

Intro to Business Analyst Online

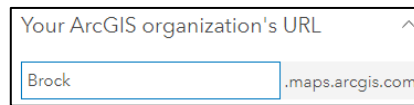
Business Analyst Online (BAO) is a cloud-based tool used to visualize business, demographics and market data and perform quick analysis. BAO boasts over 6,000 data variables ready to map! This example will look at the need (if there is one) for licensed child care in St. Catharines that can accommodate infants.

Part One: Sign in using your Brock credentials

1. Go to <https://bao.arcgis.com/esriBAO/login/> and sign in with your Brock credentials as follows:

2. Click

3. Enter "Brock" to complete the URL



4. Click Continue

5. Click

6. Enter your Brock credentials and click Sign In.

7. If prompted with a Welcome screen, click **Skip This Step**, then click **Create Project**.

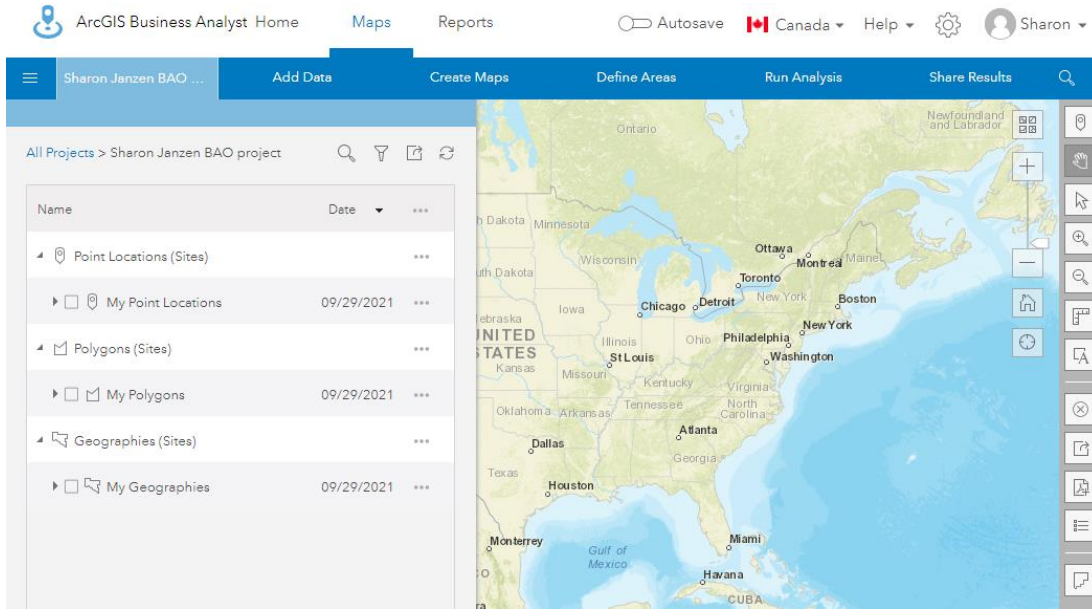
8. At the prompt, enter a *Project Name* and click **Create**. This process can take a few minutes. Click OK when your project is ready to go.

Part Two: Setting up the map project

1. At the top right of the home page window you will see a country option. If it's not already set to Canada, click the dropdown and select **Canada**.

