



What's New.... August 2013

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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

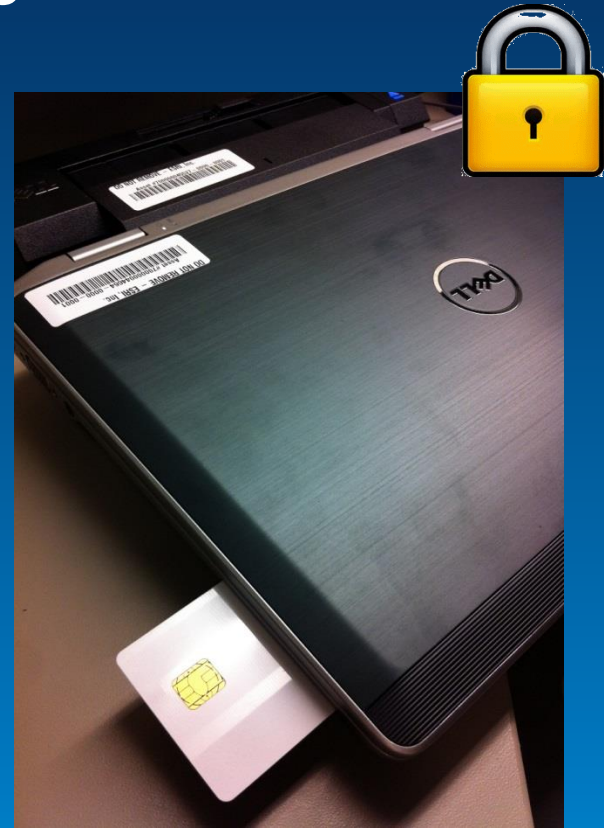
Zonal Statistics as Table



- 25% faster Geoprocessing against ArcGIS for Server Linux

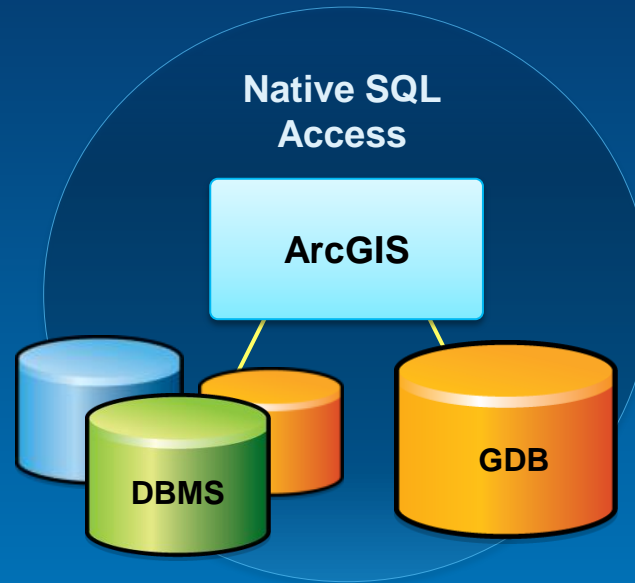
Authentication & Security

- PKI Support
- Single Sign On
- Standardized SQL Parser



Geodata

Support for new workspaces



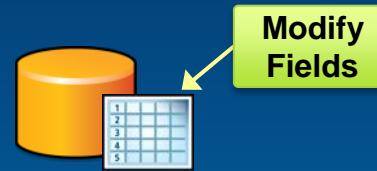
- IBM Netezza 7.0, INZA 2.5
 - Netezza Spatial Esri Package
- Teradata
- SQLite

- PostgreSQL 9.2

Geodata

More flexibility, More functionality

- Modify field properties



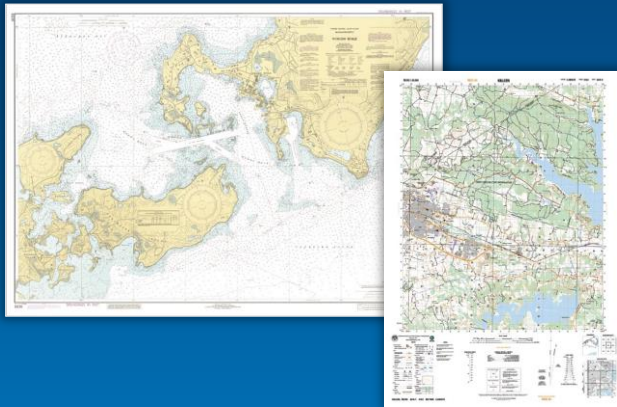
- Archive non-versioned geodatabases



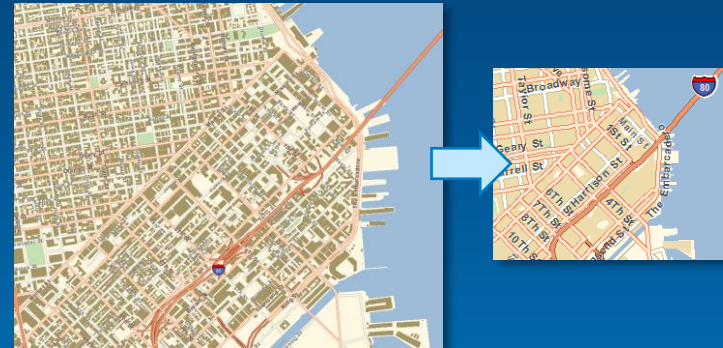
- Publish feature services from native spatial types
 - DB2, Informix, Oracle, PostgreSQL, SQL Server

