



Analyzing Demographics, Business, and Consumer Preference Data Using Business Analyst Web App

Joseph Kerski PhD GISP
Education Manager
Esri
jkerski@esri.com
303-625-3925

Goals for this workshop

1. **Understanding what the Business Analyst Web App is and why to use it in instruction and research.**
2. **Learning how to use the Business Analyst Web App.**



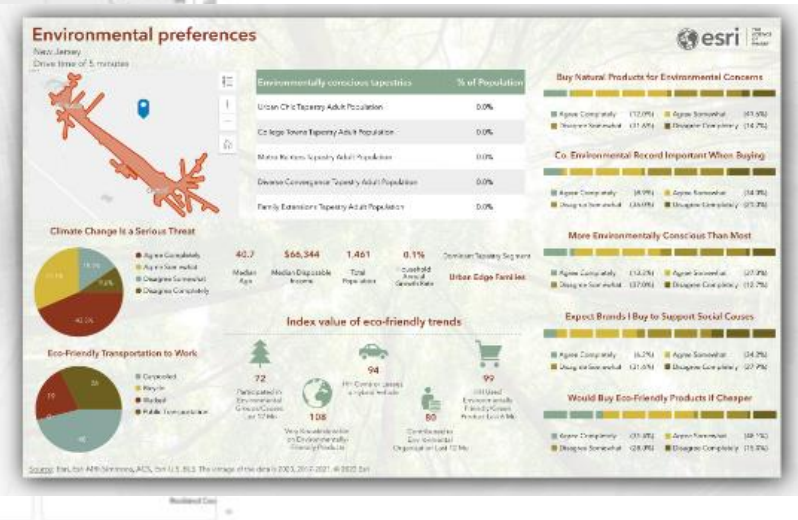
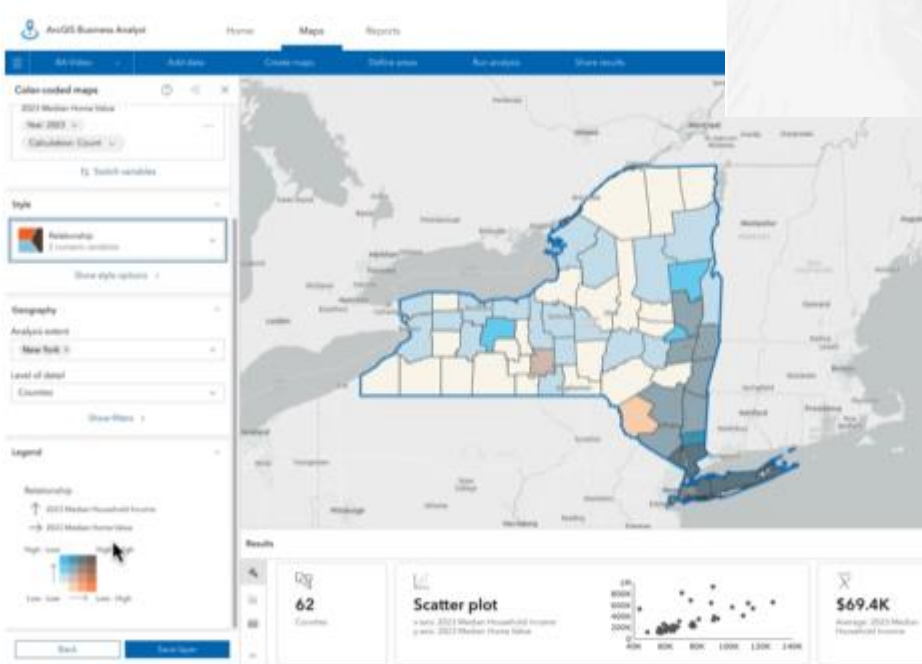
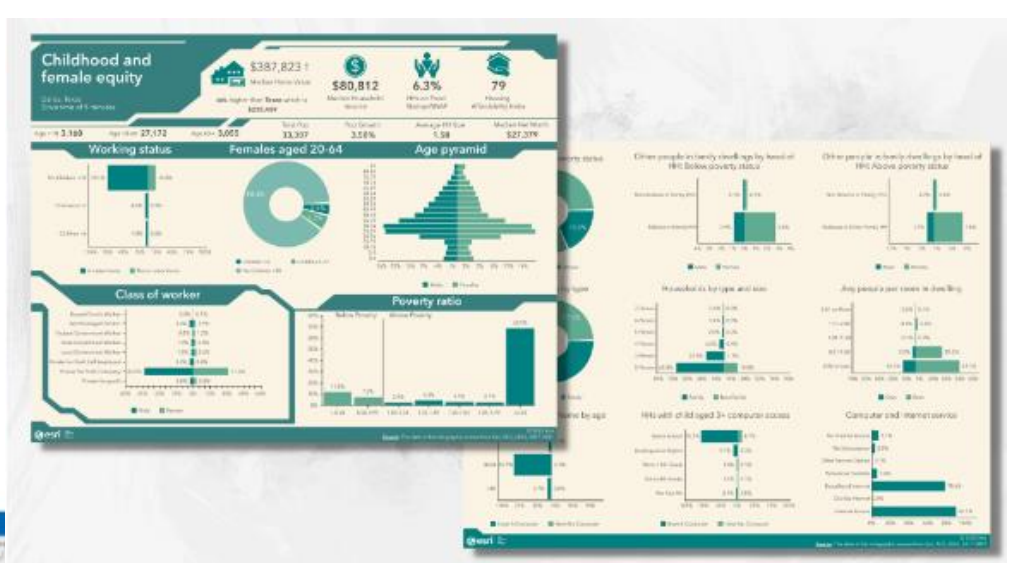
Business Analyst Web App

