativedev/comps/G0 outdated. Neither the Utah Department of Transportation, the State of Utah, nor any agency thereof, nor any of their employees, make any warranty, express

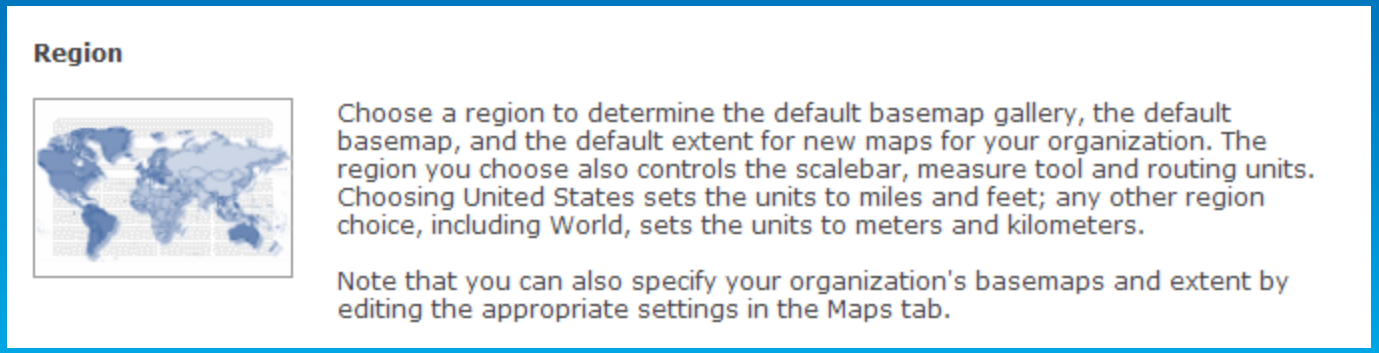
Portal 10.2 for ArcGIS

- Alternative on-premises implementation pattern
- Works closely with server 10.2
  - Better support for shared security model
  - Publishing capabilities – hosted services

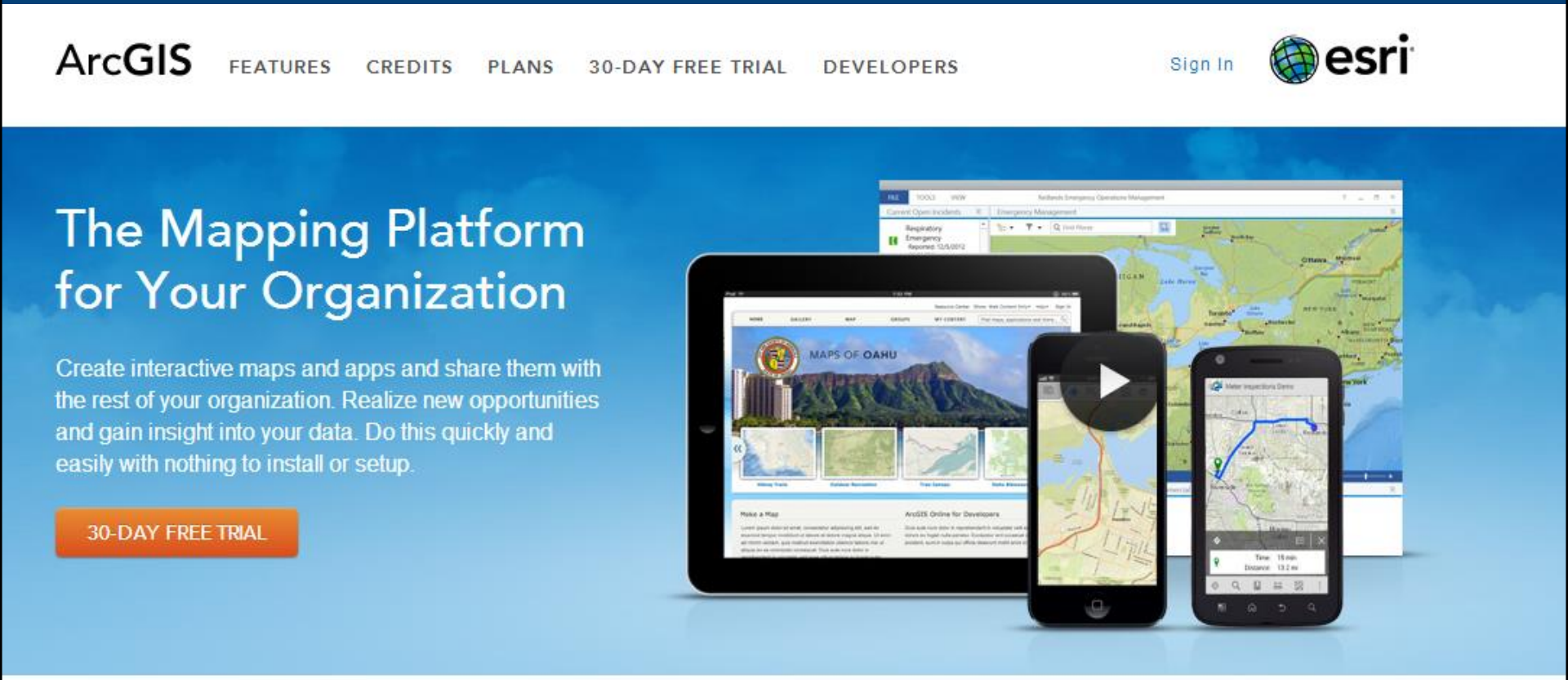
- Includes Maps for Office
- Installer, technical support, enhanced documentation