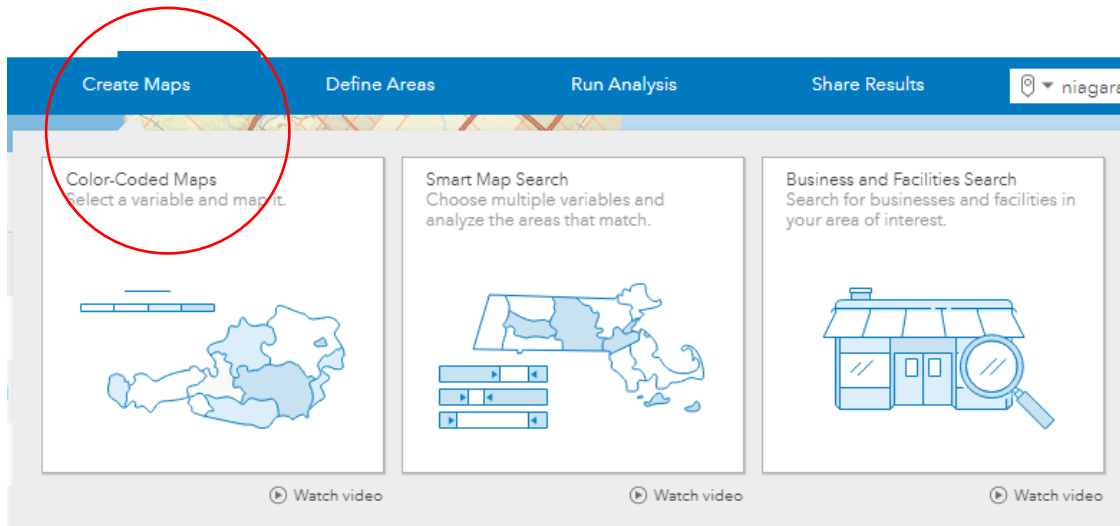
NOTE: In subsequent sessions, when you sign in and go to the Maps tab, you will see a list of your previously created projects. To work on a project, move the pointer over the project thumbnail and click Open. You may also click Create Project to create a new one.

The default map view is displayed.



Creating maps using the Colour Coded option

1. In the Search box at the top right of the window, enter an address or location (i.e. St. Catharines, Ontario, CAN) and hit **enter**.
2. Use the zoom tools on the right or mouse wheel to zoom out until the Niagara Region is visible.
3. Select **Create Maps > Color-coded maps** (additional mapping options will be discussed later).



4. Step 1 "Click on a variable to map it". Click Browse all variables.
5. Type the keyword "child care". Hit **Enter**.

6. From the Data Browser, under variables click the title **2020 Child Care Outside the Home**. (DO NOT CLICK THE STAR).
 A colour-coded map is automatically generated.

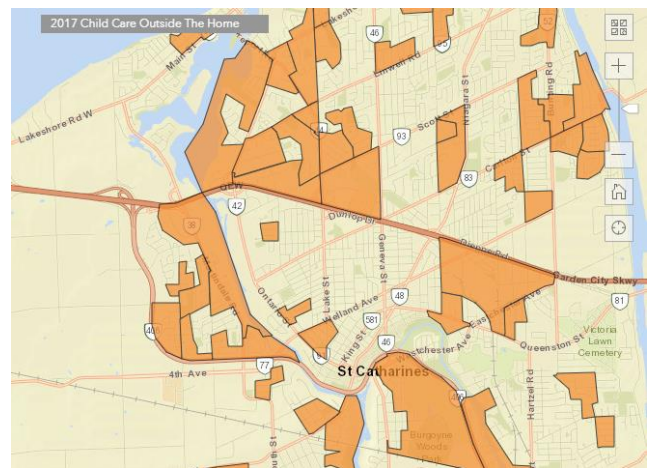
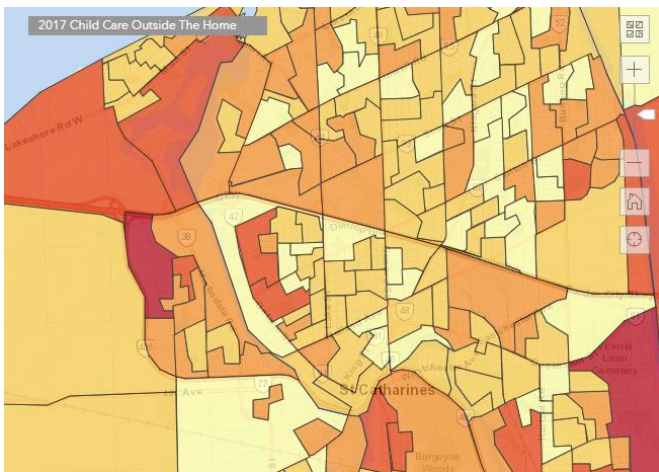
7. Hover the mouse over the zoom slider on the right and select **Dissemination Areas** to see the data displayed at a more granular geography.