A SaaS solution that applies GIS technology to analyze demographic and behavioral data, allowing you to perform analysis, and create maps, reports, and infographics.

Data

Business Analyst data includes 15,000+ variable options from more than 130 countries, including demographics, business locations, consumer spending, and market potential, at multiple geographies. With ready-to-use and custom data infographic templates and 40+ reports, sharing the analysis you've done using the data included with Business Analyst alongside your proprietary data is both informative and captivating.

Pictures are worth 1,000 words here



Thus, it is a *cloud-based software service*.
It is also an *Esri product* and it is also an *application*.

It contains:

--Tools

**Proximity analysis
Choropleth mapping
Filtering, selecting, symbolizing, etc.**

--Data:

**Demographics,
Business Locations,
Consumer preferences.**

--Connections to ArcGIS Online data and maps.

Why use the Business Analyst Web App?

It is:

- ◆ Cloud-based; no software required.
- ◆ Connected to ArcGIS
- ◆ Built for the non GIS user: Straightforward to use!
- ◆ A powerful set of tools.
- ◆ Pre-loaded with a vast amount of data.

This data is multiscale, authoritative, and is updated on a regular basis. Coverage: USA *and* many other countries.

Where to use the Business Analyst Web App?

Research

◆ Whenever visualizing demographic and behavioral variables and business locations need to be analyzed over space and time

Teaching

- ◆ GIScience
- ◆ Geography
- ◆ Sociology
- ◆ Business
- ◆ Data science
- ◆ Mathematics

Data: Detail

--Esri basemaps

--Demographics: > 2000 variables + 5 year projections

--Consumer spending by HH for 20+ categories: apparel, pets, financial, food & beverage

--tapestry segmentation: 67 segments: Lifestyles, behaviors

--market potential data – on products/services consumers use demand

--business locations and summary data: > 13 million businesses, + employee #, sales, industry classification codes

--traffic counts: for trade analysis, routing, mathematical modeling

--crime indexes: personal and property crime

Community Analyst vs Business Analyst Web App

Same interface and menus. Only difference is the color of the User Interface.

BAWA: Built with business users in mind.

CA: Built with the non-business users in mind, such as nonprofit and civic organizations, planning agencies, social services, and others.

Accessing BAWA

To access the tool: **BAWA:** www.esri.com/bao

OR – www.arcgis.com > app launcher > **Business Analyst Web App**

A separate product: **Business Analyst extension for ArcGIS Pro:**

--nothing to install – enable licensing through ArcGIS Online license manager, then use ArcGIS Pro as usual.

--contains more tools and automation than Business Analyst Web App.

--has the ability to use data locally and thus avoid credit consumption.

For more see this essay:

<https://www.esri.com/arcgis-blog/products/business-analyst/business/business-analyst-101-for-users-who-want-to-get-started-with-business-analyst-in-arcgis-pro/>

Problem 1

1. You want to understand how median age varies by state, county, and census tract to plan a new social service or business.



Problem 2

2. A brokerage firm wants to target young, high earning individuals who are not currently investing much to advertise their services.

They are interested in neighborhoods in a region where the median age is ≤ 27 and income is relatively high ($> \$75$ K), and where the retirement plan contributions is $<$ index of 75.

Problem 3

3. Your regional convenience store chain is considering expanding. When is it advantageous for a business to be regional vs. “go national”?

Map 2 existing regional convenience stores: Focus on 445120 NAICS code.

