# What's New in the Business Analyst web app

The December update of the Business Analyst web app will include several exciting features requested by our users. Use new analytical capabilities and graphical ways of representing market insights. Bring and use your own data and manage your content more efficiently. Work seamlessly with the ArcGIS platform both online and on-premises.

Here are the six key highlights:

1. Use the BA web app on-premises
2. Perform Suitability Analysis
3. Create Beautiful Infographics
4. Bring and Use Your Own Data
5. Manage Your Work Using a Project Structure
6. Leverage Daytime Population Data

Use the BA web app on-premises

One of the most requested capability by the customers that we are releasing this year is the ability to use the Business Analyst web app in your infrastructure. You will be able to run BA based mapping, analysis, and reporting using your own proprietary and sensitive data behind your firewall.
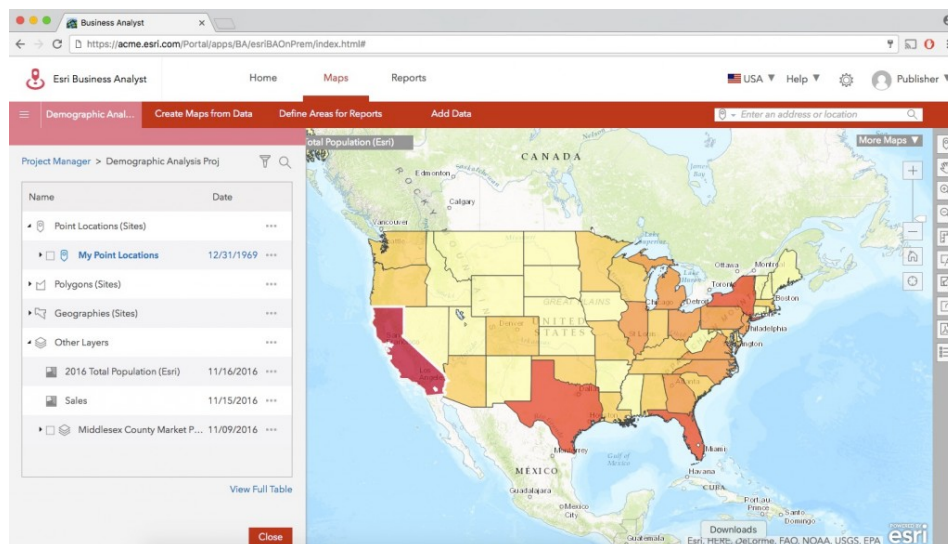

This will be available via BA Server 10.5 which will be a bundle of BA Server software, on-premises BA web app, BA mobile app, and BA Desktop, and demographic data services on-premises.

Perform Suitability Analysis

When deciding to expand your business, you are often evaluating more than one potential location. Whether you want to find areas that are most suitable for commercial real-estate development or retail

market planning, office relocation or global siting of data centers, you want to determine which among the multiple potential locations is the best or worst location for your location criteria. There might be several factors in your location criteria and certain factors may be more important than others to the overall decision. With the new suitability analysis workflow, you can rank and score sites based on multiple weighted criteria and determine locations most suitable for your business.

