

Benchmarking 2.0

Dashboard Tutorial

The Benchmarking 2.0 Dashboard is the one stop visualization tool to display municipally collected data for the Benchmarking 2.0 project.

Current Partners

Apex, Chapel Hill, Charlotte, Concord, Goldsboro, Greensboro, Hickory, Raleigh, Wilson, and Winston-Salem are the municipalities with data available on the dashboard as of 2022.

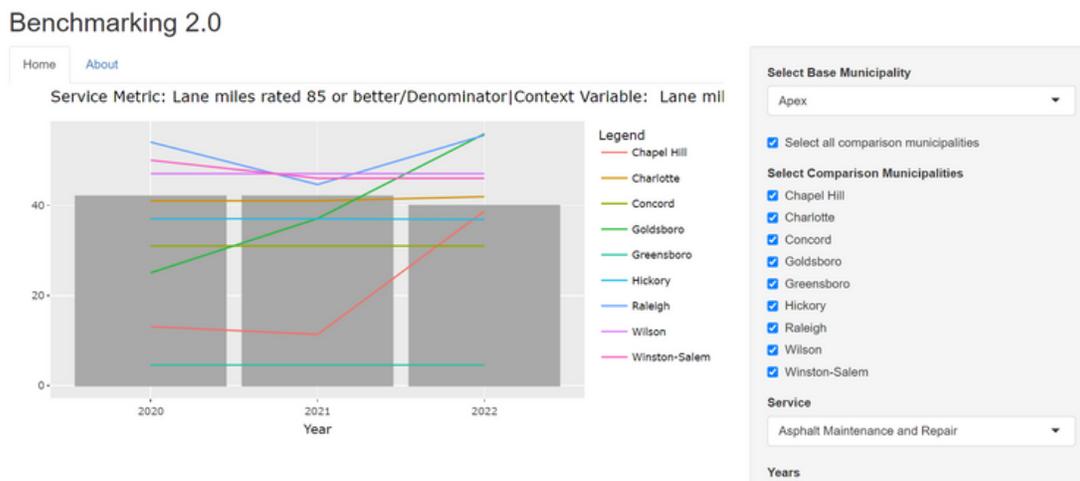
Access

To access the dashboard, navigate to <https://sogbenchmarking.shinyapps.io/Benchmarking2/>, or click the link embedded here.

The Dashboard:

The selections for the dashboard will look similar to the image on the right. This may not be exact, due to updates in development, but it should have a similar appearance and the same functionality.

This is the main page, where you will be able to make your selections to generate a graph. Details on how to use this dashboard will be discussed in depth on the next page.



Step 1: Select your base municipality

The base municipality is the main municipality you would like to view in comparison to the other municipalities. Click on the dropdown under the title of "Select Base Municipality". Clicking anywhere within the red box will expand the tab, and show you all the options. You can then click on the municipality within the list to select it.