Additional Languages and Regions

- Additional Languages
  - Czech
- Additional Regions
  - Dominican Republic, Greece, Pakistan, Philippines, Saudi Arabia, South Africa, Sri Lanka, Turkey, Uruguay, and Vietnam



Expanding Cloud Services



Network Analysis

- Live Traffic
- Save route as layer in map

esri

Danvers, Massachusetts, United States - Portsmouth, New Hampshire, United States

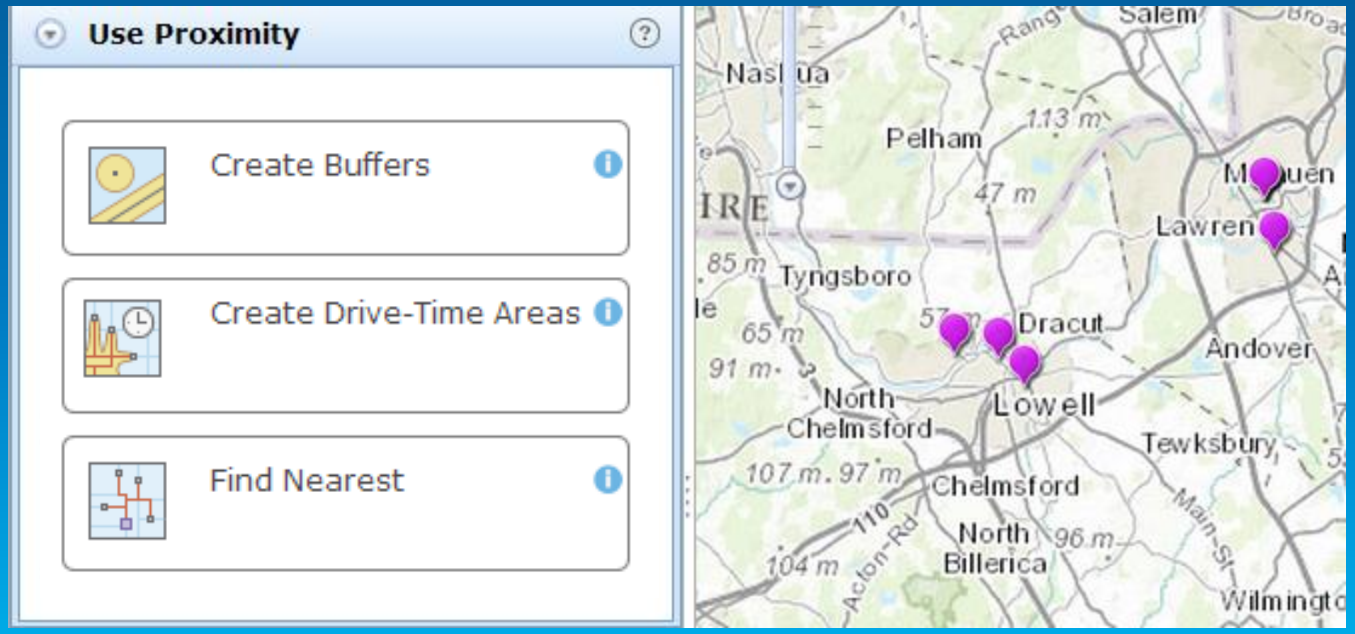
40.64 miles. 45 minutes

Enter notes here

A	**1.** Start at Danvers, Massachusetts, United States	
↑	**2.** Go west on **COOLIDGE RD** toward **CABOT RD**	0.17 mi.
↰	**3.** Turn left on **CABOT RD**	0.24 mi.
↱	**4.** Turn right on **CHESTNUT ST**	0.05 mi.
↰	**5.** Turn left on **LINDALL ST**	0.06 mi.
↱	**6.** Turn right at **ABBOTT ST** to stay on **LINDALL ST**	0.08 mi.
↰	**7.** Turn left on **LOCUST ST** (RT-35)	0.08 mi.
↱	**8.** Turn right on **POPLAR ST** (RT-62)	0.19 mi.

