

Accessing Endicott's ArcGIS Online Account

- Enter this URL to sign in: <https://ecat.maps.arcgis.com/home/signin.html>
- Then enter your username and the password that you created when you activated your ArcGIS account.



Sign in to Endicott College 

Username

Password

☐ Keep me signed in

SIGN IN

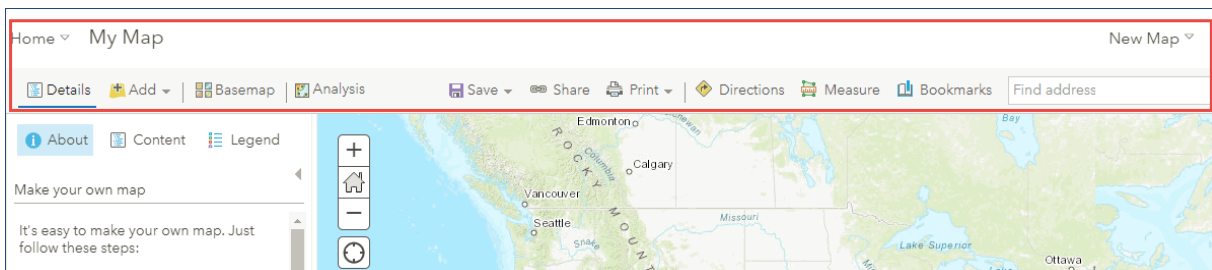
[Forgot password?](#) [Forgot username?](#)

- Once you have logged in, you will see the Dashboard Home page.

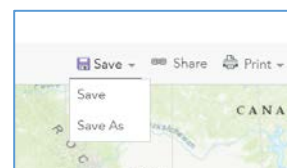


Part 1: Create %Racial/Ethnic Populations in Boston Neighborhoods Map

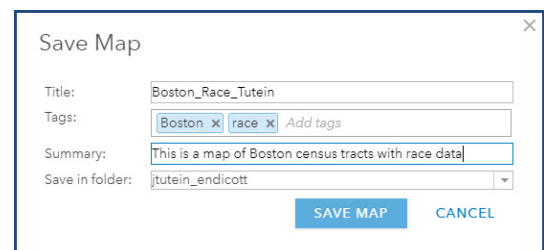
1. Create a new map by clicking on the **Map** option on the Dashboard menu bar. If this first time accessing Map, clicking Map will open a New Map that displays a world topographical map.
 - Notice the **Ribbon**/ menu bar at top of map and the left side of the map which displays **Details** pane.



2. Locate the **Save** menu option in the Ribbon and click **Save**, **Save** and complete the prompts in the Save Map dialog that displays:



- For **Title**, enter **Boston_Race_YOURLASTNAME**
- Enter **Tags**: **Boston, race.**
- Enter a **Summary**: **"This is map of Boston census tracts with race data."**
- Click **Save Map** to save the data and close the dialog.



Save Map

Title:

Tags: [Add tags](#)

Summary:

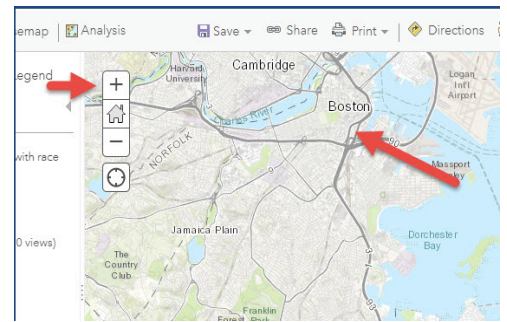
Save in folder:

SAVE MAP **CANCEL**

Step by Step Guide: Create %Racial/Ethnic Populations Map for Boston neighborhoods.

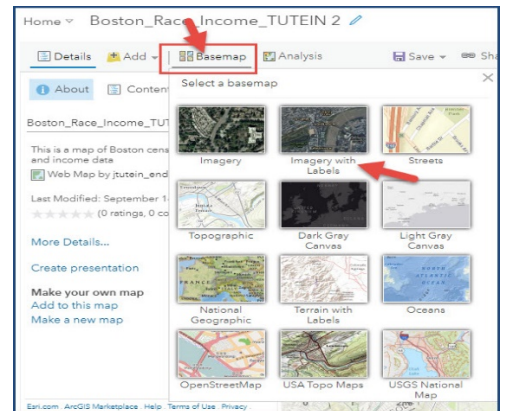
3. In the map section, **zoom** into the Boston area:

- Use the **+** button in the Maps Navigation panel and **your cursor** to zoom and position the map on Boston and surrounding towns.