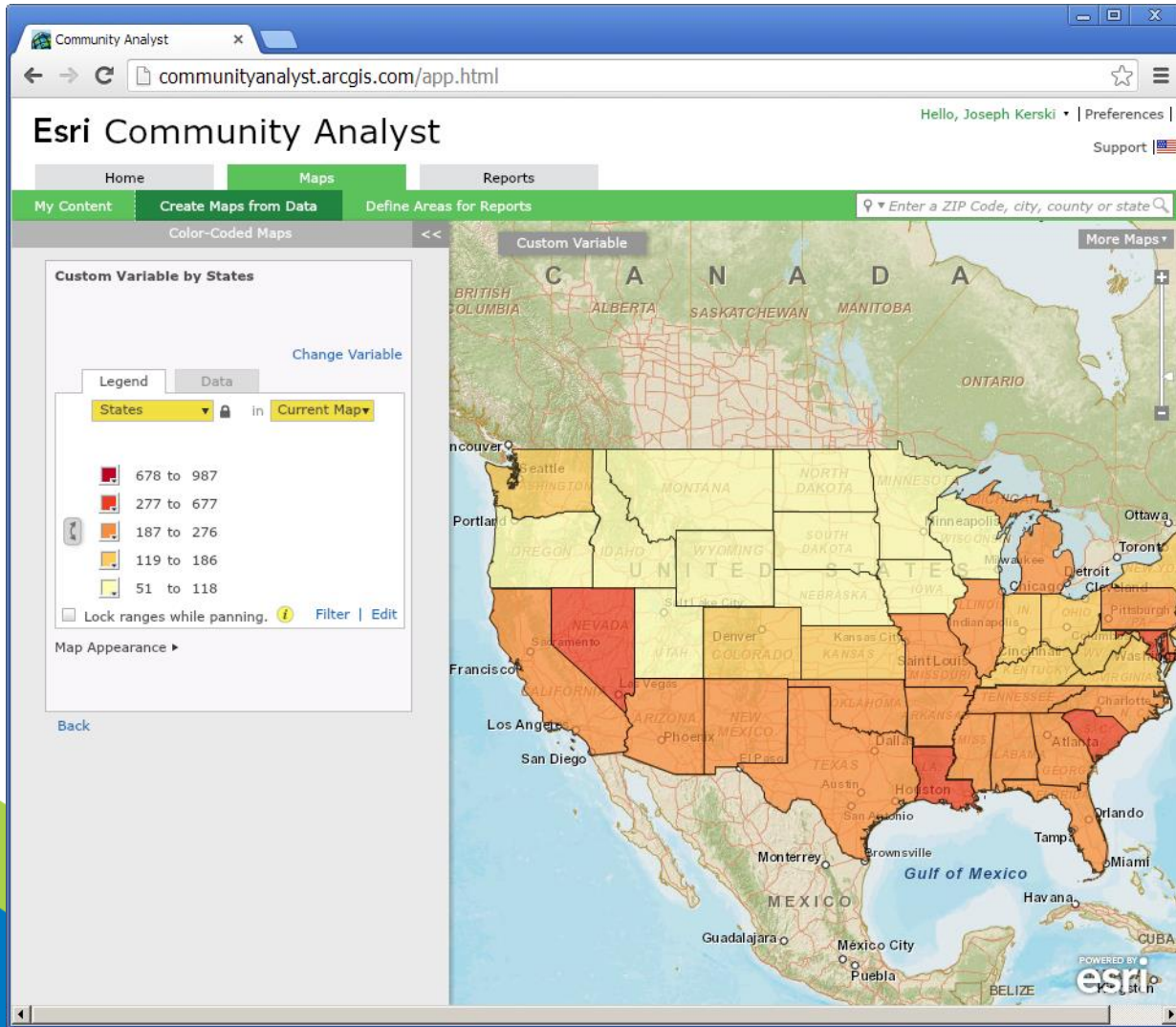
Next, your convenience store chain management agrees with your limited expansion plan and asks you to determine 1 additional optimal location in Omaha for Casey’s.

Problem 4

4. Determine the optimal location for bicycle and ski equipment rental facility near Sparta-Elroy Trail, west-central Wisconsin. Import trail from ArcGIS Online. Smart map search – Spending – Bicycle.

You can create custom variables: For example: Murder Index + Personal Crimes Index.

Custom Variable: Personal Crime Index + Murder Index



Notes

The GIS terminology you are familiar with may or may not be used in BAWA and CA. Remember, they were created for the non-GIS specialist and the terms are meant to make sense for that audience.

The current map extent is usually what the analysis or query uses for input.

You can lock the geography level for analysis.

Remember when querying and symbolizing that you are in a web browser. Be sensitive to bandwidth for your end users.

Data Transfer

Your results are stored in “My Content”. Sound familiar to ArcGIS Online? Here, “My Content” contains sites, layers, maps, reports, and map legends.

You can bring in ArcGIS Online maps to Business Analyst Web App.

You can export reports to Excel.

You can bring in points and polygons from Excel files and from zipped shapefiles.

Continue your journey:

◆ Videos:

<https://mediaspace.esri.com/>

Software Documentation:

<https://doc.arcgis.com/en/business-analyst/web/welcome.htm>

Analyst Tutorials:

<https://www.esri.com/en-us/arcgis/products/arcgis-business-analyst/resources>

<https://www.esri.com/training>



Analyzing Demographics, Business, and Consumer Preference Data Using Business Analyst Web App

Joseph Kerski PhD GISP
Education Manager
Esri
jkerski@esri.com
303-625-3925