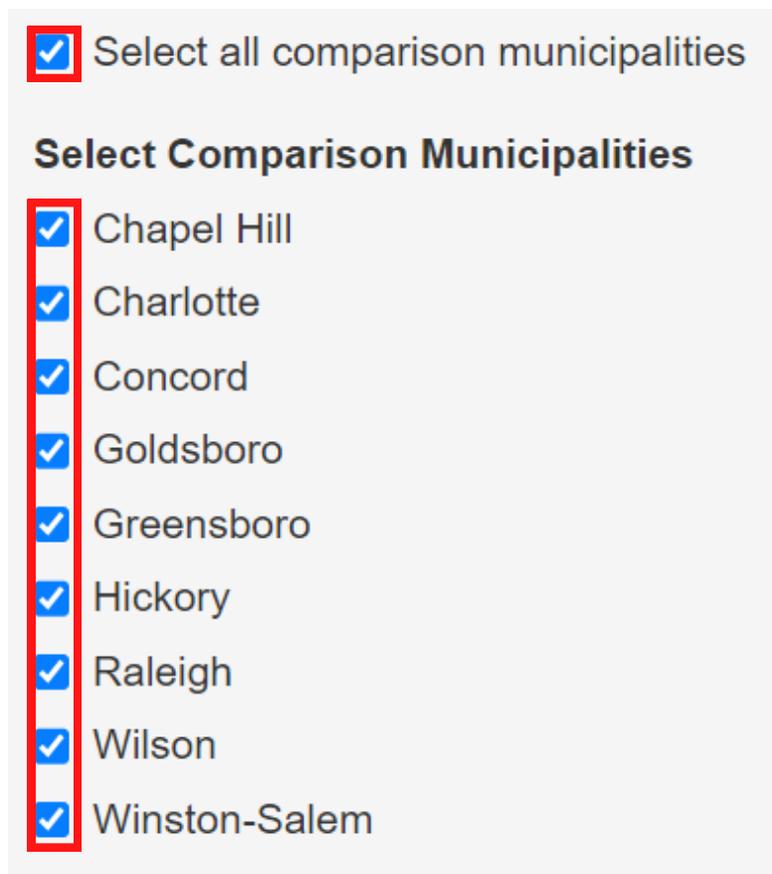


The screenshot shows a dropdown menu titled "Select Base Municipality". The current selection is "Apex". A red rectangular box highlights the entire dropdown area, including the title and the selection text.

Step 2: Select your comparison municipalities

The comparison municipalities are the ones you would like to view in comparison to the base municipality. If you'd like to see all of the comparison municipalities, you can click the line labeled "Select all comparison municipalities" to check all of them.

Otherwise, you can click on any of the checkboxes, shown in red, to select or deselect them. The boxes with a check are the ones which will be displayed in comparison to the base municipality.



The screenshot shows a list of comparison municipalities with checkboxes. The first checkbox, labeled "Select all comparison municipalities", is checked and highlighted with a red box. Below it, the title "Select Comparison Municipalities" is displayed. A list of municipalities follows, each with a checked checkbox and a red box highlighting the checkbox area:

- Select all comparison municipalities
- Select Comparison Municipalities**
- Chapel Hill
- Charlotte
- Concord
- Goldsboro
- Greensboro
- Hickory
- Raleigh
- Wilson
- Winston-Salem

Step 3: Select your service

The service is the municipally provided service, about which you'd like information. This will be done similarly to Step 1. Click on the dropdown under the title of "Service". Clicking within the red box will expand the tab, and show you all the options. You can click on one to select it.



The image shows a light gray rectangular box with the word "Service" in bold black text at the top left. Below it is a white dropdown menu with a red border. The text "Asphalt Maintenance and Repair" is displayed in the dropdown, followed by a small black downward-pointing triangle on the right side.

Step 4: Select your years

The years are the years of data which you'd like to be included on the graph. This will be done the same way as Step 2.

You can click on any of the checkboxes, shown in red, to select or deselect them. The boxes which have a check in them are the ones which will be displayed.



The image shows a light gray rectangular box with the word "Years" in bold black text at the top. Below it is a list of three years: 2020, 2021, and 2022. To the left of each year is a blue square checkbox containing a white checkmark. A red rectangular box highlights the three checkboxes.

Step 5: Select the service metric

The service metric is the metric which will act as the numerator in the calculation of the graph, or is the raw data you would like to view. To select this, click anywhere within the red box under "Select Service Metric", which will expand the dropdown with several options. It is worth noting that this will only display options for metrics which are within the scope of the service selected in Step 3.

You can also type here to search for an item in the dropdown. Once the item is located, you can click to select it as your service metric.

Select Service Metric

Lane miles rated 85 or better ▼

Step 6: Select your context variable

The context variable is the metric which will act as the denominator in the calculation of the graph. If you want to only view the raw data for the service variable, you can leave the "Use Denominator/Context Variable" unchecked. Checking that box, however, shown in red below, will bring up the dropdown menu for the context variable options.

To display a calculated graph, click within the red box under "Select Control Variable", which will expand the dropdown with options. This will only display options for metrics within the scope of the service selected in Step 3, and options for metrics taken from the US 2020 Census Data.

You can also type here to search for an item in the dropdown. Once the item is located, you can click to select it as your context variable.

