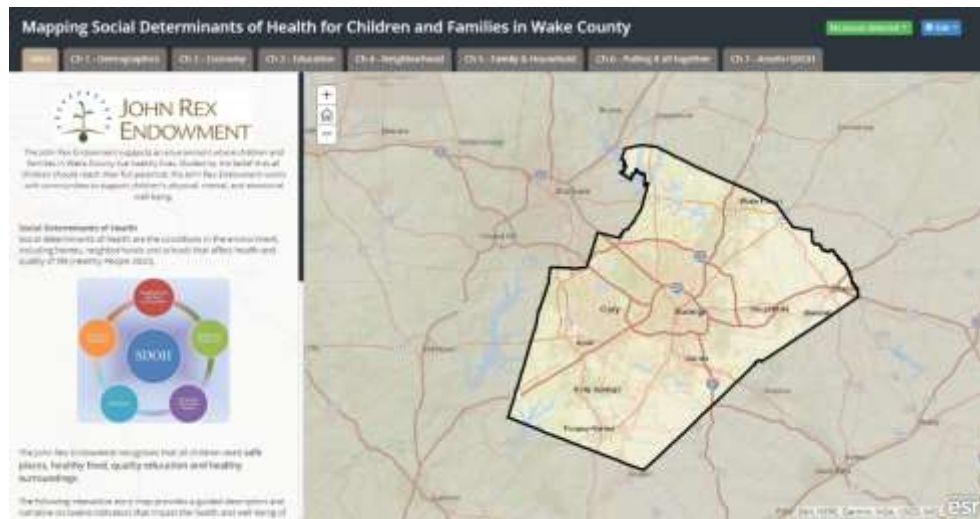


User Guide:

Mapping Social Determinants of Health and Assets for Children and Families in Wake County – A Story Map



Shareable link to <http://arcg.is/2pDFuXr>

-or-

<https://tinyurl.com/JRE-SDOHmap>

The story of Mapping Social Determinants of Health (SDOH) for Children and Families in Wake County examines the social, economic and environmental factors that influence health. Wake County organizations who work to create a healthier environment can use the story to narrow their focus on specific neighborhoods or they can view specific indicators across the county. For example, if a goal is to increase access to high quality child care facilities then the story map can be used to locate which neighborhoods do not have access to these resources. In addition, if interested in increasing SNAP enrollment, the story maps paints a clear picture of where the highest concentrations of children living in poverty are located and where SNAP enrollment is low.

Note that most of the data is sourced from the U.S. Census Bureau's American Community Survey (ACS) 5-year estimates from 2011-2015. The terms 'neighborhood' and 'census tracts' are interchangeable. The U.S. Census Bureau publishes ACS estimates at the block group and tract level. Census tracts were chosen as the estimates at this level because they are more stable and reliable compared to block groups which consistently have very low reliability estimates. There are a total 187 U.S. Census Tracts in Wake County, two of which are uninhabited (RDU and Umstead Park).

Story Map Navigation Tips

1. When first viewing the map tabs and layers they might take a few seconds to load. After being viewed the first time they will subsequently load more quickly as cached images will be stored in the browser.
2. **Navigation between the SDOH 'environments'** occurs by clicking on the chapter tabs at the top of the page. Specific indicators and other maps are included within each tab and can be accessed by scrolling through the text on the right pane.
3. **Navigation within maps:** There are two ways to zoom in and out on the maps. The mouse wheel can be used or the '+' or '-' in the upper left hand side of the map can be used (Figure 2). Once an image is zoomed in, clicking and dragging is possible on the map to pan and pinpoint desired location(s) of interest. As the maps are zoomed in on, additional details will be displayed such as city and town names and roads.
4. Once you are zoomed into your area of interest you can click on a neighborhood to access the SDOH data on that census tract in a **pop-up box**. Use the scroll bar to view all the info in the pop-up (Figure 1).
5. To return to the zoomed out view of Wake County, click the home icon in the upper left hand corner (Figure 2).

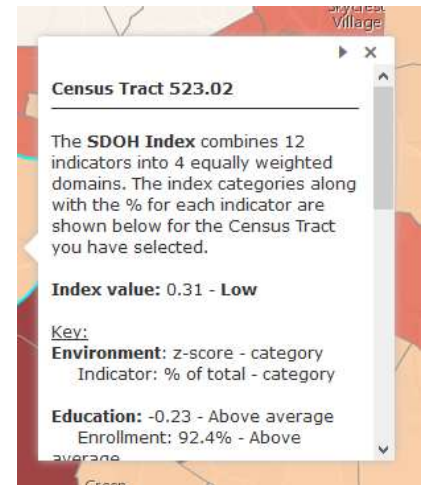


Figure 1. Example pop-up text box displaying SDOH data.