This workflow can be run on a set of point locations, polygon areas, and standard geographies such as block groups, zip codes, and more. Model your location criteria using two types of parameters – demographic data variables and site attributes (e.g. minimum size, rent and number of parking spaces) from your own data. Assign weights to them, get weighted scores for each potential location, and review their ranks from most suitable to least suitable location.
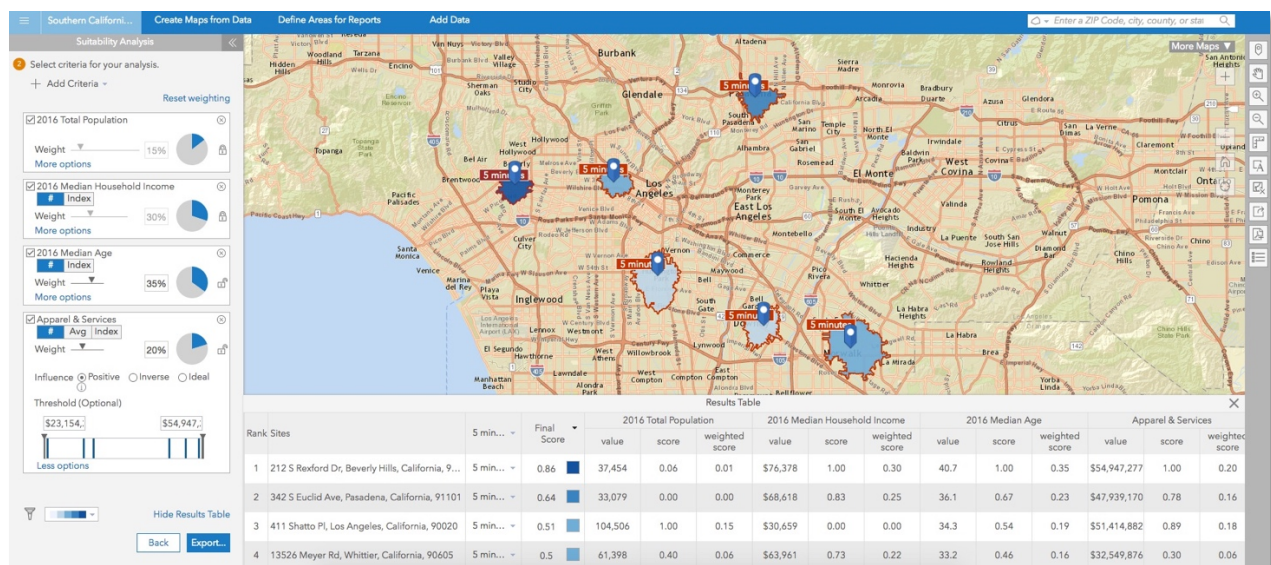

Here is how you run suitability analysis:
1. Define the sites that you want to use in the analysis. You can add sites from a project or start with the locations you have on the map.
2. Define criteria for your analysis by:
    o Choosing one or more variables from Esri Demographics data. For example, you can choose population, income, age, and other Esri Demographics variables.
    o And including site characteristic variables from your own data such as size of facility, number of parking spaces, leasing rate, and more.
3. Assign weights to each factor. For example, having population of a certain age group might be a comparatively more important criterion than the total population in your trade area. Optionally, you can define positive or negative impact of a particular factor. For example, having more parking spaces has a positive impact but high rent value has a negative impact on your location's suitability decision.
4. Review the result of the analysis in the form of scores and ranks for each location weighted based on importance of various factors. You can see the results on the map and in the table and examine how a location meets your business criteria.

It may be beneficial not only to explore the best locations identified by the model but to also investigate the second and third most favorable sites. The output can also be shared and used across the ArcGIS platform. The identified locations could be visited by employees of an organization to further validate the site selection criteria.