Network Analysis

- Analysis Widgets
  - Drive Time
  - Find Nearest

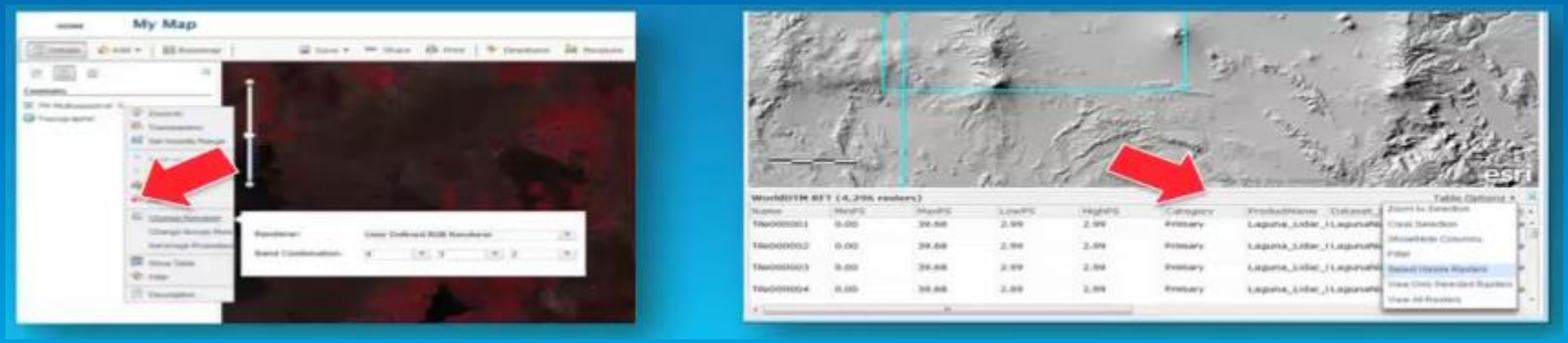


Geocoding Expansion and Enhancement

- Auto-complete (and associated API)
- Continual improvement to coverage
  - Distributor-based improvements worldwide

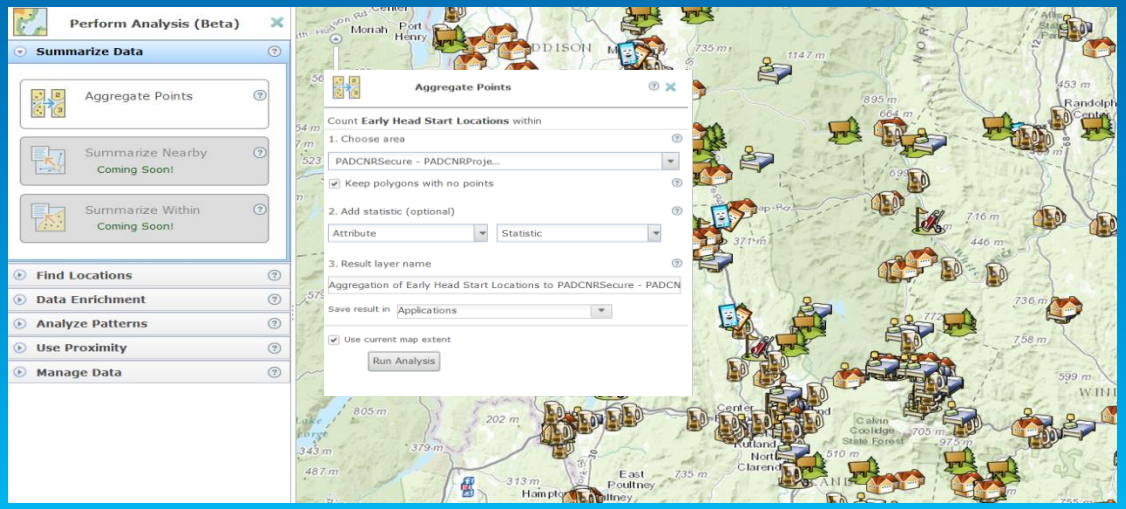
Enhanced Image Service Layers

- Control server settings on the fly
- Selection and ordering of overlapping imagery
- Access to metadata