Use Denominator|Context Variable

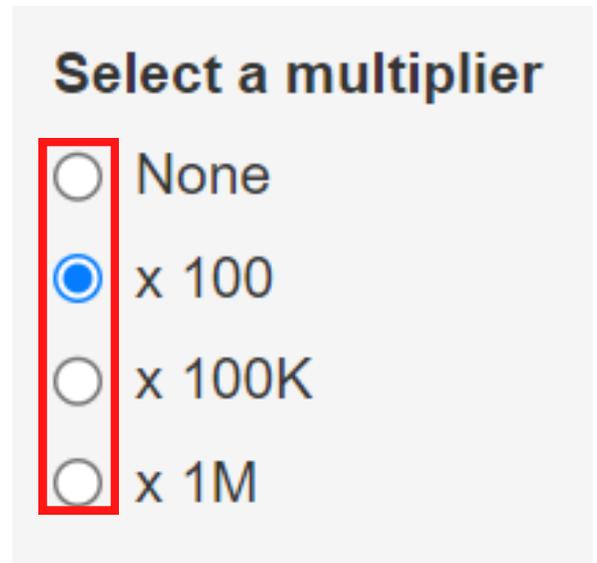
Select Denominator/Context Variable

Lane miles ▼

Step 7: Select your multiplier

The multiplier is the value which will be multiplied by your service metric values from Step 5. This will not change how your graph looks, it will only change the scale on the left of the graph, and makes things easier to read when scaled by large numbers. An example would be when dividing by population. A multiplier of 1 million would let you view your service metric per 1 million people, rather than per capita.

You can click on any of the buttons shown in red to select that option as your multiplier.



Select a multiplier

- None
- x 100
- x 100K
- x 1M

Step 8: Other options

The "Average of Comparison Municipalities" option will take the average of all the comparison municipalities selected in Step 2, and will display this as one line rather than having an individual line for each municipality. If this option is selected, then the "Add Confidence Interval (95%)" option will become visible.

The "Add Confidence Interval (95%)" will add a display to the graph to show the confidence interval for each year, within 95% accuracy.

You can click on either of the checkboxes, shown in red, to select or deselect them. The boxes which have a check in them are the ones which will be activated.

Average of Comparison Municipalities

Add Confidence Interval (95%)

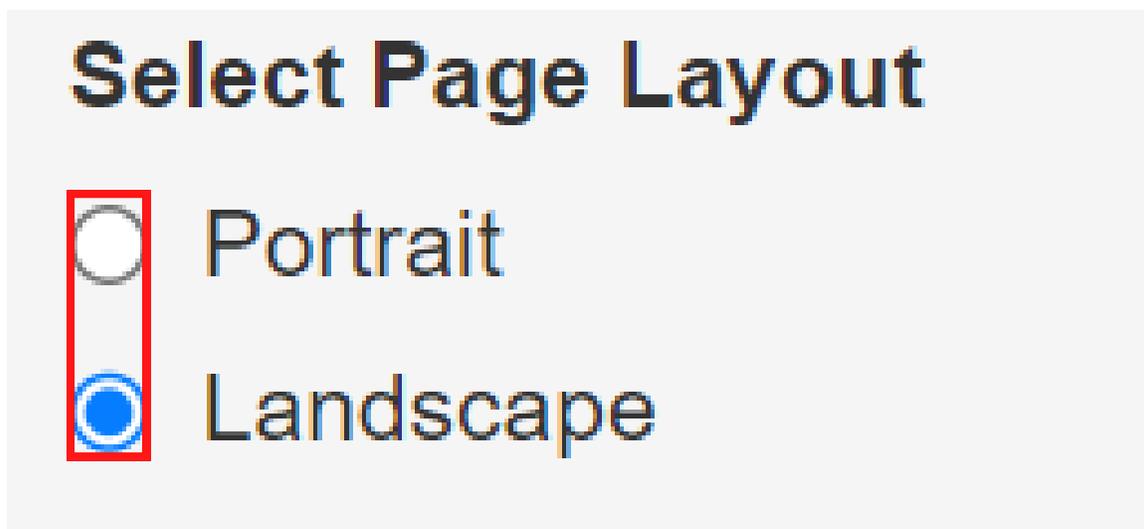
Step 9: Download your graph

When the graph on the left looks to your liking (it should be continually updating as you go through this process), click the download button to download this graph to your personal device as a PDF.