Create Beautiful Infographics

When reviewing market information for a location, you often have several numbers and charts about demographics, your business data, and information about the location such as its picture, rent, parking spaces, and more. Many times you review such information for several locations every day to make good business decisions. Wouldn't it be easier if such information was presented in a visually appealing, easy to understand, and more graphical format? Now, you can create compelling infographics in a few clicks and quickly grasp the demographic insights and your own business information for any locations. Present market information with attractive infographics, impress your clients, and close deals faster.
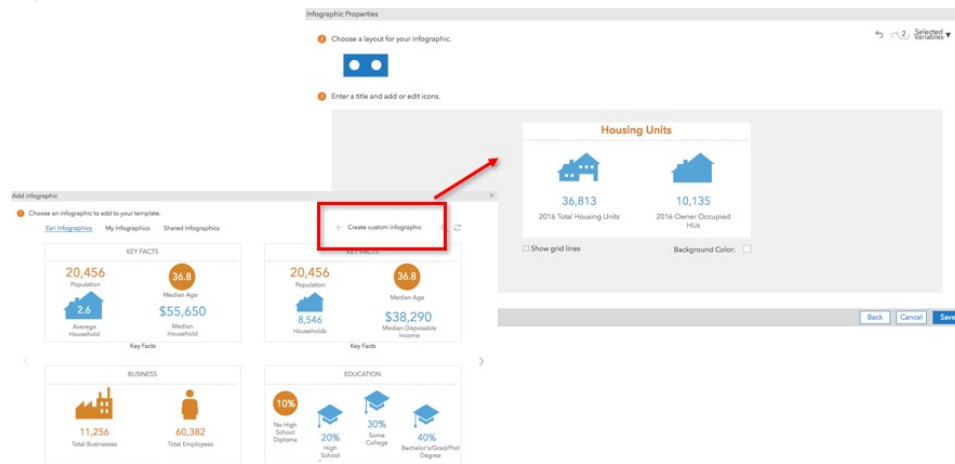
To create infographics, first create infographic templates and then run them for any site you have on the map. Use your own business data along with Esri Demographic data. Apply your company's branding and share infographic templates with your team. View infographics in the site pop up menu and export them as HTML and image.
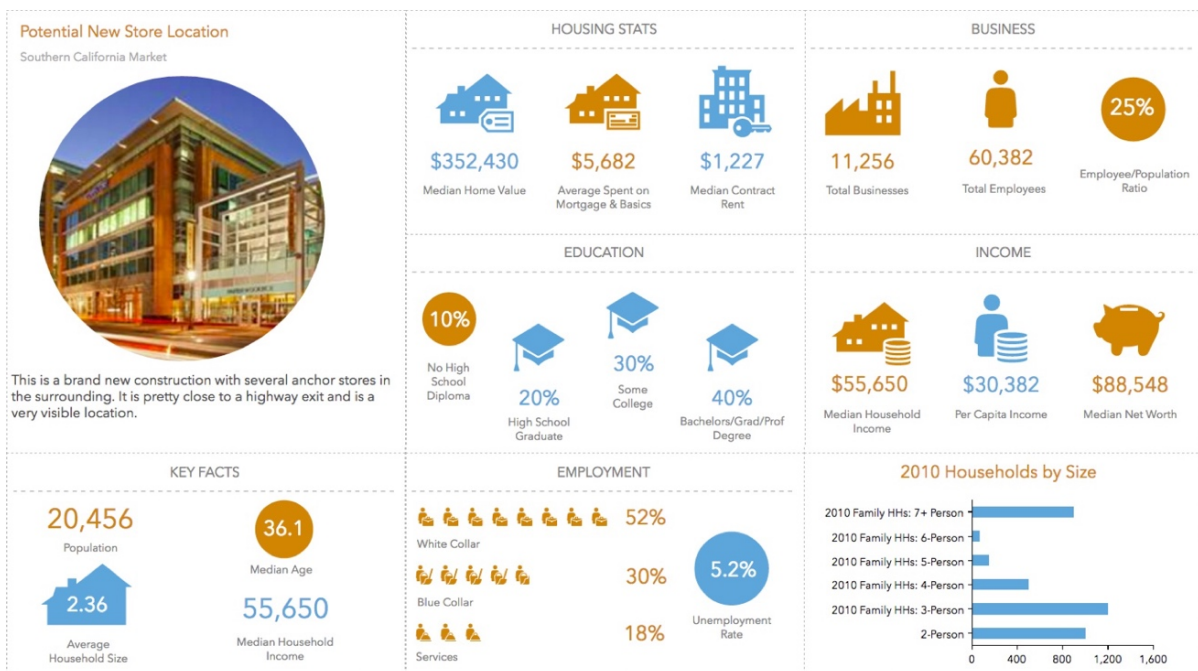
Here is how you create and use custom infographics:
   1. Go to the Reports tab and choose the Build Infographics option.