Better Mapping and Reporting

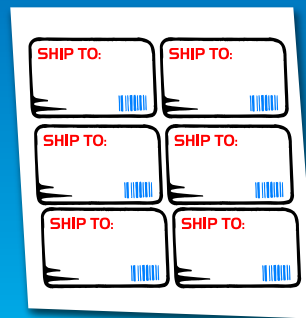
Improved PDF export



Generalization improvements



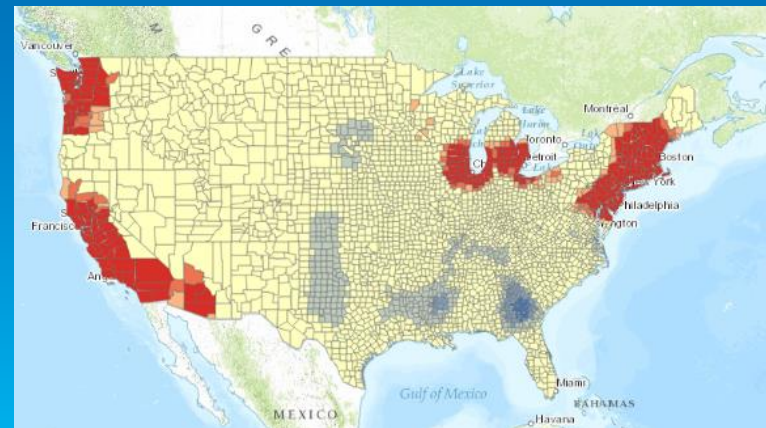
Mailing label generation



New Analytics

Expanding GI Science

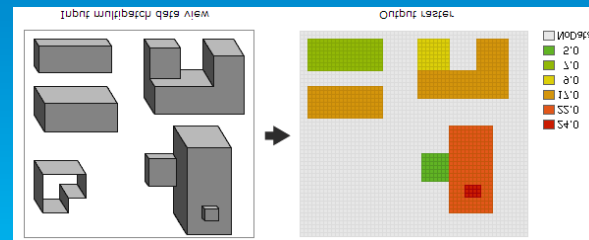
- 16 New Geoprocessing Tools
 - 74 new or modified parameters
- New Optimized Hot Spot Analysis tool
 - Interrogates data for optimal settings
 - Statistics background not required
 - Science remains valid



New Analytics

Spatial Analyst, 3D Analyst

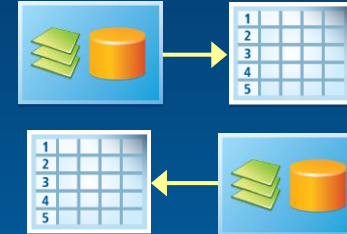
- Local function
 - Pixel-by-pixel map algebra in a single band
- Visibility
 - Supports user-specified values for parameters
- Intervisibility
 - Flags sight lines obstructed by intermediate features
- Multipatch to Raster