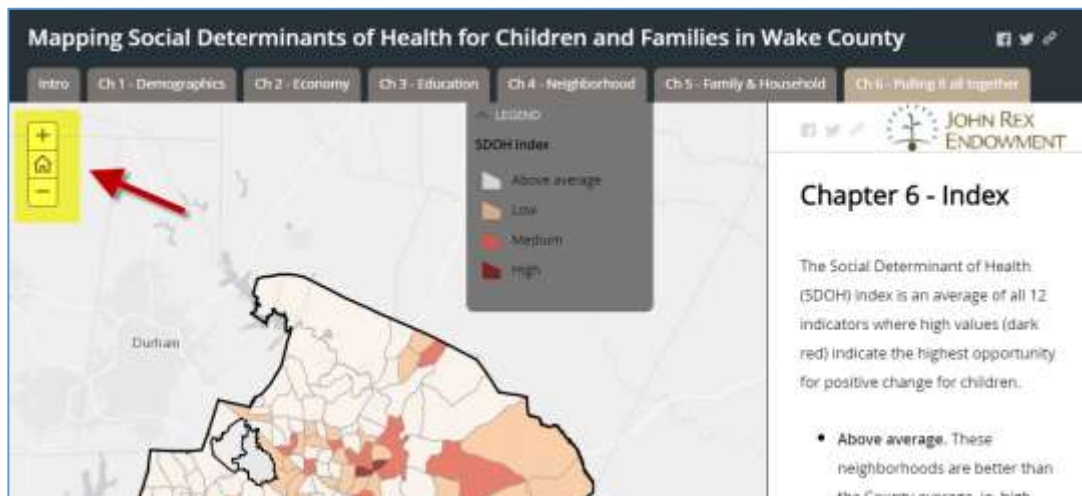


Figure 2. Zoom in with the + button, zoom out with the -, and return to the original extent with the home icon.

6. Brown buttons that say “Show INDICATOR” or “Turn layers OFF” (Figure 3) can be seen throughout the story. These buttons assist to explore the different indicators and help determine which particular census tract may be of interest. Turning all layers off while zoomed in will help identify road names and landmarks.