8. From the legend on the left, click a class range interval and notice the map updates to reflect only that group.

9. Click “Reset” to view the full data.

NOTE: This variable represents the total cost of child care per Dissemination Area.



10. Change the zoom level to reveal automatically updated data.

Part Three: Creating maps using the Smart Map Search option

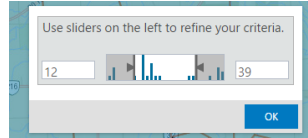
The **Smart Map Search** option allows you to select multiple variables and explore any correlation between the variables.

1. At the top, click **Create Maps > Smart Map Search**
2. Click on a variable list or select up to five variables > then **Browse all variables** to open the Data Browser.
3. Search for the following 3 variables for the current year:
 - a. Spending > Household Operation (Hint: use the arrows under keep browsing)> **2020 Child Care Outside The Home**
 - b. Categories > Households > Children at Home > 2020 Total Children At Home By Age > **2020 Children At Home: Under 5**
 - c. Categories > Jobs > Labour Force > 2020 Household Population 15 Years or Over by Labour Force Activity > **2020 Labour Force: Labour Participation Rate**

d. **HINT: the number of selected variables is indicated in the top right of the Data Browser.**

Selected variables 3

4. Click **Apply**. You are prompted with an instruction bubble regarding the method for adjusting classification.



5. Change the 2nd variable to reflect % of households that have children at home under the age of 5.

6. Use the sliders to refine the criteria.

The image shows dissemination areas that have a high expenditure on child care; greater than 20% of **households have children under 5** at home and the participation rate is greater than 65%.

7. Click Next to **View Results Table** and explore the values of the highlighted dissemination areas.

8. To expand the results table click **View Full Table**.

9. You can also Export the table to Excel at this point to run further analysis by clicking **Export to Excel**.

35260612	CA\$434.39
35260741	CA\$501.3
35260835	CA\$625.55
35260836	CA\$1,052.41

[View full table](#)

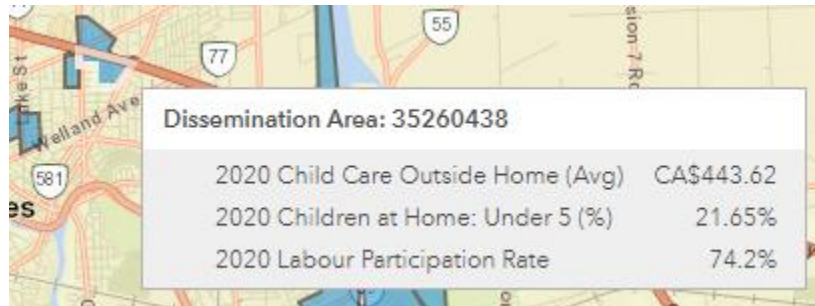
Overlay color

Transparency

10. Click **Back** to return to the Smart Map Search results OR click Next to continue.

11. Hover the mouse over the map to see a quick view of the statistics in question.

In summary: This map illustrates dissemination areas with folks who spend a lot of money on childcare outside the home, have small children in the household and are part of the labour force.