New Conversion Tools

Big enhancement request

- Table to Excel
- Excel to Table

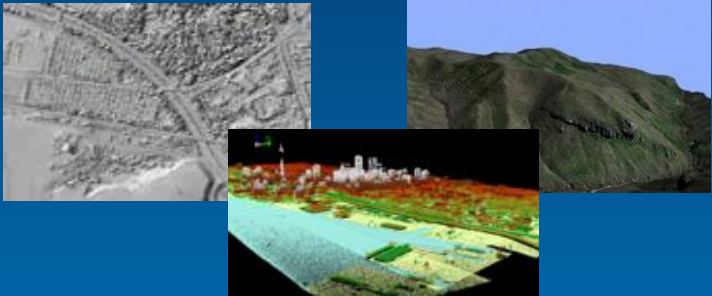


- Feature Class to JSON
- JSON to Feature Class

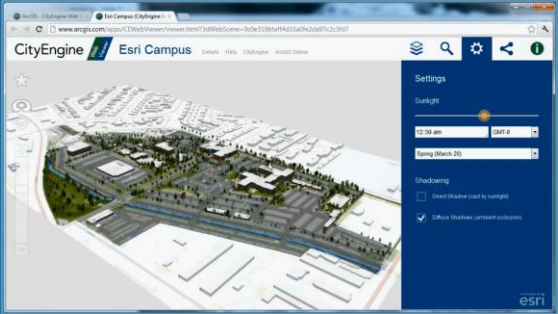
```
{"displayFieldName":"","fieldAliases":{"OBJECTID":"OBJECTID","Title":"Title","Magnitude":"Magnitude","Location":"Location","Time":"Time","AgeInHours":"AgeInHours","URI":"URI"},"geometryType":"esriGeometryPoint","spatialReference":{"wkid":102100,"latestWkid":3857},"fields":[{"name":"OBJECTID","type":"esriFieldTypeOID","alias":"OBJECTID"},.....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

Advancing 3D GIS

LiDAR is faster



Share 3D Web Scenes



Generate rule-driven 3D content

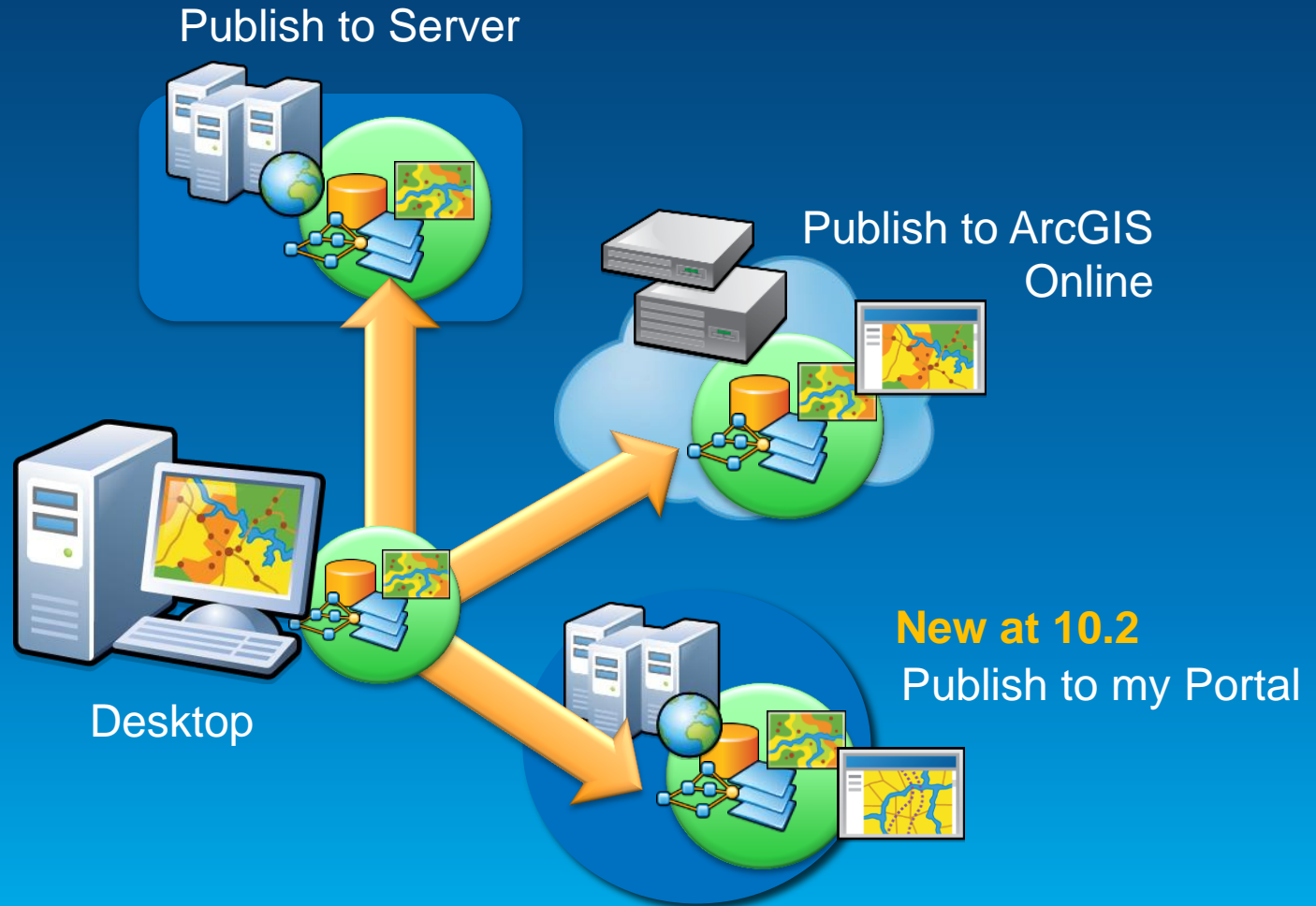


ArcGIS for 3D Cities



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



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

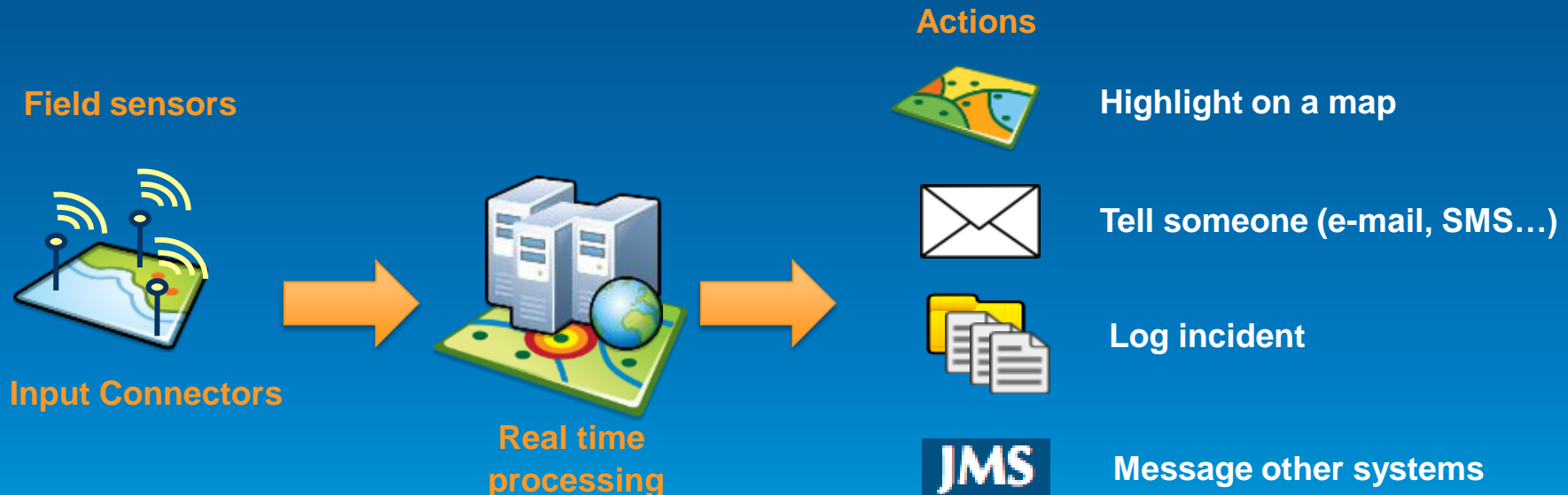
Always use online help for the latest



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



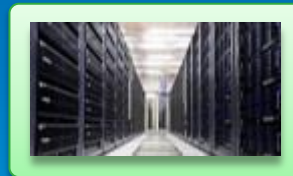
Apps

Information Products
Access Control



Portal

Web Services
Data



GIS Servers
Authoring tools



**Ready to use
Content**

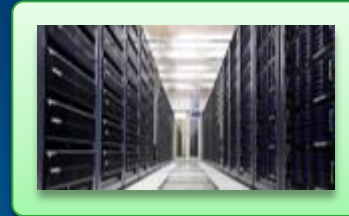
WebGIS Deployment Patterns



Apps



Portal



GIS Servers



Ready to use
Content

SaaS

ArcGIS Online
(Portal)

ArcGIS Online
(Hosted Servers)

ArcGIS Online
Services

Software