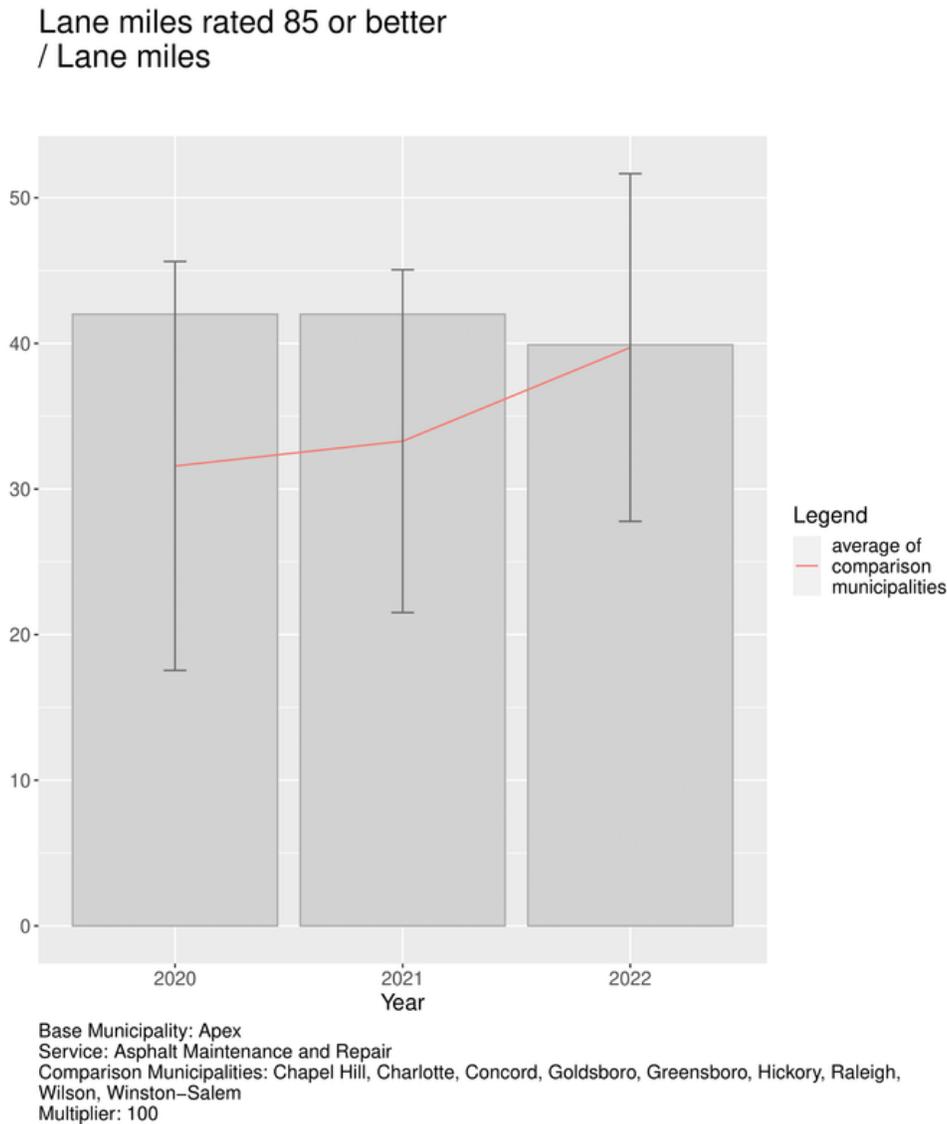
Step 9: Download options

It is also worth noting that there are download options, as shown in red below, can be used to select portrait or landscape mode. Changing this option will change the PDF's page orientation during the download.



Step 10: View your graph

This graph should now be saved to your device, but on Mac, it may need to be manually saved using the "Save As" feature. Below, you can see a sample PDF. This may be slightly different due to updates, but it should look fairly similar to your PDF.



Celebrate!

That's it, you've successfully used the Benchmarking 2.0 Dashboard! Feel free to experiment with the dashboard to view other metrics. You can also repeat these steps as many times as needed for different graphs, and download them to your personal device.

For information and questions, please contact Obed Pasha (pasha@unc.edu) or Elisabeth Butler (elisabth@live.unc.edu) at the School of Government.