Durham-Chapel Hill-Carrboro (DCHC) MPO

Mobility Report Card (MRC) Dashboards

Created on 07-15-2024, and updated as of 08-29-2024

1.0 Landing Page of the MRC Dashboards

The Mobility Report Card (MRC) Dashboards of the DCHC MPO are organized by report chapter. The web links to the dashboards are provided below and are unique to each chapter, as the data and visualizations vary based on the level of detail and the range of attributes available in each MRC dataset.

Chapter 1: Vehicle Activity and Arterial Level of Service
DCHC Mobility Report Card 2023 - Chapter 1 (Arterial LOS) (arcgis.com)

Chapter 2: Intersection Peak Hour Level of Service
DCHC Mobility Report Card 2023 - Chapter 2 (Intersection LOS) (arcgis.com)

Chapter 3: Vehicle Travel Time
DCHC Mobility Report Card 2023 - Chapter 3 (LOTTR) (arcgis.com)

Chapter 4: Vehicle Safety
DCHC Mobility Report Card 2023 - Chapter 4 (Car Crashes) (arcgis.com)

Chapter 5: Pedestrian Facilities, and Chapter 7: Bicycle Facilities
DCHC Mobility Report Card 2023 - Chapter 5 and 7 (Pedestrian and Bike Facilities) (arcgis.com)

Chapter 6: Pedestrian Activity
DCHC Mobility Report Card 2023 - Chapter 6 (Pedestrian Activity) (arcgis.com)

Chapter 8: Bicycle Activity
DCHC Mobility Report Card 2023 - Chapter 8 (Bike Activity) (arcgis.com)

Chapter 9: Pedestrian and Bicyclist Safety
DCHC Mobility Report Card 2023 - Chapter 9 (Pedestrian and Bicyclist Safety) (arcgis.com)

Chapter 10: Transit Service
DCHC Mobility Report Card 2023 - Chapter 10 (Transit Service) (arcgis.com)

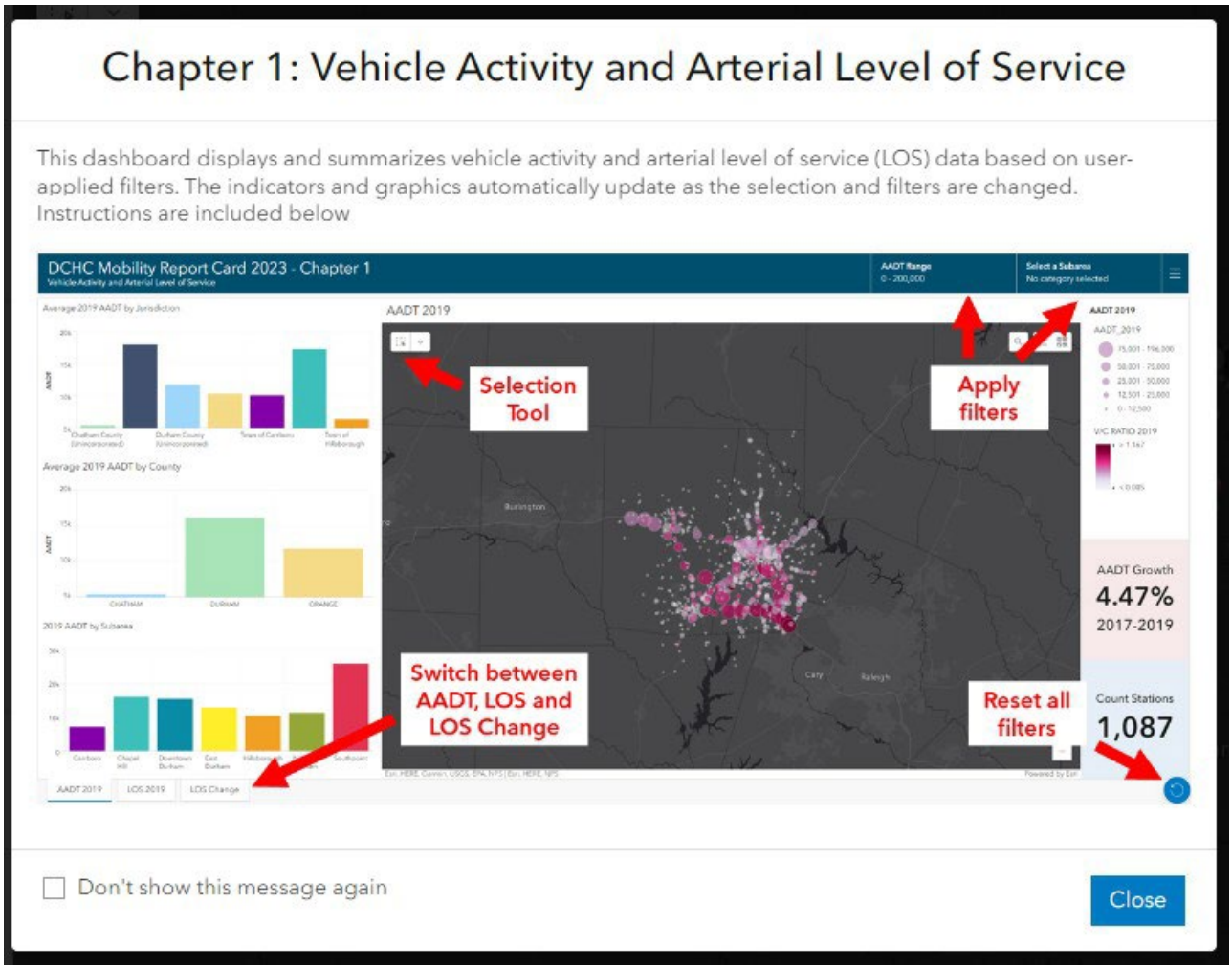
Chapter 11: Transit Ridership
DCHC Mobility Report Card 2023 - Chapter 11 (Transit Ridership) (arcgis.com)