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

January	February	March	April
May	June	July	August
September	October	November	December

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

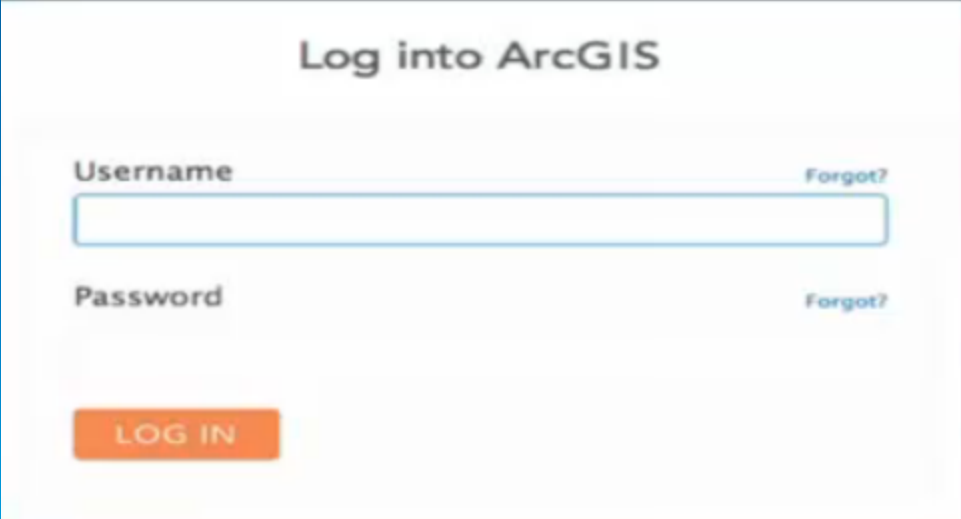
ArcGIS Online Release Themes

June's release addresses core areas

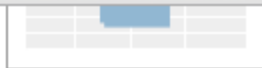
- **Platform for organizations to embrace GIS and mapping**
 - Administration and management
 - Security and compliance
 - UX/UI improvements
- **Platform for developers**
 - Information to facilitate understanding/use
 - Subscriptions for developers
 - Management and Marketplace
- **Expanding the ArcGIS 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



The image shows a screenshot of the ArcGIS login interface. At the top, the text "Log into ArcGIS" is centered. Below this, there are two input fields. The first is labeled "Username" and has a "Forgot?" link to its right. The second is labeled "Password" and also has a "Forgot?" link to its right. At the bottom of the form is an orange button with the text "LOG IN" in white capital letters.



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

The screenshot shows the ArcGIS Online Service Credits Estimator interface. At the top, there is a navigation bar with 'ArcGIS Online' and tabs for 'Main', 'Features', 'Apps', 'Services', 'What's New', 'Credits', 'Plans', and 'Free Trial'. Below this is a secondary