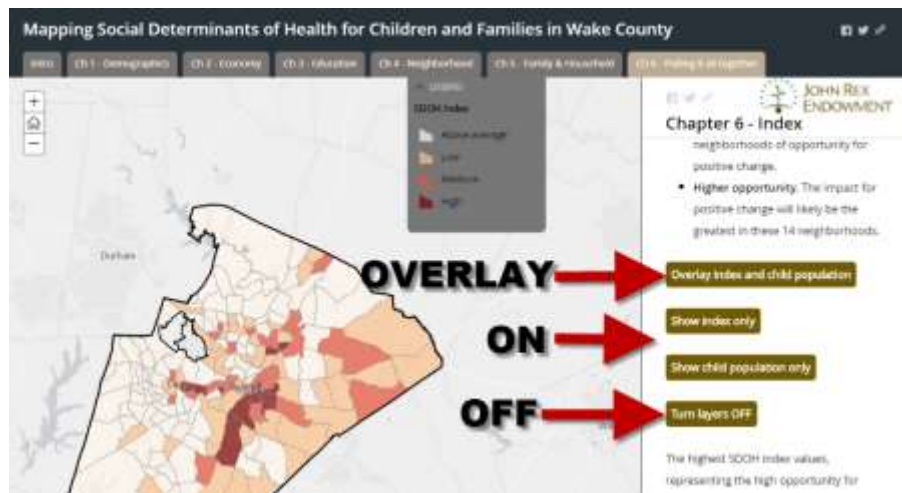


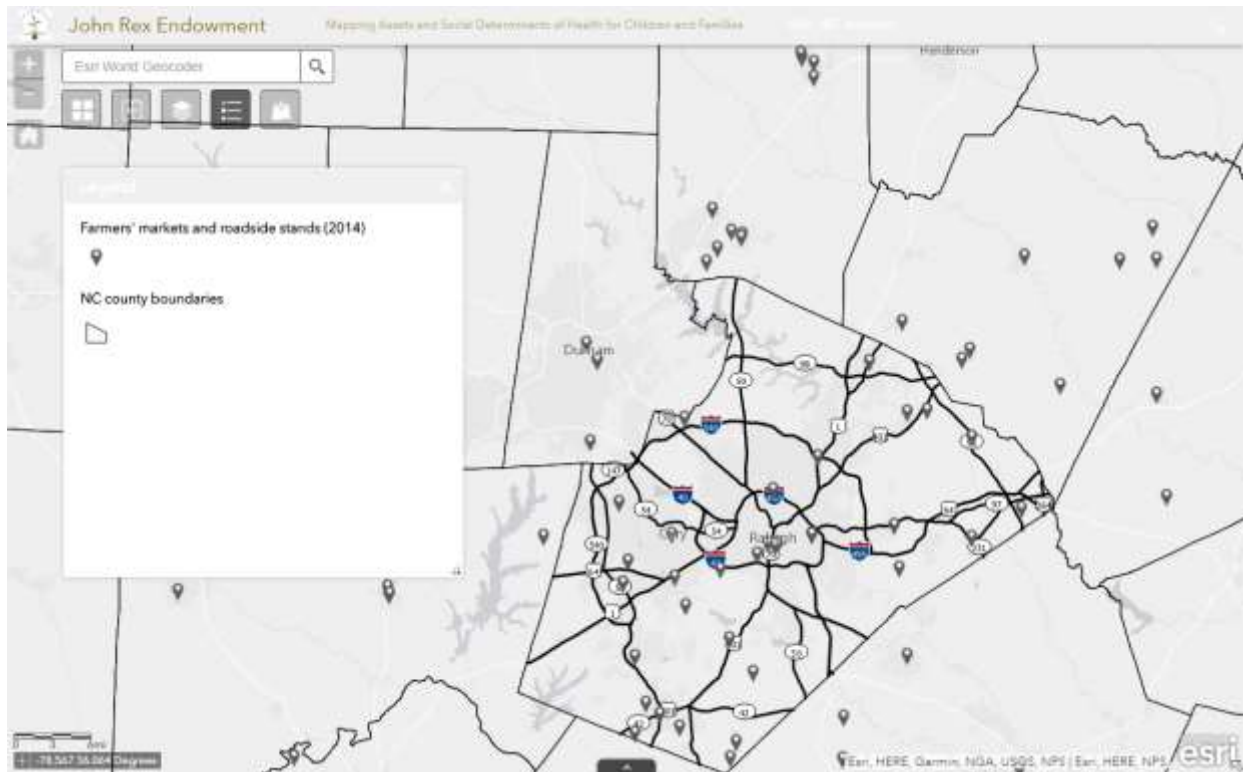
Figure 3. Overlay, On and Off buttons are found throughout the story map.

7. There is also the ability to ‘overlay’ multiple layers in several sections of the story. In Figure 3, ‘Overlay index and child population’ will show the index value in solid colors for each census tract and then place different size yellow dots on top of each census tract that represent how many children live there.

To embed the story in an existing webpage supply the following link to your web developers:

```
<iframe width="100%" height="800px"
src="https://unc.maps.arcgis.com/apps/MapSeries/index.html?appid=5eb9f9d962914ab19e5b454b30637104" frameborder="0"
scrolling="no"></iframe>
```

Chapter 7: Mapping Assets and Social Determinants of Health for Children and Families in Wake County



The Asset Chapter of the Social Determinants of Health Story Map is structured more like a mapping application and less like a guided story. In the place of a guided narrative there are a set of tools that allow you more power to manipulate each individual data layer. For example, you will be able to turn on and off all of the layers, change their transparency, swipe between layers or even add your own data.

Assets Map Tips:

1. **NAVIGATION.** Similar to the Story Map, there are two ways to zoom in and out on the maps. The mouse wheel can be utilized or the '+' or '-' in the upper left hand side of the map can be used. Panning is possible by clicking and holding the left mouse button, just as on Google Maps. As the maps are zoomed in, additional details will be displayed such as city and town names and roads.
2. **TOOLS.** A set of tools are located in the upper left hand corner to help manipulate the data (Figure 4). While hovering your mouse over the tool icons, text will appear with the names below. A brief description of each tool is outlined below.



Figure 4. Asset map tools.

- a. **ZOOM IN OR OUT.** The plus symbol zooms in closer while the minus symbol zooms out.
- b. **HOME.** This button will return to the zoomed out view of Wake County.
- c. **BASEMAPS.** Allows switching between a set of basemaps maintained by ESRI (Figure 5). By default the Light Gray Canvas is loaded as this allows for high contrast between map layers and the background.