4. Click the **BaseMap** option in the Ribbon to access different basemaps.

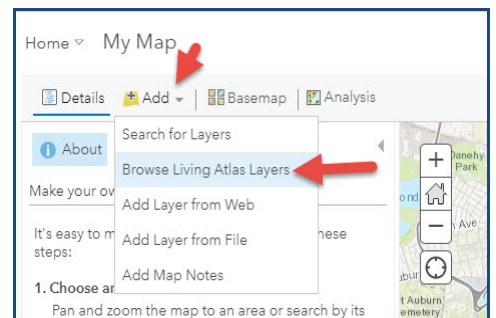
- Explore the various basemaps and zoom in and out.
- When you are finished exploring, select the **Imagery with Labels** basemap.
- Click **Save** to save your updated map.



Add Data Layer for % White Population in Boston Neighborhoods

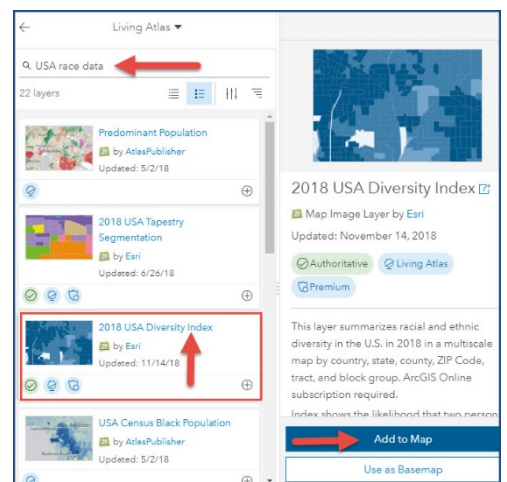
5. Click **+Add** in the Ribbon

- Select **Browse Living Atlas Layers** in the drop-down menu.
- In the search field, type **USA race data**.
- Scan the list and click the **2018 USA Diversity Index by ESRI** layer.
- A menu with a summary of the variable and source displays.
- Review the summary information.
- Click the **Add to the Map** button at the bottom and click **X** to close the Summary pane.



You will use this dataset because ESRI is a trusted source. It is a trusted source because the organization relies on data from the US government (specifically, the 2010 Census from the US Census Bureau) to calculate demographic estimates for 2018 and social scientists consider this to be a fairly good standard for basic demographic data. In our final analysis, we should factor the quality, or limitations, of calculated estimates.

- **Save** your map

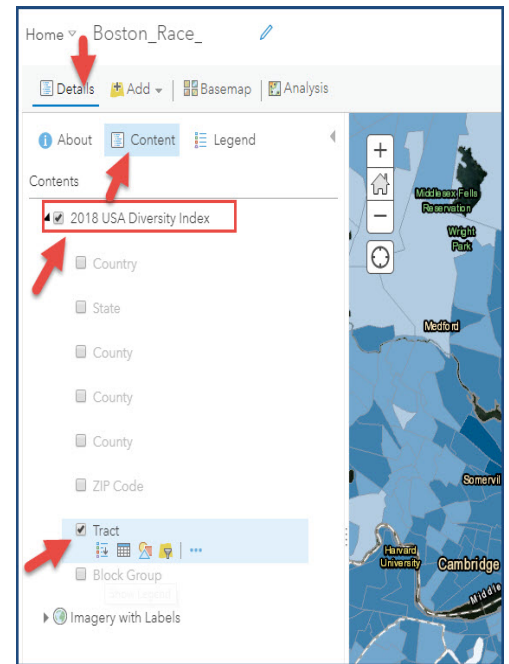


Explore Race Data Layer Details

- Click **Details** in the Ribbon to access map content, legends and general information.
- Now click **Content** to display the map layers.
- Verify that the **checkbox** next to **2018 USA Diversity Index** is **checked**. If not, check it.
- Click on **triangle** next to **2018 USA Diversity Index** layer to expand the list of geographic layers.