Chapter 12: Bicycle Level of Traffic Stress (LTS)
DCHC Mobility Report Card 2023 - Chapter 12 (Bike LTS) - Overview (arcgis.com)

2.0 User's Guide

2.1 Dashboard Navigation Controls

Each MRC dashboard provides a custom "splash page" prior to loading of the full dashboard. The purpose of this splash page is to orient the dashboard user about the basic navigation controls for that dashboard. For example, when a user clicks on the Chapter 1 dashboard web link (shown in the previous section), the following Chapter 1 "splash page" will pop up to orient the user about four key navigation controls.



The Chapter 1 splash page can be closed by clicking on the "Close" button. It can also be permanently turned off by the user by checking off the "Don't show this message again" button.

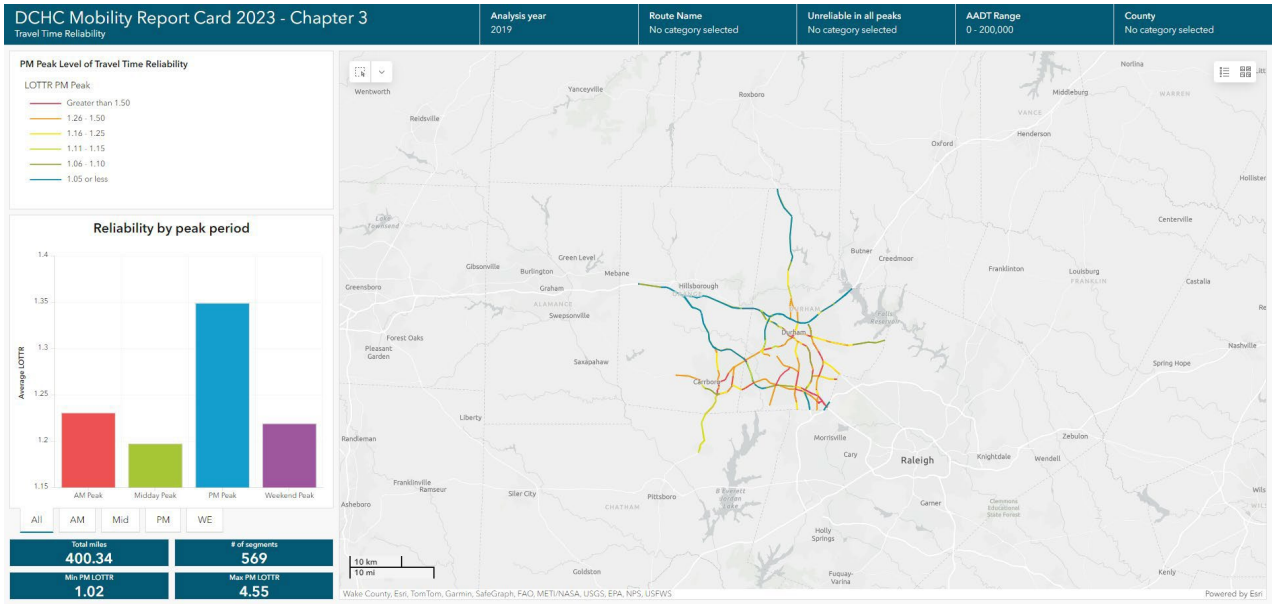
The four navigation controls in Chapter 1 dashboard are:

1. **Selection Tool**: This tool provides the dashboard user the capability to select multiple data points on the map, either drawing a line, rectangle or polygon on the map.
2. **Reset all filters**: This is an important tool to use for resetting all filters to default values in one click. It is a good idea to click on this button to have a data refresh after activating cascading multiple filters or when nothing shows up on the map due to invalid selections.
3. **Apply Filters**: The filtering tools are provided in the top bar that allow data reviews for a subset depending on the type of data and the range of attribute values. For Chapter 1, the available filters are "AADT Range" and "Subarea." These data filtering options are different for each dashboard chapter based on available data details.

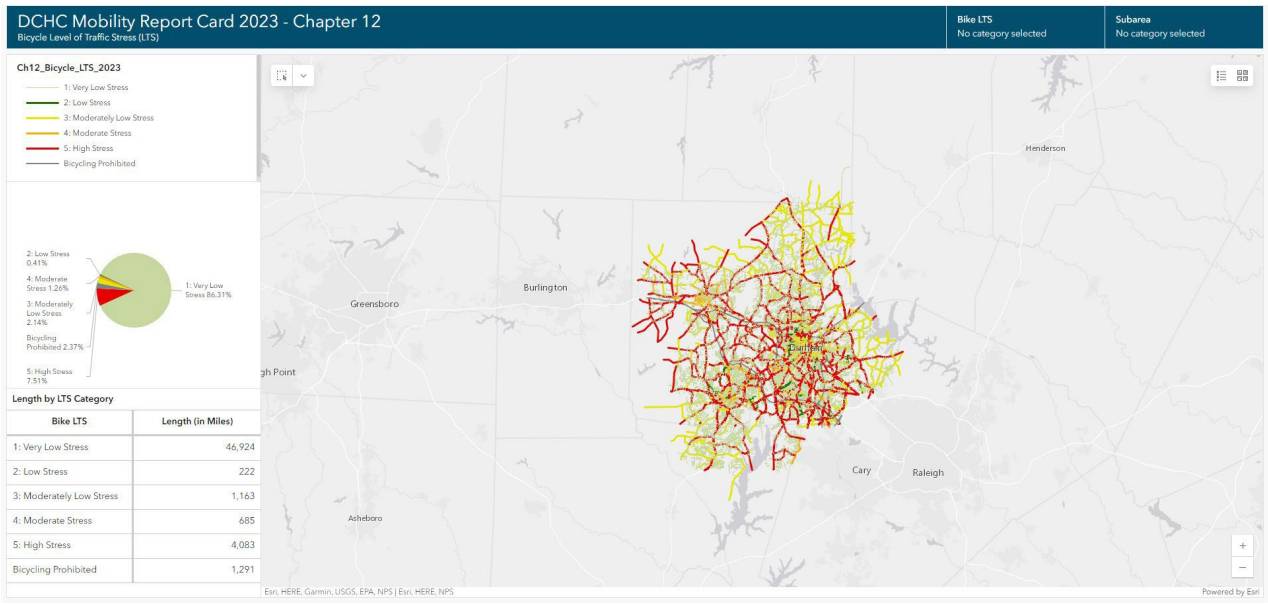
4. **Switch between AADT, LOS and LOS Change (i.e., Data Types)**: The dashboard user can select between three available data types in Chapter 1 by selecting each of the tabs provided in the bottom left corner, namely AADT 2019, LOS 2019, and LOS Change. Selection of each data type tab will automatically update the contents of the map and other summary statistics and charts provided in the dashboard.