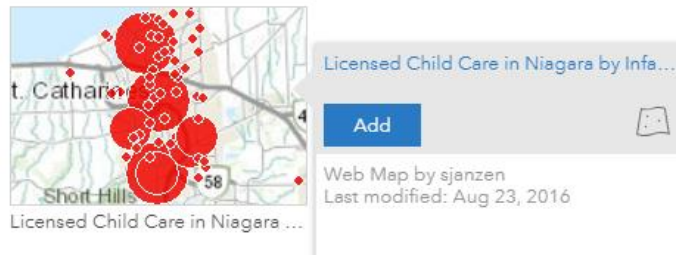


Part Four: Adding point data

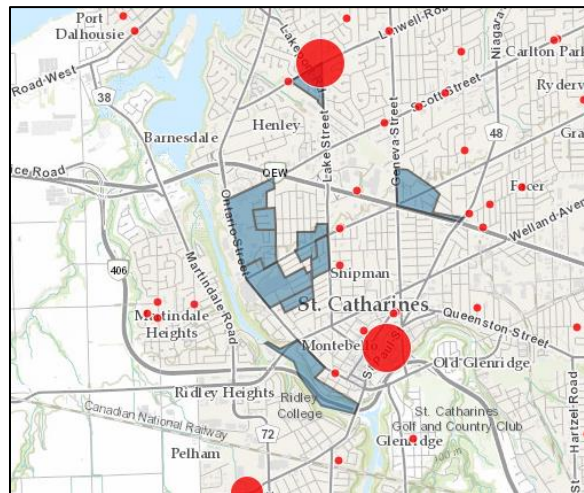
The next question is: “Where are the child care centres?”

1. Click **Create maps > Business and Facilities Search** (show more options; note NAICS/SIC code search)
2. Enter the term “child care”. Click **Go** to run the query.
3. Browsing the results you may see unwanted terms such as “Thorold” and “Beamsville”. Uncheck these options and see the map update to reflect the change. Alternately, click ‘only’ beside St. Catharines.
4. Click **Next**. There are a variety of options for displaying the data. To map the data based on a count (i.e. business revenue or number of employees) click the down arrow and select **Counts and Amounts (size)**.

5. Although this data is interesting, there is a web source that would be even more useful. Click **Back** twice to remove the business search results.
6. Select **Add Data > Web Maps and Layers > Select My Organization**; search “Child Care”.
7. Select **Licensed Child Care in Niagara by Infant Capacity > Add**

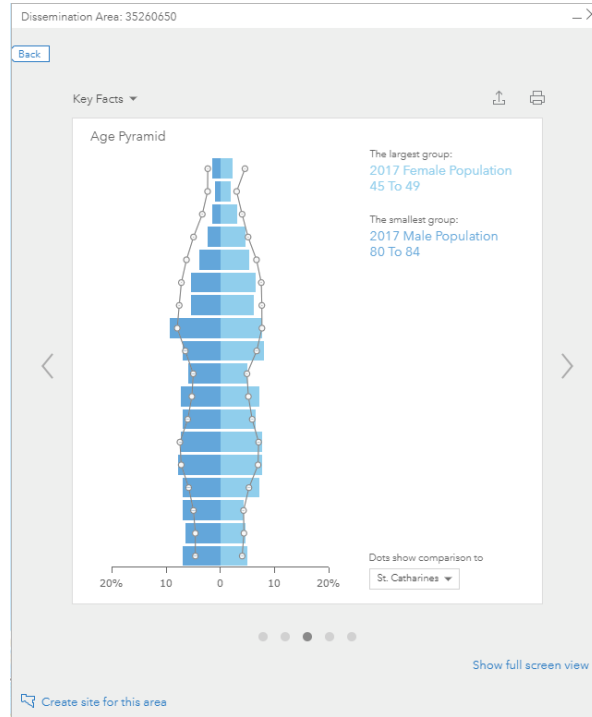


8. These data reflect all licensed child care centres by infant capacity for Niagara.

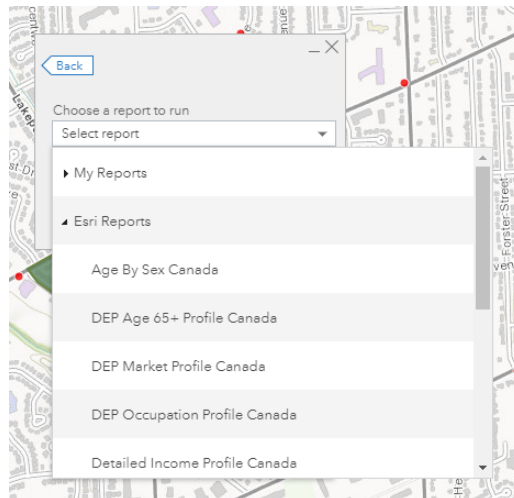


Part Five: Further study (infographics and reports)

1. To further enhance our understanding of areas in need of childcare for infants we can select a Dissemination Area (DA) of interest and study the available infographics (age pyramid; HH income; Family size).
2. Click one of the highlighted DAs. A popup window provides a summary of the 3 variables we included on the map.
3. Click the **Infographics** option.
4. Use the arrows to tab through the available graphics.
5. From the Infographics window, click the export Button to save a graphic to a file.