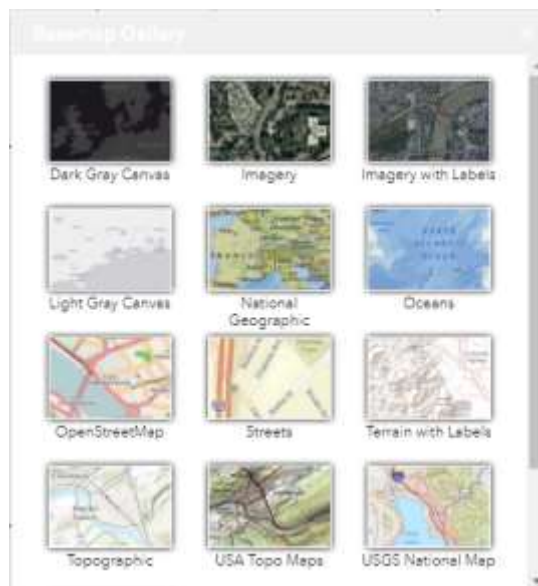


Figure 5. Basemap gallery.

- d. **SWIPE.** This tool allows swiping one layer on and off. This is an alternative to turn the layer on and off in the Layer List. A layer has to first be turned on in the Layer List before swiping on/off can occur. In the adjacent image, the SDOH index is the chosen swipe layer. To disable the swipe tool click on the icon again so that it is no longer dark gray.

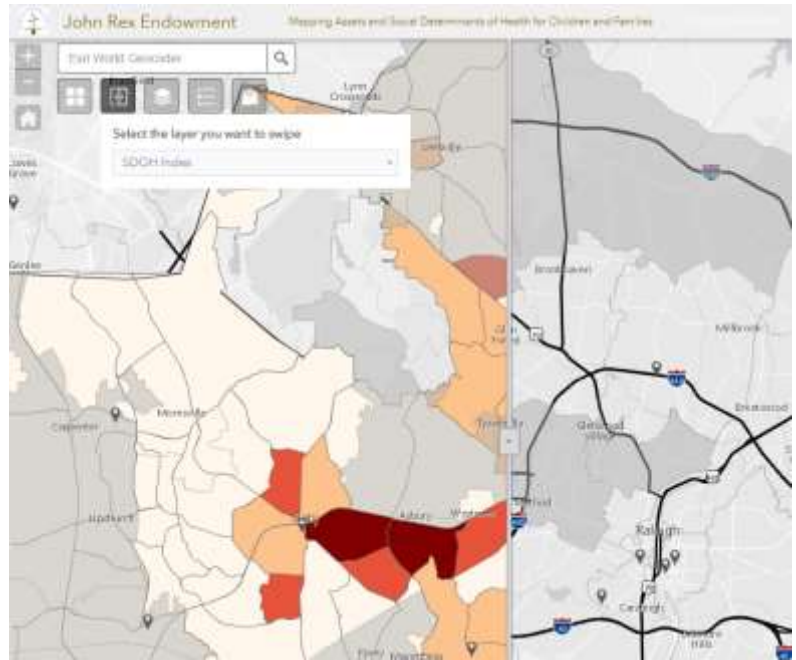


Figure 6. The swipe tool

- e. **LAYERS.** This tool will shows all of the available layers and this is how layers are turned on and off, transparency can be changed, drawing order can be adjusted, and the attribute table can be viewed. Checking the box next to the layer name turns the layer on or off. If a layer is 'grayed out' that means it is not viewable at the current map scale. For example, the bus stops can only be viewed when you zoom into a neighborhood since showing them at the full extent would obscure large portions of the map since there are so many stops. Clicking the small arrow to the left of the check box will show the legend for that particular layer. In the adjacent image, highways are shown, bus stops are turned on but not visible and the legend for total child population has been shown, but the layer is not turned on.

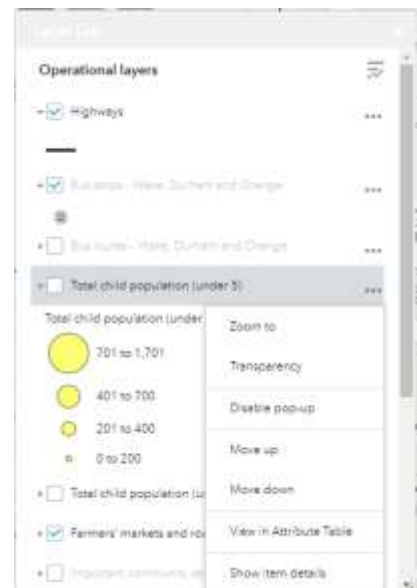


Figure 7. Layers tool or the table of contents.