The first two navigation controls (Selection Tool and Reset all filters) are same for all other MRC dashboards. The second two navigation controls (Apply Filters and Switch between Data Types) will have similar functionality, but will vary across different MRC chapters depending on available data types and the range of available data attributes.

For example, the Chapter 3 dashboard, as shown below, has five different available filters on the top menu bar, namely “Analysis year,” “Route Name,” “Unreliable in all peaks,” “AADT Range,” and “County.” In addition, Chapter 3 has five different data types (related to travel time reliability by time of day) presented as Tabs on the bottom-left, namely “All,” “AM,” “Mid,” “PM,” and “WE,” for daily, AM peak, Midday peak, PM peak, and weekend peak conditions respectively.



In contrast, the Chapter 12 dashboard, as shown below, has just two available filters on the top bar, namely “Bike LTS,” and “Subarea,” because this performance measure is a new measure developed in the study. It should be noted that the Chapter 12 dashboard does not currently have any tabs on the bottom left to reflect any different data types. In the future, this dashboard could have annual snapshots reflected in multiple tabs to monitor progress on bicycle connectivity.



Modifying Window Sizes

In addition to the dashboard navigation controls described above, users are also allowed to modify or resize the windows where map, charts, and summary statistics are displayed. This window resizing feature will allow the users to make the dashboard look optimal for their device (laptop screen, large monitor, tablet, etc.).

To revert back to the original window sizes, users will need to use the browser's refresh button to reload the dashboard.

Map Legend

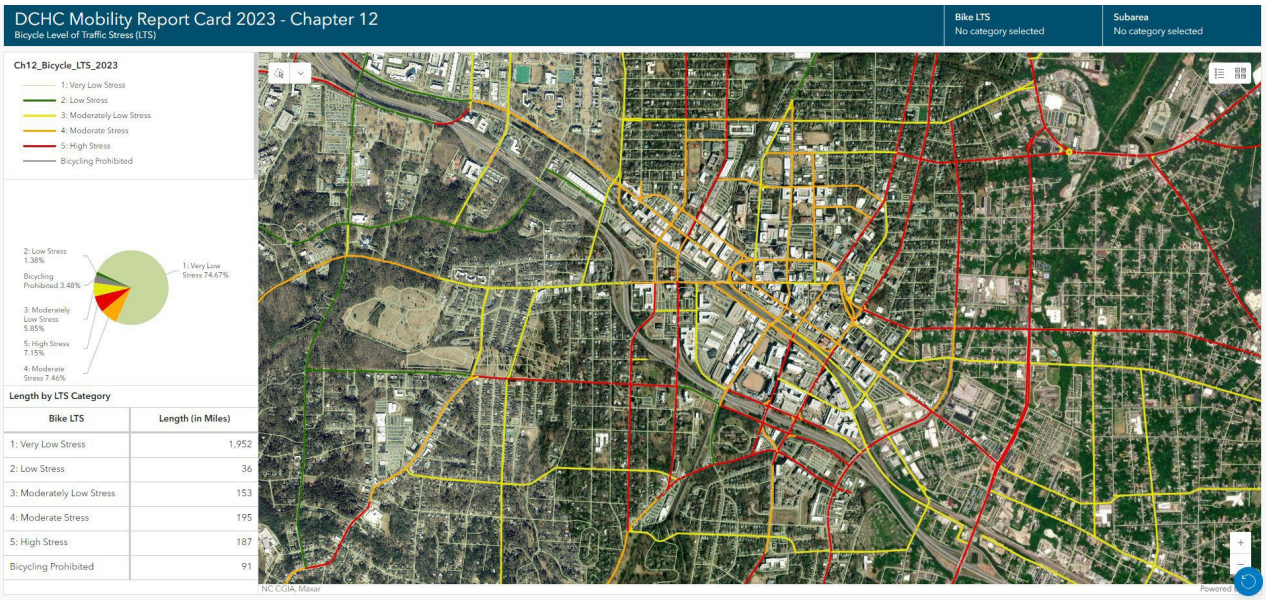
The map legend in each dashboard has been kept as "always on" either in the top left corner (such as in Chapters 3 and 12) or in the top right corner (such as in Chapter 1) for user convenience and based on available space for each dashboard.