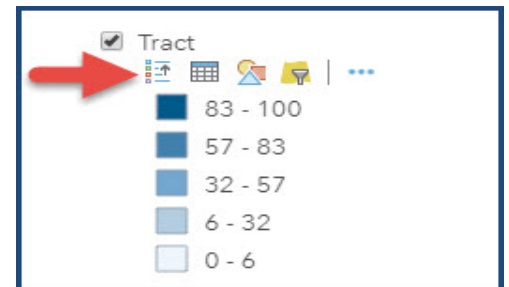
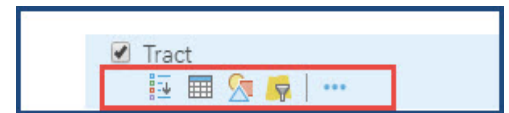
- You will see that you can look at **2018 Diversity Index** by country, state, county, county, zip code, tract, and block group level.
- We just want to look at tract level, so make sure there is only a **check mark in the box next to tract**.

TIP: Also, **Tract** should be the only word in the list that is **in black** and all the other words should be in light gray. If not, zoom in and out on the map section until **Tract** turns black.



- Hover your mouse below **Tract**. A series of images displays:

- Click on the first image: **Show Legend**, to see that the map is showing a different color for different ranges of median household income.



- Hover your mouse below **Tract** and click on the second icon: **Show Table**.

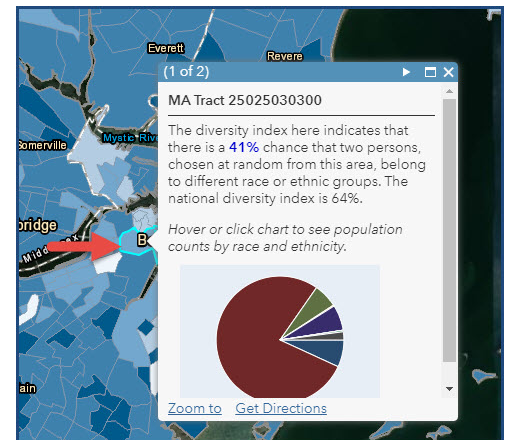
- A data table displays below the map with the quantitative and qualitative data attributes behind the visuals you are seeing in the map.

ID	NAME	ST_ABBREV	2018 Total Population (Esri)	2018 White Population (Esri)	2018 Black/African American Population (Esri)	2018 American Indian/Alaska Native Population (Esri)	2018 Asian Population (Esri)
01083020402	010830204.02	AL	5,686	4,637	371	61	36
01071950600	010719506.00	AL	5,676	4,798	535	74	26
01101002900	011010029.00	AL	8,042	270	7,589	7	10
01117030102	011170301.02	AL	4,478	3,115	1,258	15	2

Step by Step Guide: Create %Racial/Ethnic Populations Map for Boston neighborhoods.

12. Click on a **Boston census tract** in the map area.

- A **MA Tract XXXXX** menu displays with detailed information about median household income for the tract. The **last 6 numbers correspond** with the census tract numbers from **Streets-and-Neighborhoods_tracts_2017.pdf**.
- When you're finished, turn off the table by clicking the table button again.



Styling Layers – Calculate % White Pop and Display Red Heat Map Style

13. Under the tract layer, click the third icon: **Change Style**.

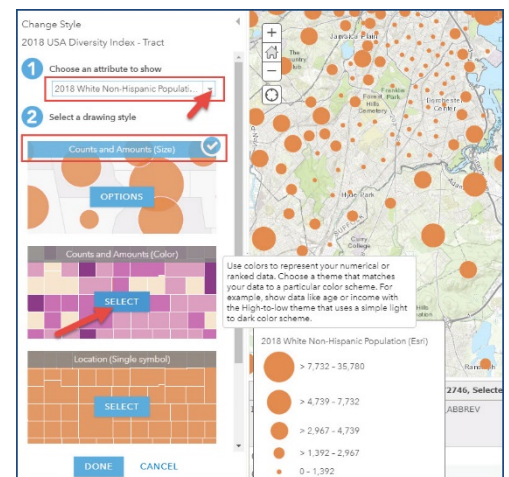
- The Change Style Dialog displays

14. Under **1 Choose an attribute to show**,

- Select **2018 White Non-Hispanic Population (ESRI)** from the drop-down menu.
- The map refreshes and shows % white attribute per tract with the Size style because it is current selected style.
- To change the drawing style:

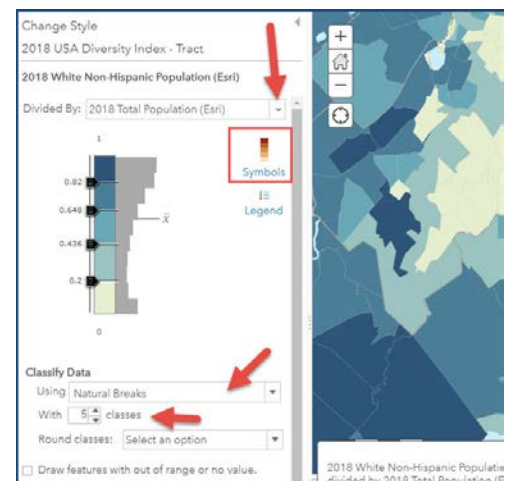
15. Under **2 Select a drawing style**,

- Select **Counts and Amounts (Color)** and click on **Options**.



16. In the **Divided By** option, select **2018 Total Population (ESRI)**.

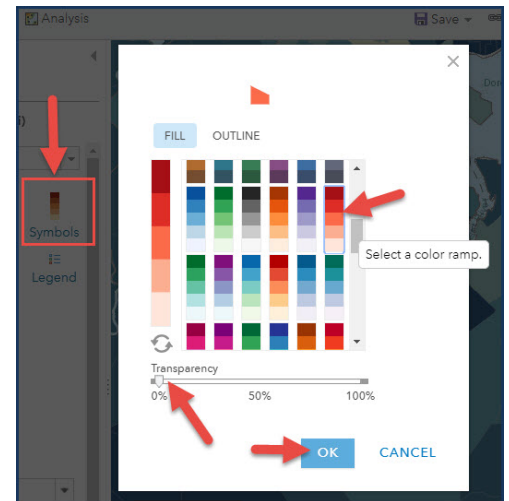
- **% white population** is now calculated and displayed for each tract.
- Under **Classify Data**, select **Natural Breaks**.
- Under **With ___ classes**, select **5**.
- Remember to **Save** your map changes.



Step by Step Guide: Create %Racial/Ethnic Populations Map for Boston neighborhoods.

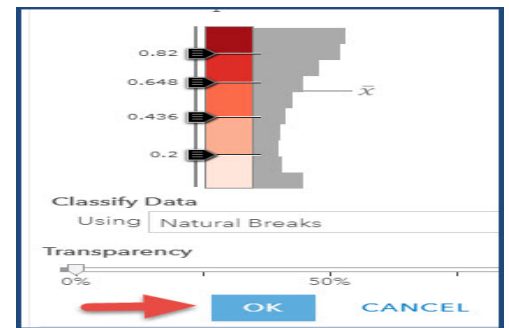
17. Click the **Symbols** image in the Change Style menu.

- Create a **red heat map** with lower percentage of whites in light red and higher percentage of whites in dark red.
- Make sure the color is on **0% transparency**.
- Click **OK** to close the color dialog.



18. Now to confirm your style changes:

- Click **OK** at the bottom of the **Change Style** menu.
- Then click **DONE** to return to the Content list.
- Remember to **Save** your map changes.