Additionally the image above shows how to *zoom to* the layers extent, how the Transparency can be adjusted, how *pop-ups* can be disabled as well as how to move the layer above or below others and open the *Attribute Table*.

- f. **LEGEND.** By default the legend will be displayed but only one tool can be active at one time and if you open the layers tool, the legend will disappear. Clicking this button will bring the legend back (Figure 8).
- g. **ADD DATA.** The Add Data tool allows bringing in data from ArcGIS Online, another GIS server or from a local file. Shapefiles (in a zip file) or data from a spreadsheet can be added. Note that data uploaded during a session is temporarily added to the map and will not be stored there permanently. Take careful note of the steps taken to add data in order to reproduce this for subsequent visits to the site.

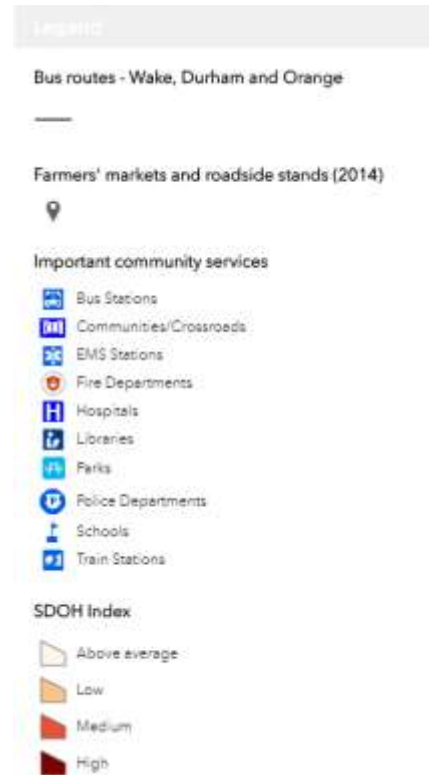


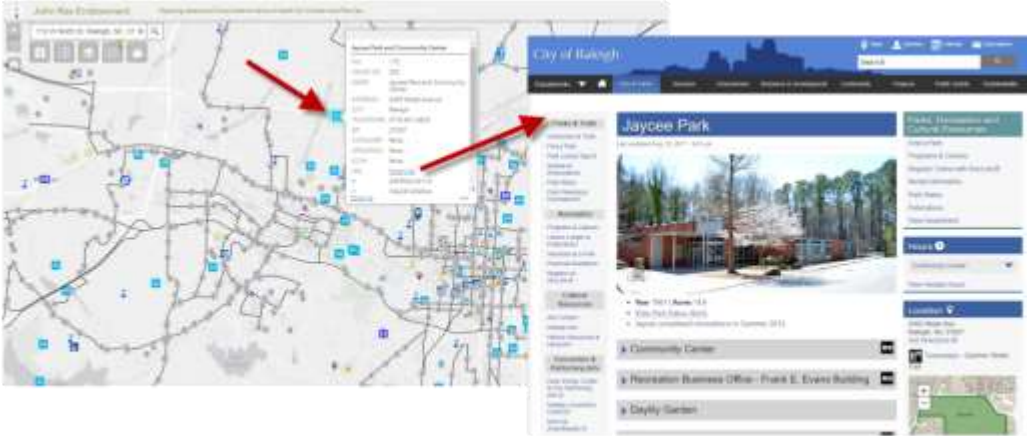
Figure 8. The Legend tool.

- h. **SEARCH BAR:** The text “ESRI WORLD GEOCODER” is in the search bar indicating that searching for any address in the world using this search bar is possible. Typing an address into this box allows locating points of interest on the map. Additionally, a placemaker may be added as seen below in Figure 9.



Figure 9. The search bar allows you to search for any address in the ESRI World Geocoder

Note that some of the pop-ups have hyperlinks that will relocate to a dedicated website for that particular resource. The image below displays the park location for Jaycee Park and Community Center and the “More info” link will bring a user to the Jaycee Park website.



One final powerful utility is the ability to view all of the attribute, or tabular data, behind the maps. From the Layers Tool the Attribute table of any layer can be opened. The image below displays the attribute table for the Important Community Services. The attribute tables for Bus Stops, Bus Routes, Farmers’ Markets and Points of Interest are also viewable by clicking on the tabs.