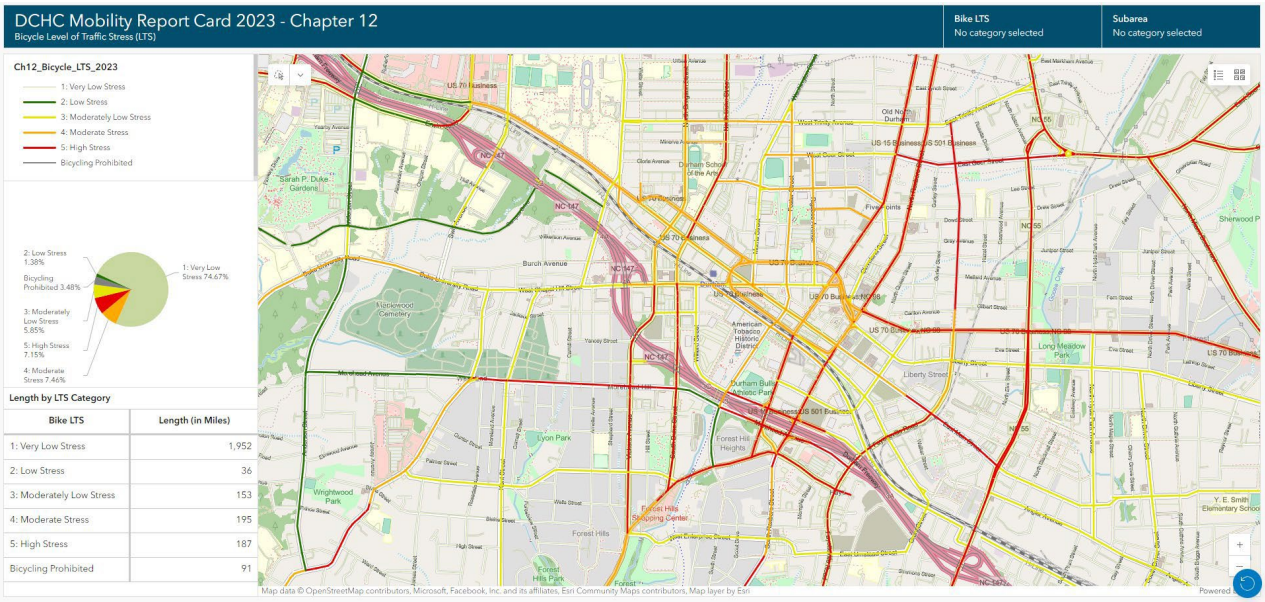
The map legend can also be viewed by clicking on the legend box provided in the top right corner of each dashboard.

Basemaps

The top right corner in each dashboard also has the "Basemaps" button (next to the Legend button) that will allow the user to change the default basemap for the dashboard. Many of the dashboards have either the light gray or the dark gray canvas as the default basemap for visualizing attribute data in their optimal format. However, these default basemaps can be easily changed by the users based on their data review needs.

For example, users can change the basemap to “Imagery” or “OpenStreetMap” when reviewing data on a zoomed-in map, as shown below for downtown Durham for the Chapter 12 Bike LTS dashboard.





2.2 Access to Attribute Data

The dashboards currently allow viewing of only critical data attributes for each dashboard as shown below for Chapters 1 and 12 dashboards as examples. It should be noted that the MRC dashboards currently do not allow any “printing” or “data download” features.

Users requiring raw data or any custom maps are encouraged to contact the DCHC MPO’s GIS department.