navigation bar with 'Overview', 'Map Tile Generation', 'Geocoding', 'Network Analysis', and 'Credit Estimator'. The main heading is 'Service Credits Estimator'. A 'Get Started' button is followed by a link to 'example scenarios'. The interface is divided into several sections: 'User Accounts' with sliders for 'Users' (set to 50) and 'GB' (set to 1); 'Services' with a slider for 'Feature Services' (set to 20) and a section for 'How many tile services and updates will be hosted?' with dropdown menus for 'Geographic Area' (Country, State/Province, County, Large city, Small city) and 'Yearly updates' (all set to 0). On the right, a green box displays the 'Estimated Annual Service Credits' as 5,574, with a disclaimer that the estimator is only a reference. At the bottom right, contact information for larger plans is provided, including the phone number 1-800-447-9778 and a link to 'Email us' for feedback.

ArcGIS Online

Main Features Apps Services What's New Credits Plans Free Trial

Overview Map Tile Generation Geocoding Network Analysis Credit Estimator

Service Credits Estimator

Get Started Learn more about service credits usage through [example scenarios](#).

User Accounts

Users 50 How many users will log into your subscription? 5 100 ⓘ

GB 1 Estimate the data transfer per user per month Low Average High ⓘ

Services

Feature Services 20 How many feature services will you host online per month? 0 10 20 30 40 50 60 70 80 90 100 ⓘ