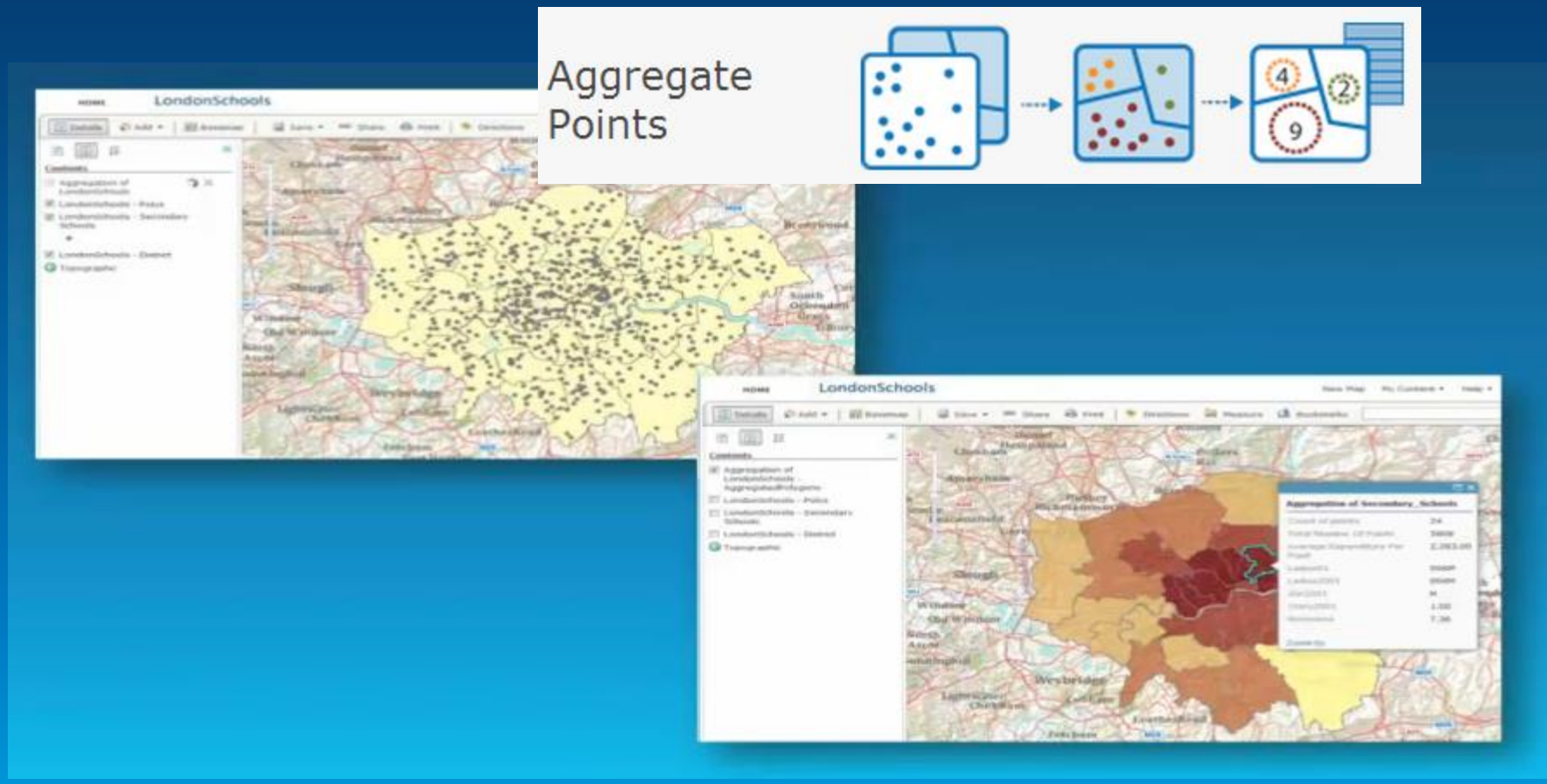


Analytics

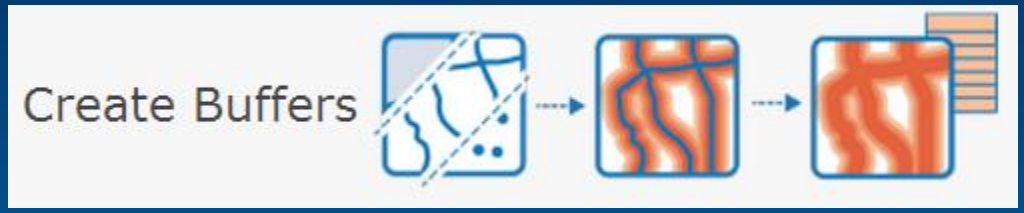
- Aggregate Points, Summarize Nearby, Summarize Within, Enrich Features, Explore Correlations, Find Hot Spots, Create Buffers, Drive Time Polygons, Find Nearest, Attribute Calculator, Dissolve Boundaries, Extract Data, Merge Layers, Overlay Layer
- Re-Run analysis