2. Choose from Esri's predefined templates, start from a blank template, or use a template shared with you by others in your organization. Each infographic template is made up of various panels.
3. Insert various type of content in each panel including infographics, charts, images, maps, tables, and text depending on what kind of market insights you want to review for your site.
   - Use content from Esri demographic data as well as web maps of your own business data.
   - Pick from several predefined infographic panels or create your own custom infographic panel


4. Finish defining your template and save it.
5. Create a site on the map, open its pop up menu, and click infographics. It will show the infographic defined as default in the preferences. Change it to show the infographic template you defined using the drop down in the bottom left of the site's pop up menu.
   - If you want to show your infographic template by default, go to preferences from the gear icon on the top right, go to the Reports section, click Infographics, and choose your infographic template as default.
   - While viewing the infographics for your site in its pop up menu, you can see the full infographic with all the panels or you can switch to the slide view and see each panel at once. This is to help view infographics optimally for smaller screen sizes.
6. Export the full infographic as HTML and image and insert them in your market research reports, presentations, and StoryMaps and share with others.

Bring and Use Your Own Data

Using your own business data is a critical part of your market analysis. You often have sales, revenue, number of customers, and other data specific to your business performance and operations that you want to bring and use in Business Analyst based mapping, analysis, and reporting. Imagine you run a chain of coffee shops and you have sales data by zip code. You want to visualize coffee sales data on a map and run Smart Map Search with the population data to see which zip codes have high population but low coffee sales. Or maybe you have a potential location for a new coffee shop and you want to understand the coffee sales for a 10-minutes drive-time around the potential location. With the new

Custom Data Setup workflow, now you can easily bring your own data, use them along with Esri Demographics data and perform more customized market analysis.

To do this, your business data (e.g. sales, revenue, customers information) needs to be in a feature layer format in the ArcGIS system. You can directly consume feature layers, choose which attributes to use, and access them via the Data Browser in Color-coded Maps and Smart Map Search.
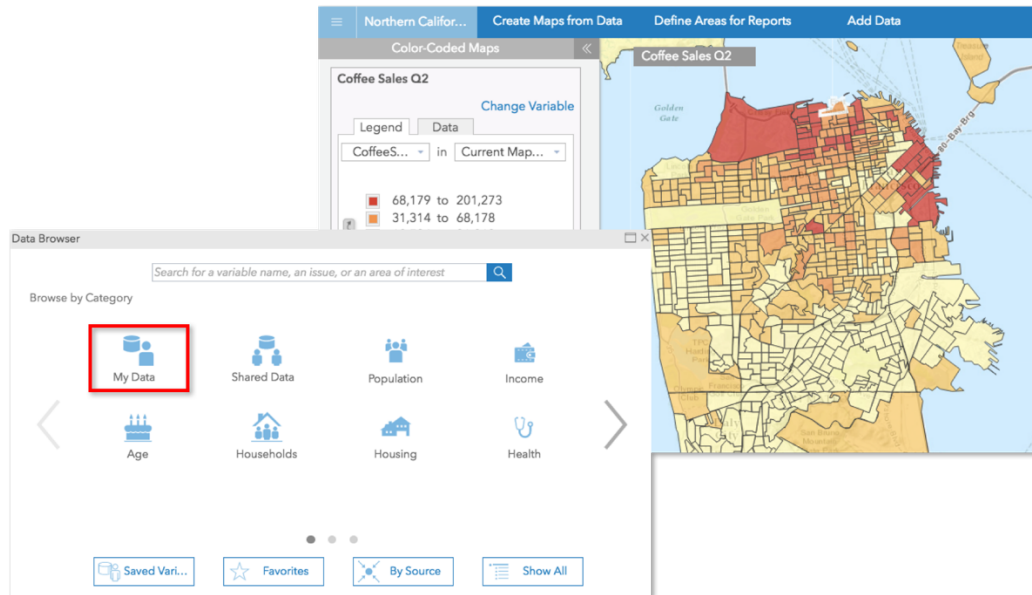
Here is how you bring and use your own data:
1. Go to the Add Data tab under Maps and click Custom Data Setup.
2. Enter the URL of the hosted feature layer or browse to it in your ArcGIS portal.
3. Select which attributes from the layer you want to use in BA. For example, your layer might have sales numbers that you want to use in your market analysis but it might have feature IDs that you don't need in your analysis.
4. Once setup, you will see the attributes in the My Data panel.
   - You can share this data with your colleagues and teammates while maintaining control over who has access to the data.
   - Notice that you can access data shared with you by your colleagues and teammates as well.
5. Go to Create Maps from Data and click Color-Coded Maps or Smart Maps Search
6. Click Browse all variables. You will see the My Data and Shared Data categories in the Data Browser.
7. Use them in your market analysis the way you would use any Esri Demographic variable in the Data Browser.