How many tile services and updates will be hosted?

Geographic Area		
0 Country	0 Yearly updates	
0 State/Province	0 Yearly updates	
0 County	0 Yearly updates	
0 Large city	0 Yearly updates	
0 Small city	0 Yearly updates	

Learn more about [Map Tile Generation](#)

Estimated Annual Service Credits

5,574

The service credits estimator should only be used as a reference to estimate ArcGIS Online service credits usage. Your actual service credits usage may vary.

For information on larger plans in the US call **1-800-447-9778** or contact your local [Esri office](#).

Have feedback on the service credits estimator? [Email us](#) your suggestions.

Security and Compliance

- FISMA (September)
- SafeHarbor (June)
- Accreditation, Certification



User Experience

HOME GALLERY MAP GROUPS MY CONTENT SUPPORT LOG IN find maps, apps and more...

 **FEMA** Follow FEMA:      Visit: FEMA.gov

FEMA GeoPlatform

Providing geospatial data and analytics in support of emergency management

 **The Great Utah Shake Out**
City Council Group Gallery

 **Development**

 **Fire Department**

 **GIS Maps and Apps Gallery**

 **GEOSPATIAL PLATFORM** FEMA is a partner of the FGDC's National Geospatial Platform Visit: www.geoplatform.gov

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.





City Council Group Gallery



Development



Fire Department



GIS Maps and Apps Gallery