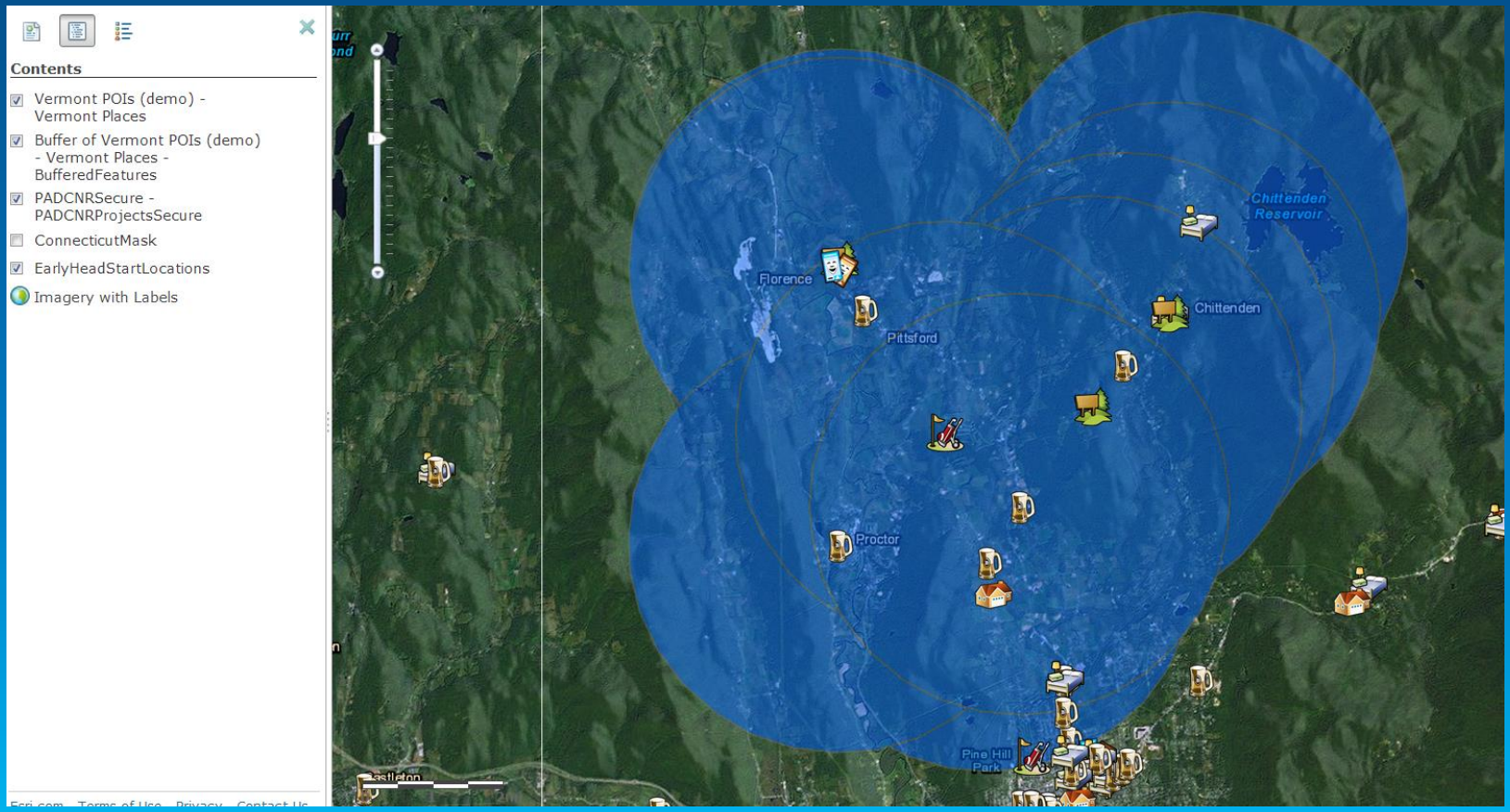


Analysis – Aggregate Points



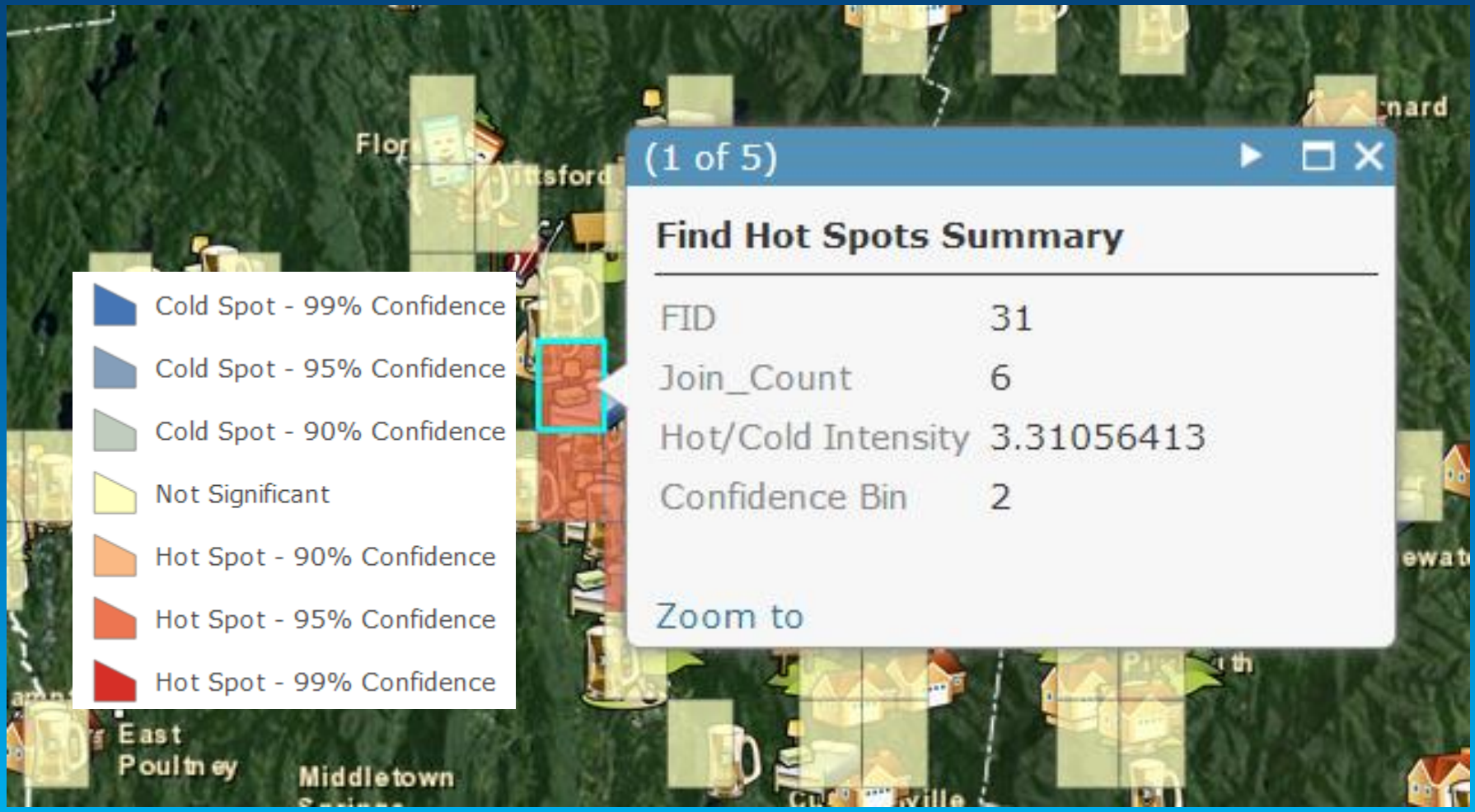
Analysis - Create Buffer





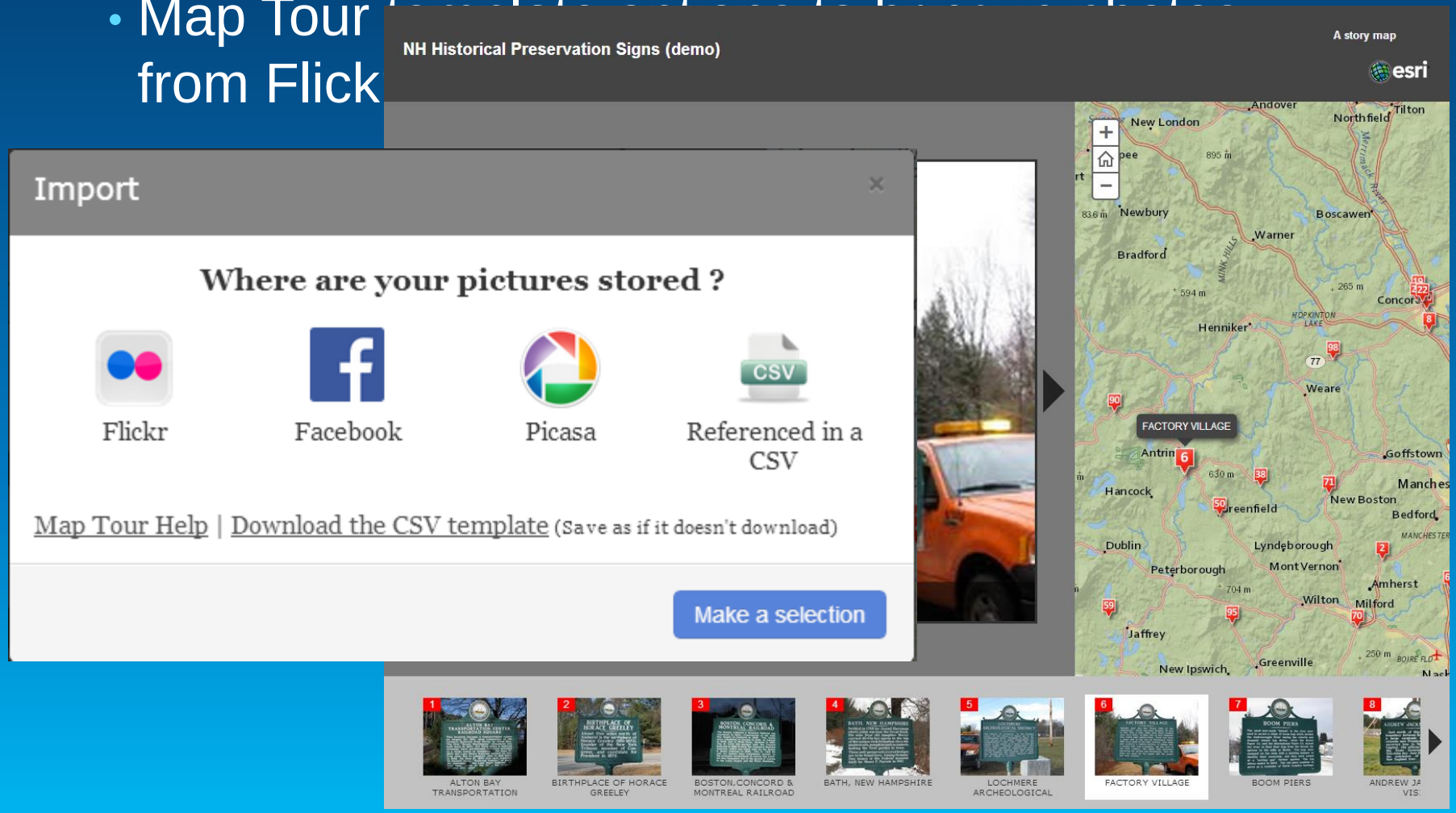
Analysis – Hot Spots

Find Hot Spots



New Templates and Options

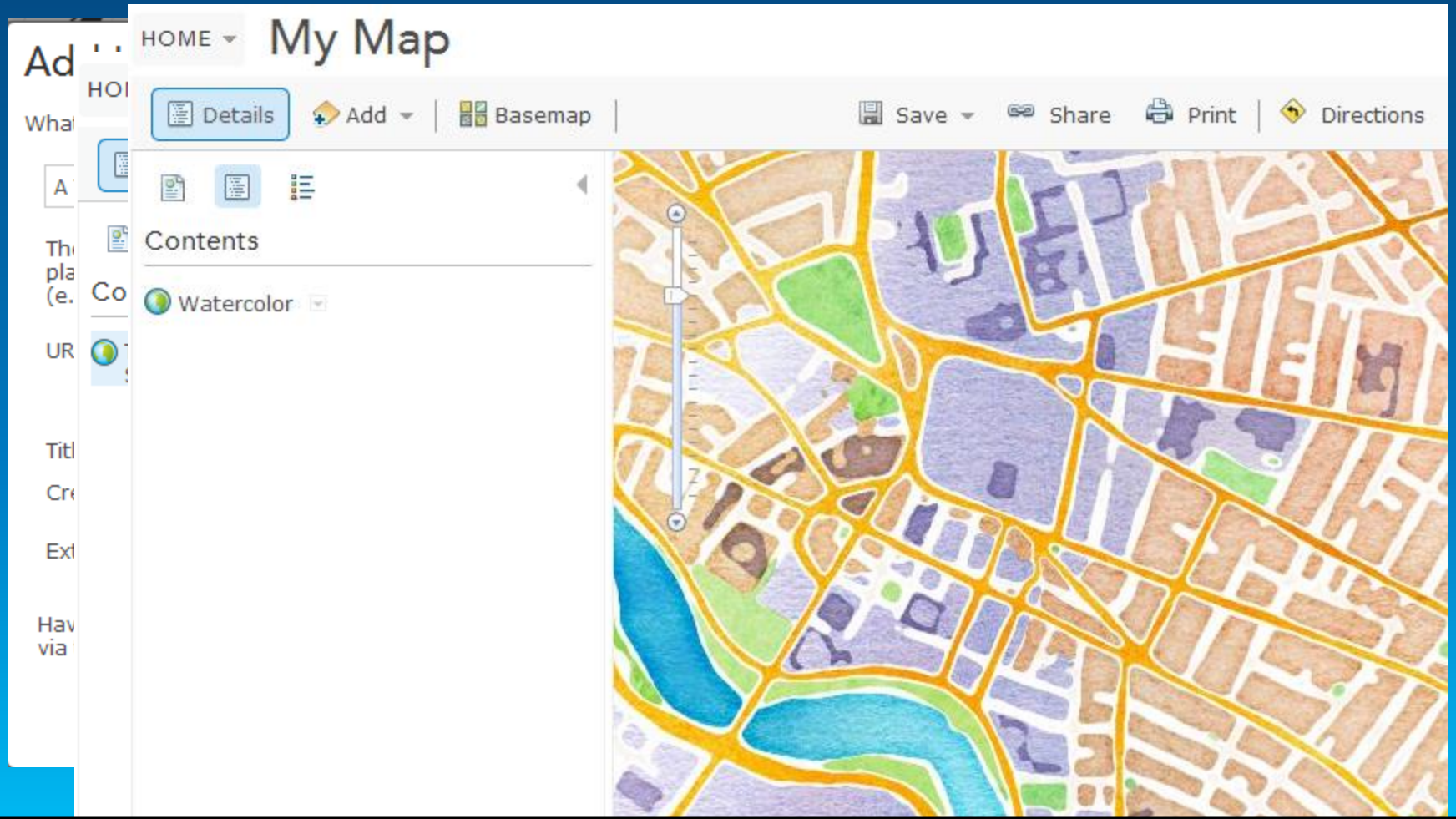
- Map Tour
from Flick



Did you know….

Add a tile layer to your map

- http://tile.stamen.com/toner/{level}/{col}/{row}.png



Credits

- Flexible way to cover subscription costs
- Can be used for storage, analysis, building caches, geocoding, more…

Overview

Service Credits Overview

ArcGIS Online is based on an annual subscription with flexible plans you can choose from. Each plan includes a number of named users and service credits. Service credits are the currency for ArcGIS Online and are used in exchange for any of the hosted services an ArcGIS Online subscriber uses.

What Uses Service Credits?

Service	Service Credits Used
Map Tile Generation	1 credit per 1,000 tiles generated
Feature Services Storage	2.4 credits per 10 MB stored per month
Tile and Data Storage	1.2 credits per 1 GB stored per month
Geocoding	40 credits per 1,000 geocodes
Simple Routes	0.04 credits per simple route
Optimized Routes	0.5 credits per optimized route
Drive-Times (Service Areas)	0.5 credits per drive-time
Closest Facilities	0.5 credits per closest facilities route
Multi-Vehicle Routes (VRP)	2 credits per multi-vehicle route
Demographic and Lifestyle Maps	10 credits per 1,000 map requests
Data Enrichment	10 credits per 1,000 attributes (data variables)
Infographics	10 credits per 1,000 views
Reports	10 credits per report
Spatial Analysis	1 credit per 1,000 features

Understanding our world.