Manage Your Work Using a Project Structure

When performing location-based market and demographic analysis, you often create multiple sites, maps, layers, and reports for each area of interest. You collect site information such as size of the property, number of parking spaces, and site pictures. As you do analysis for various areas, this content keeps growing and becomes a bit hard to manage and organize. Also, depending on the ease or complexity of your analysis, you use web, mobile, or desktop based tools and need easy access to your content across various devices. Once you complete your analysis, you share the results with your stakeholders, clients, and decision makers within and outside your organization. Traditionally, accomplishing these goals in Esri Business Analyst either have been a bit challenging or sometimes not possible. The new project structure helps you with this by enabling you to manage and share content more aligned with the way your business works.

Projects are a container for storing, organizing, and sharing your content. When you start working on the map, you need to have a project selected so all the content you create including site pictures and site attributes can be saved in the selected project. Projects use the 'group' based sharing model of ArcGIS. A group is a collection of maps and content usually related to a specific area of interest. You can add users to a group and control which members of your organization have access to the content in a group. Using a group allows users to contribute and consume items for better collaboration.

Here are some key details about projects:
- Contains sites, business search points, reports, and various types of layers including imported layers, web maps, color-coded maps, and layers resulting from smart map search in one place.
- Stores multiple sites in one point, polygon, or geography (e.g. zip codes, block groups etc.) layer which helps you show or remove multiple sites on the map in one click.
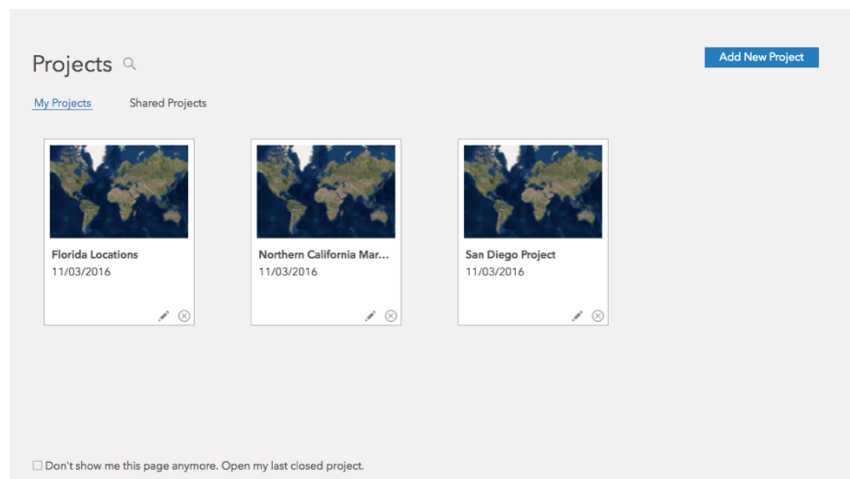
- Saves your color-coded maps and smart maps search results so you can quickly access them later without having to create them again.
- Helps you filter and find content organized in the project table more efficiently.