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.

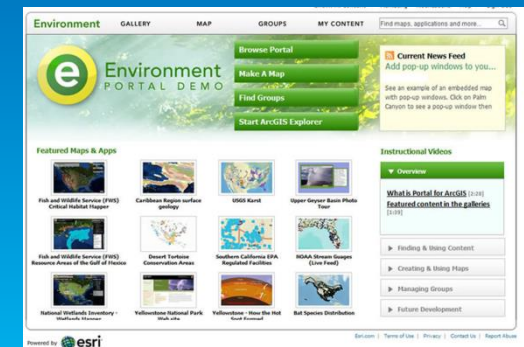
UDOT is about more than roads, repairs, and maintenance. Our mission is to preserve infrastructure, optimize mobility, zero fatalities and strengthen the economy.

[UDOT GIS Page →](#)
[UDOT Home Page →](#)



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

Region



Choose a region to determine the default basemap gallery, the default basemap, and the default extent for new maps for your organization. The region you choose also controls the scalebar, measure tool and routing units. Choosing United States sets the units to miles and feet; any other region choice, including World, sets the units to meters and kilometers.

Note that you can also specify your organization's basemaps and extent by editing the appropriate settings in the Maps tab.

Expanding Cloud Services

ArcGIS

FEATURES

CREDITS

PLANS

30-DAY FREE TRIAL

DEVELOPERS

Sign In



The Mapping Platform for Your Organization

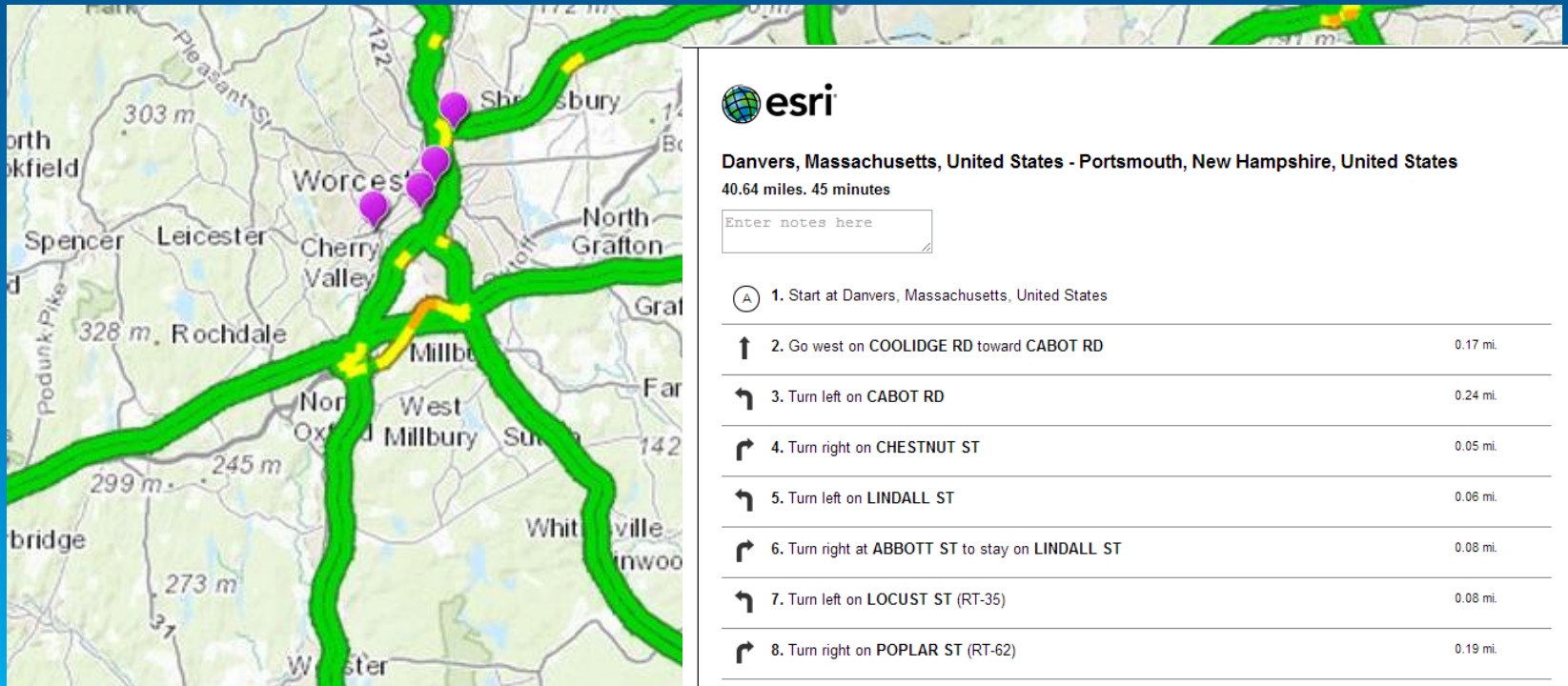
Create interactive maps and apps and share them with the rest of your organization. Realize new opportunities and gain insight into your data. Do this quickly and easily with nothing to install or setup.

30-DAY FREE TRIAL



Network Analysis

- Live Traffic
- Save route as layer in map



esri

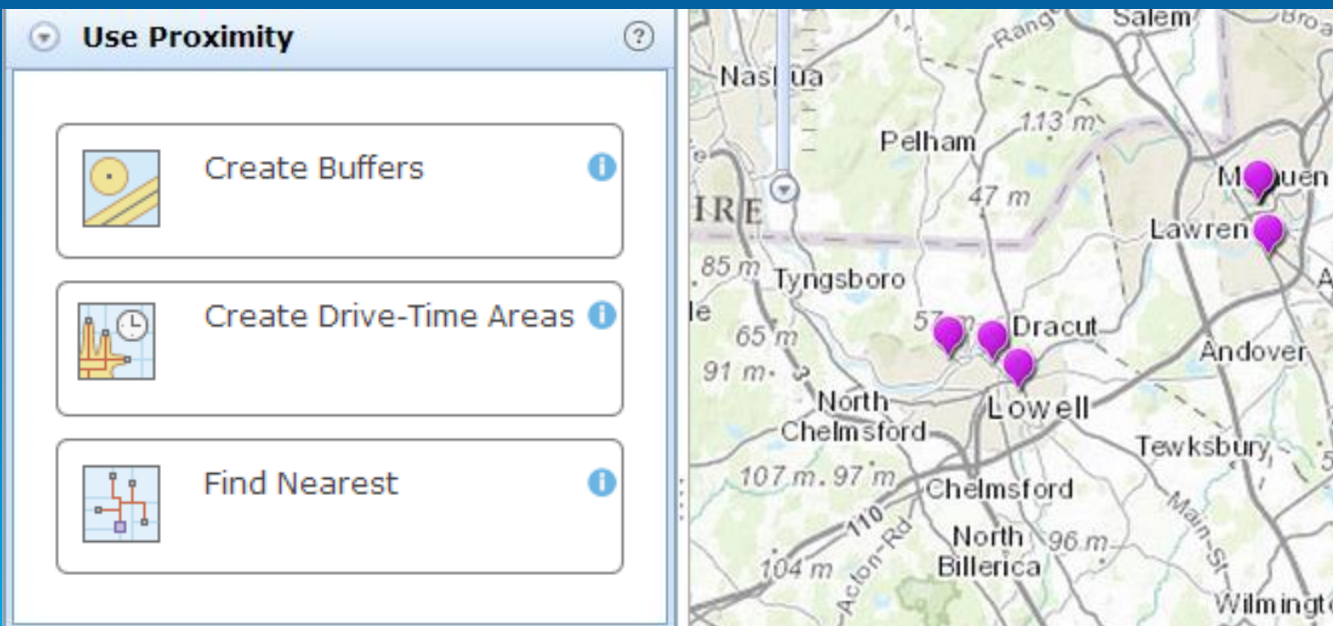
Danvers, Massachusetts, United States - Portsmouth, New Hampshire, United States