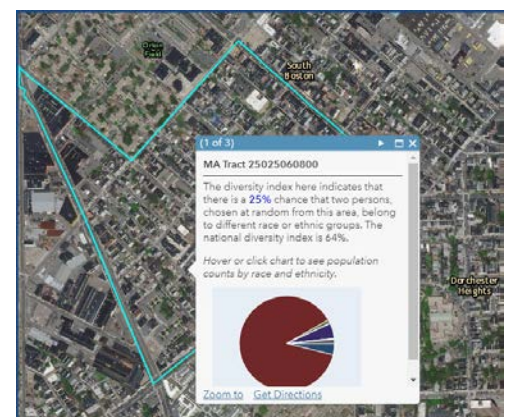
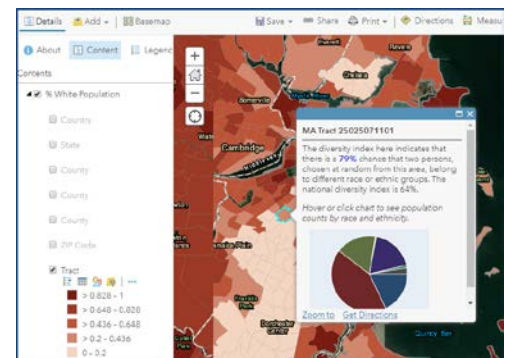
Zoom in to View Physical Differences of High and Low % White Population Tracts

19. Under **Tract**, click the **Legend** icon to refresh map

- Look at the map and evaluate patterns in the locations of high and low % white tracts.

20. Click on a **light red census tract** and **zoom in**.

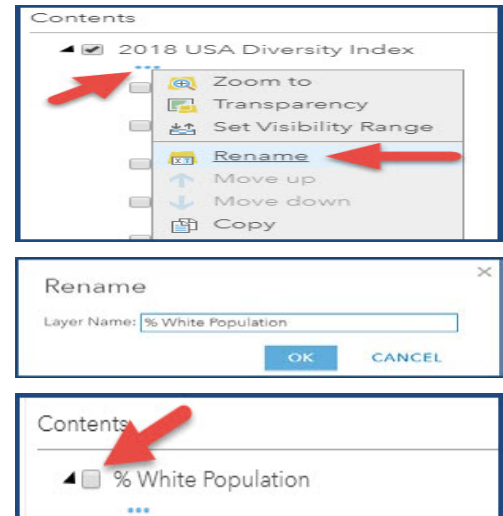
- Consider the layout of the neighborhood (e.g., presence/absence of parks, space between homes, houses vs. apartment buildings, medical centers, etc.).
- Then pick a **dark red census tract** and do the same tasks (zoom, review neighborhood features)



Rename 2018 USA Diversity Index Layer

21. Click on the three dots below **2018 USA Diversity Index**.

- When a menu appears, click on **Rename**.
- Rename the layer you created, “**% White Population.**”
- **Unclick this layer** in preparation to create new layer.



Add Layer for %Race/Ethnic Population in Boston Neighborhoods

22. Repeat the above steps, starting at Step 5 to look at another racial/ethnic group. You must select a racial/ethnic group based on the assignments below.

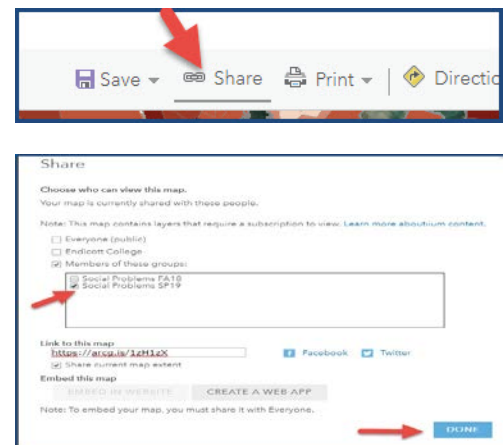
- If you last name starts with A-I, look at the % black, non-Hispanic population
- If you last name starts with J-Q, look at the % Asian, non-Hispanic population
- If you last name starts with R-Z, look at the % Hispanic population

Remember to **Save Your Map** changes.

Share Your Map to the ARCGIS class group

23. Click the **Share** link to the right of Save link

- When the Share menu displays, select **the Members of these groups checkbox**.
- Then select the **Social Problems current semester group**.
- Click **Done** to close the Share window.
- Once you map is shared to the group, everyone can view each other's maps by clicking **Home and Groups** and choosing current semester group..



24. Follow this link to get additional instructions on how to export the map image to your computer (useful for as you prepare your final paper): <http://pro.arcgis.com/en/pro-app/help/sharing/overview/export-a-map-or-layout.htm>