- Click the **Back** button and click **Reports** to select from a variety of statistical summaries to learn more about the neighbourhood. (Format options PDF, XLS)

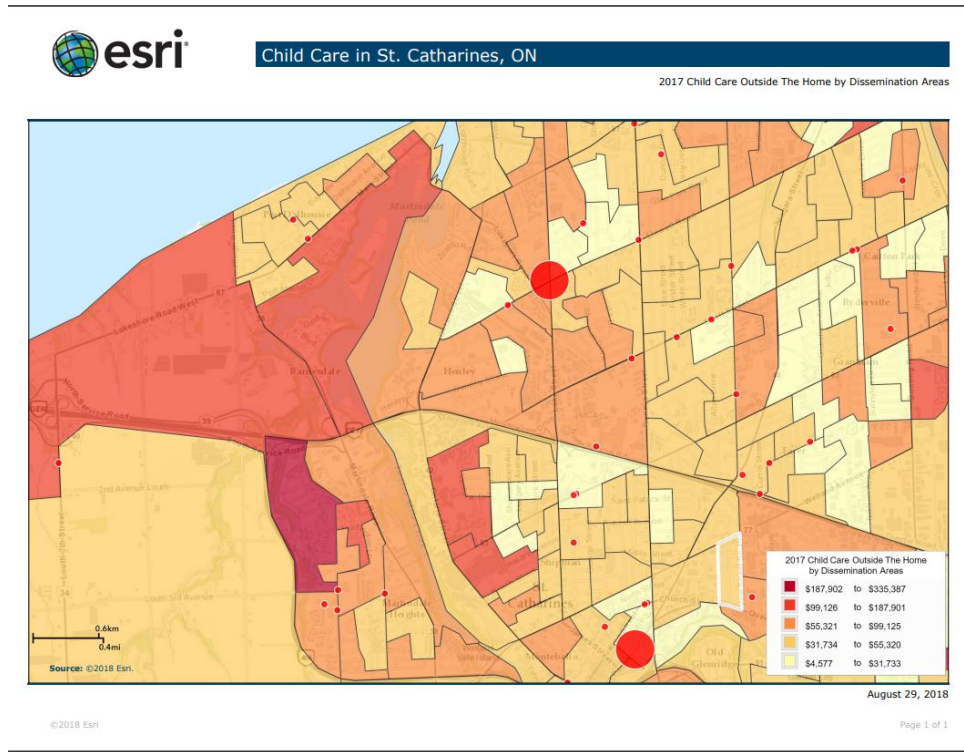


Part Six: Saving a map



- From the options to the right of the map, click the **PDF** icon.
- Enter a title and click **create PDF** or change the view to Image and create a JPEG version of your map.
- When the map is prepared, click the title in the pop-up window to view, download or print.

NOTE: The option for showing a legend on the map is grayed out if you have used Smart Mapping options. When the map reflects colour-coded variables, the Show Legend option is activated.



More info about BAO, data sources, training resources, credit consumption:

Business Analyst Web App <http://doc.arcgis.com/en/business-analyst/web/welcome.htm>

Description: <http://www.esri.com/software/bao/> includes short video introductions

Credit Consumption: <http://www.esri.com/software/arcgis/arcgisonline/credits>

Where does the data come from? <http://doc.arcgis.com/en/business-analyst/web/data.htm>

Canadian data - <http://doc.arcgis.com/en/esri-demographics/data/canada.htm>

Online Training:

“Introduction to Business Analyst Online”

<https://www.esri.com/training/catalog/5952ce7fa1f3fd54a988e5a0/introduction-to-arcgis-business-analyst/> (1.5 hours)

“Site Analysis Using ArcGIS Business Analyst” <https://www.esri.com/training/catalog/5a1da2d973ca5830269bc1dc/site-analysis-using-arcgis-business-analyst/> (1.5 hours)