- Enables you to share and use your work seamlessly across Business Analyst Web, Mobile, and Desktop.
- Helps access content across the ArcGIS platform so you can use them in StoryMaps, Collector, and other ArcGIS apps. Share your work more easily with your stakeholders, clients, and decision makers within and outside your organization.
- Move and share layers and sites across various projects using Project Manager.
- Add site details including pictures, notes, and other information such as parking spaces and building area as well as helps you view any report you ran for that site.
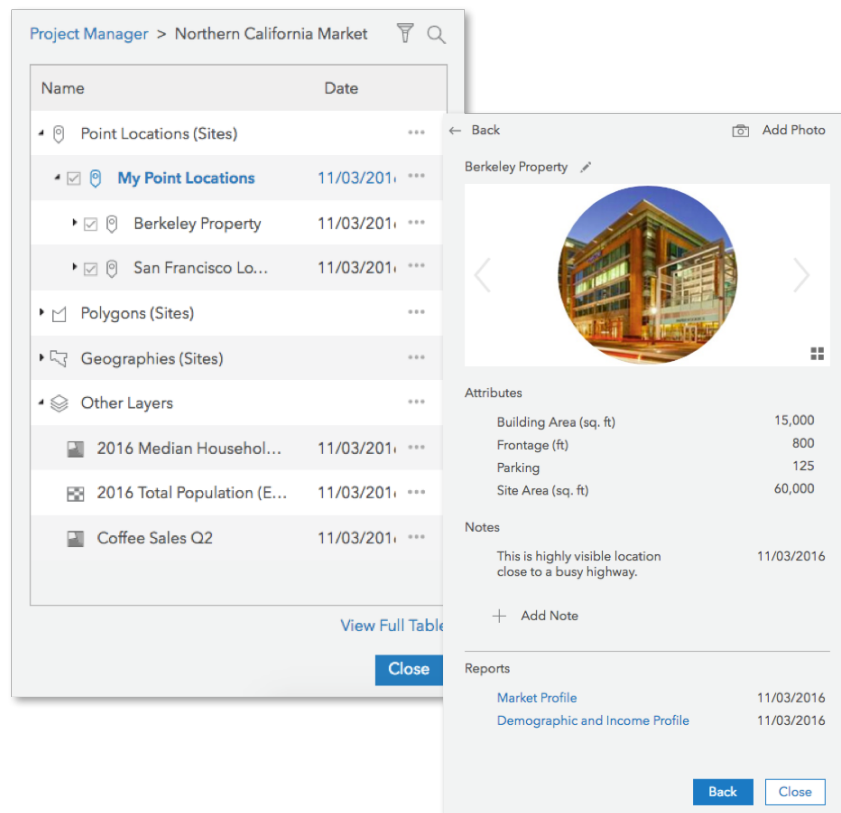
Here is how you work with projects:
1. Go to the Maps tab. You will see a projects interface.
2. Click Add New Project to create a project, enter a name for your project, and click Save. A new project will be created which could take up to a minute.
3. Once your project is created, click Open to select it and start working on the map.
4. Create a site or color-coded map, do a smart map or business facilities search, or bring your data or web maps or files, you will notice that the content from each workflow is being saved in the various categories of the project table.
5. Click on the menu on the right of any item in the project table and explore how you can easily manage them including seeing details, editing, moving, renaming, deleting, and more. For

example, if you have a point site created on the map, expand the Point Locations (Sites)>My Point Locations, click the menu on the right of your point site, and click show details. In the details panel, you can add site details including pictures, notes, and other information such as parking spaces and building area as well as access any report you ran for that site.

The most effective use of projects requires named users to be in a role with publishing privileges. If a named user is in a publisher, administrator, or custom role with publishing privileges, they can create new projects, share them with others, add sites to projects, and run reports. If a named user doesn't have publishing privileges i.e. 'user' role or a custom role with no publishing privileges, they will not be able to create new projects however they can work in the projects shared with them, add sites to shared projects, and run reports.

Leverage Daytime Population Data

We are pleased to introduce a new dataset in the U.S. called Daytime Population which estimates the number of workers and residents in an area during the day. This dataset will be available in the online release of the BA web app. Trade areas can contain very distinct day and night demographic profiles. Esri's daytime population model provides invaluable insight into an area's day part population expansions and contractions. These data variables will be available on the Market Profile report, in Color-coded Maps and Smart Map Search, and in custom and comparison reports.

Additionally, there will be a number of data updates including demographics for Canada, China, Russia and some European countries (Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, UK).

In the U.S., the Retail MarketPlace, Major Shopping Centers, and Crime datasets will each be updated. In addition, the ACS data is being expanded to include details on place of birth and citizenship, language spoken at home, and ancestry. These items will be available in Color-coded Maps and Smart Map Search.