40.64 miles. 45 minutes

Enter notes here

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



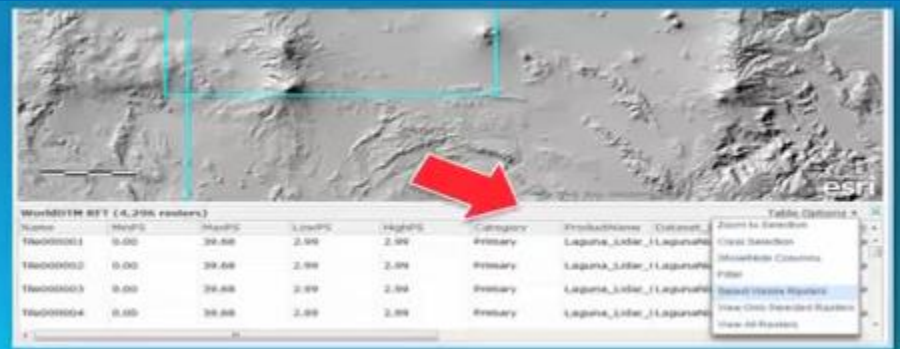
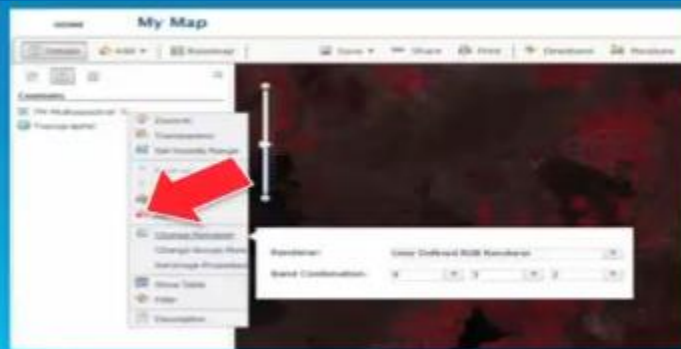
Geocoding Expansion and Enhancement

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



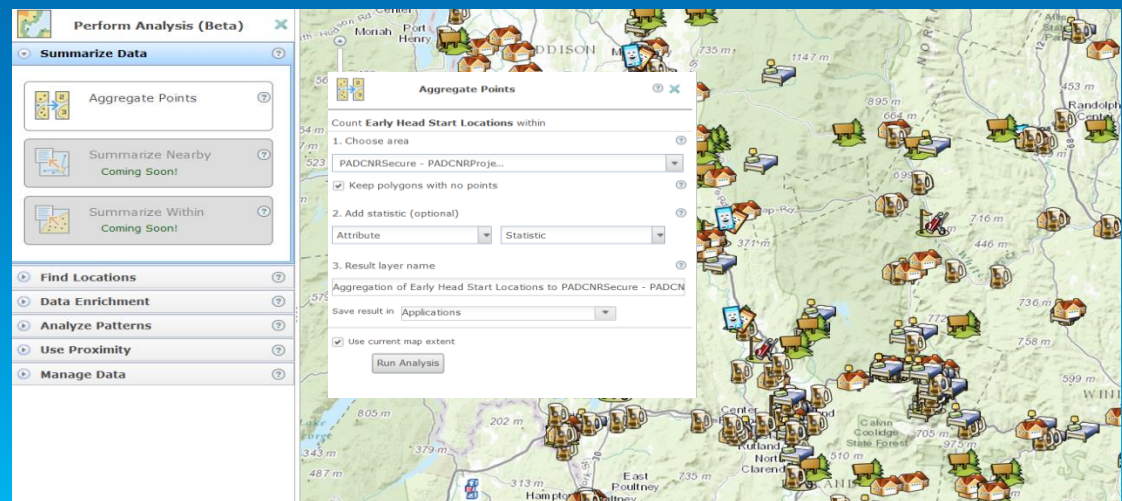
Enhanced Image Service Layers

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



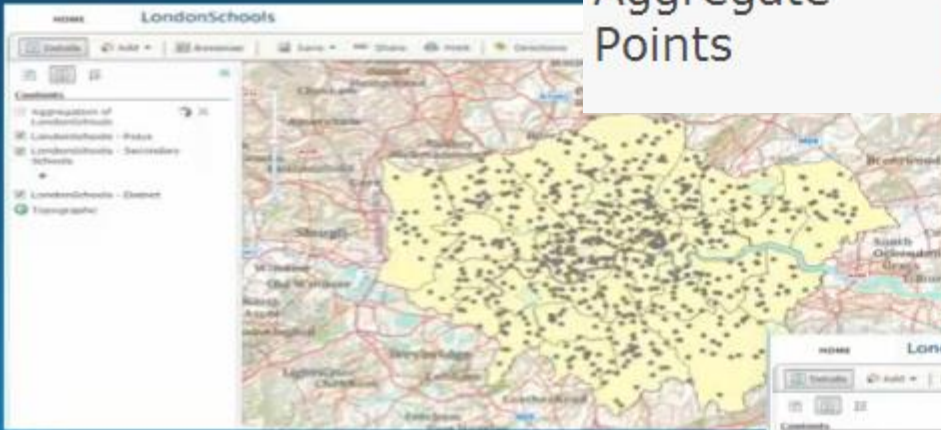
Analytics

- 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

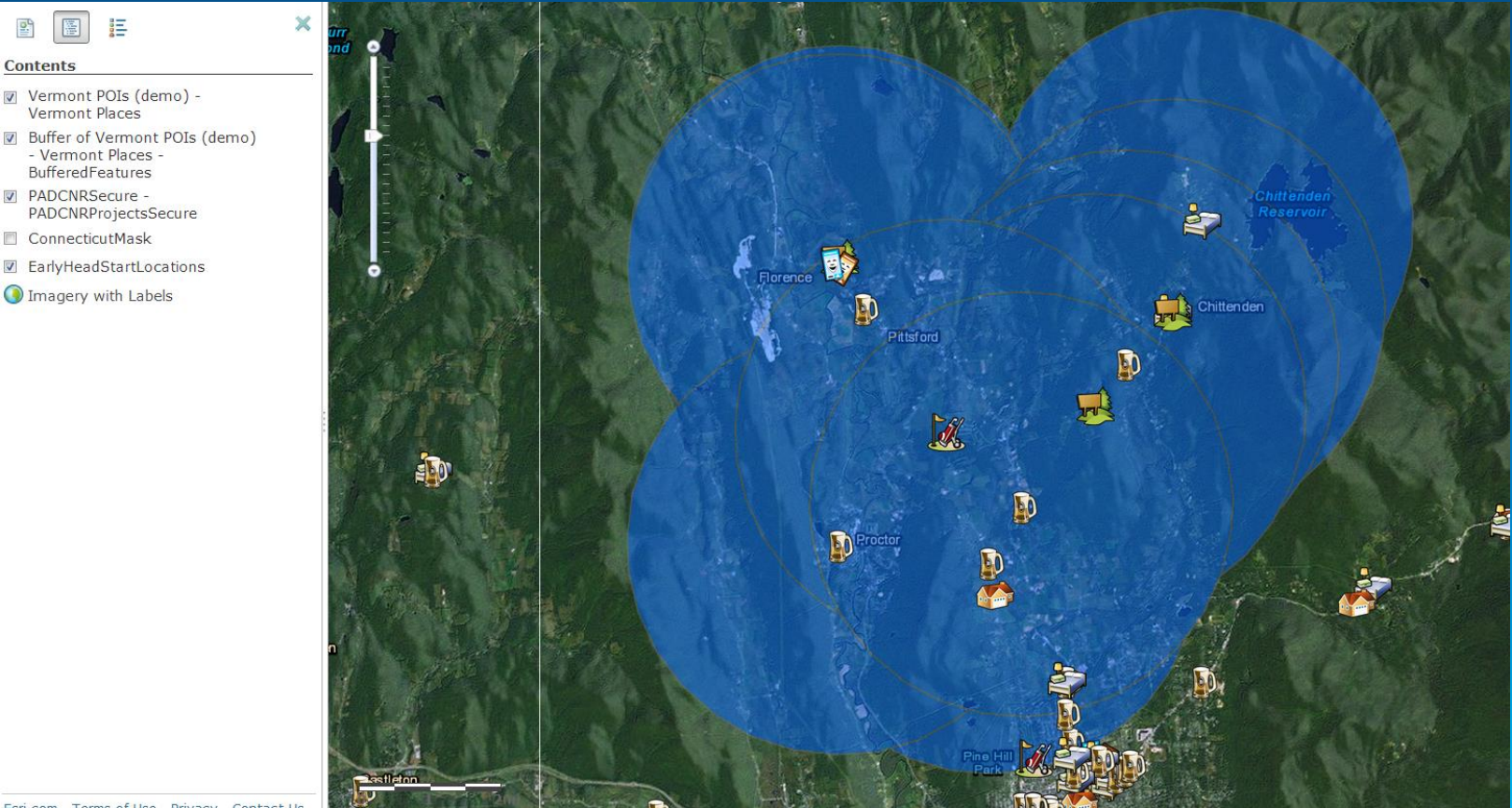
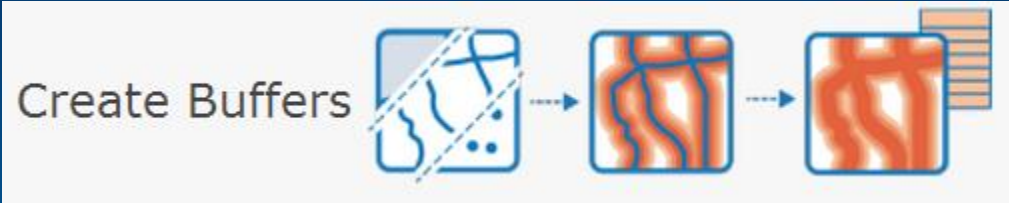


Analysis – Aggregate Points

Aggregate Points

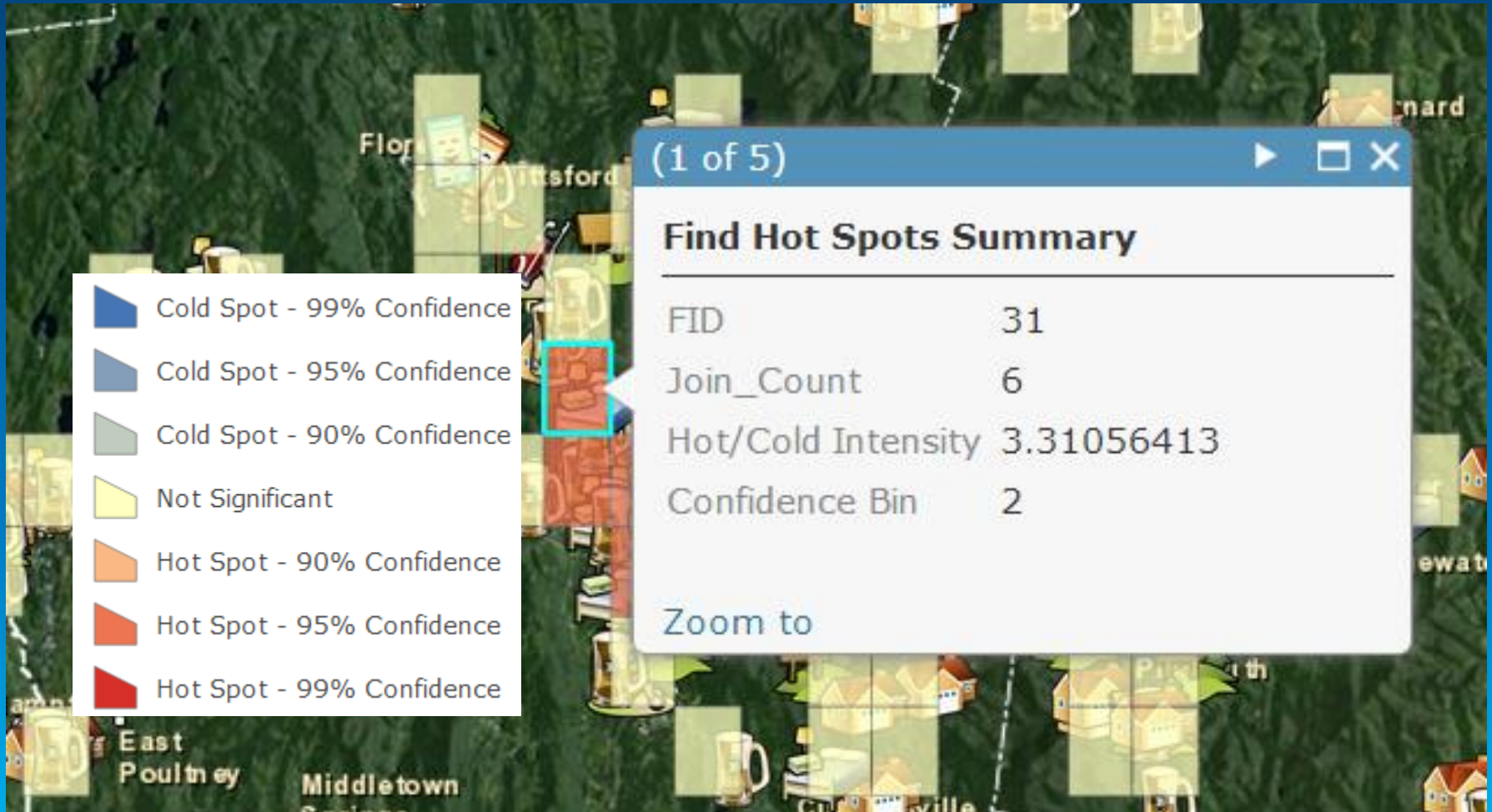


Analysis - Create Buffer



Analysis – Hot Spots

Find Hot Spots



New Templates and Options

- Map Tour from Flickr

NH Historical Preservation Signs (demo)

A story map



Import

Where are your pictures stored ?



Flickr



Facebook



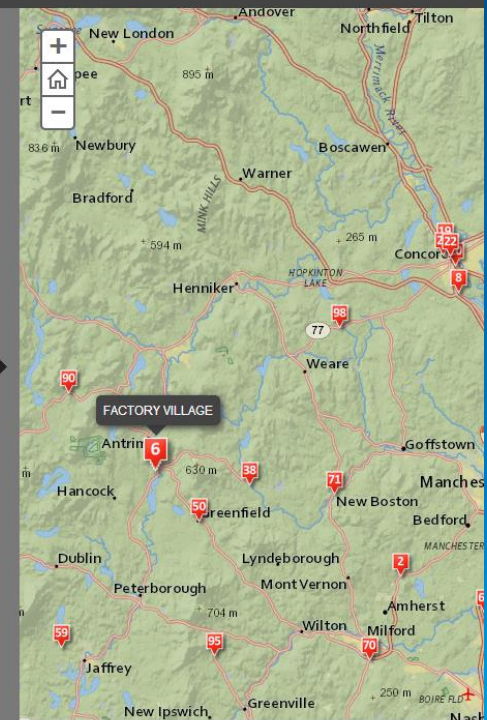
Picasa



Referenced in a CSV

[Map Tour Help](#) | [Download the CSV template](#) (Save as if it doesn't download)

Make a selection



1 ALTON BAY TRANSPORTATION



2 BIRTHPLACE OF HORACE GREELLY



3 BOSTON, CONCORD & MONTREAL RAILROAD



4 BATH, NEW HAMPSHIRE



5 LOCHMERE ARCHEOLOGICAL



6 FACTORY VILLAGE



7 BOOM PIERS

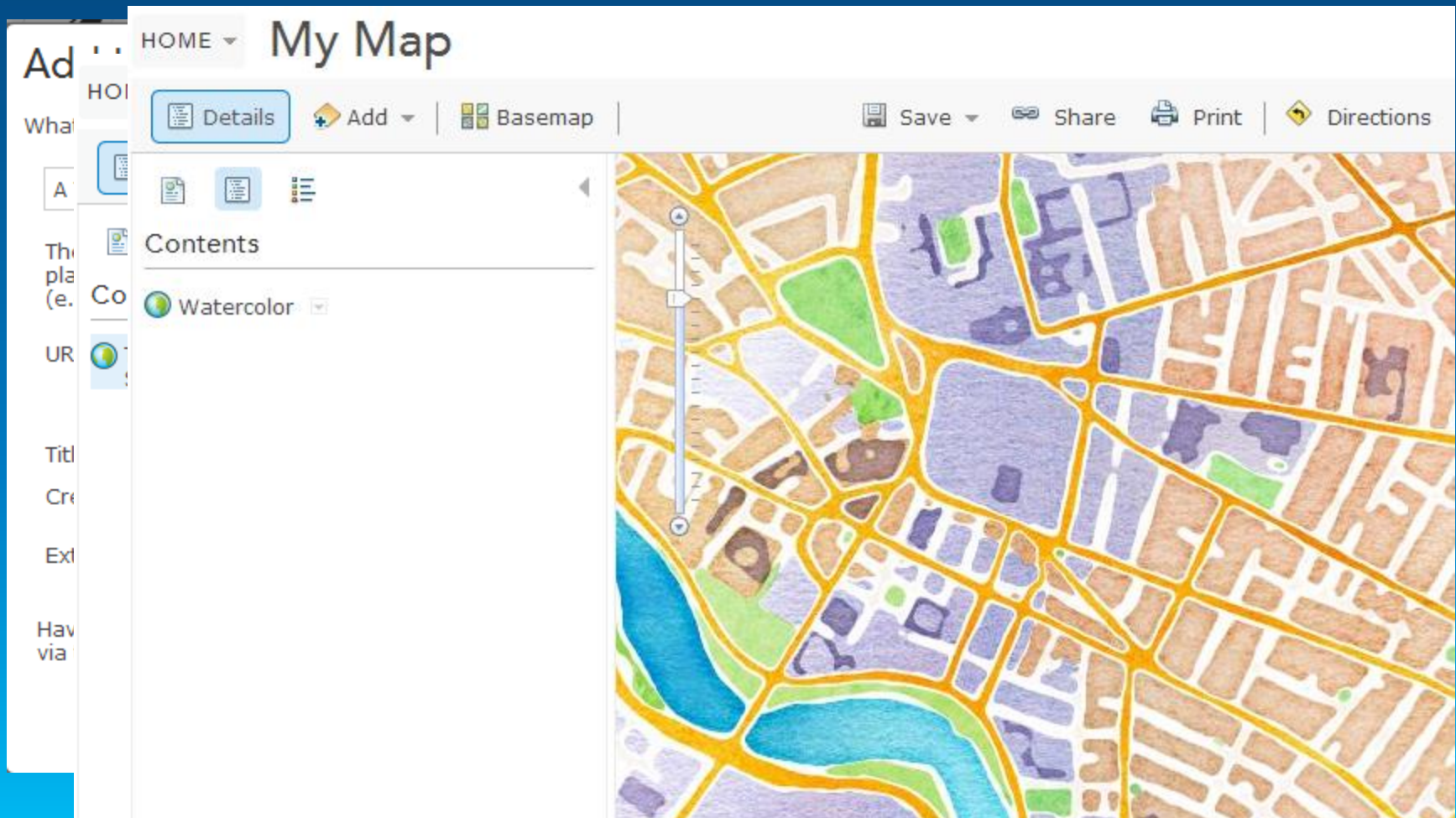


8 ANDREW JAVIS

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.