Data Visualizations Interactivity Guide

Data on the Institutional Data and Research (IDR) website is presented using data visualization software that gives users a high degree of interactivity to manipulate, sort, share, and download the information presented. These data dashboards and visualizations are designed to meet the data information needs of the broad University community by promoting customizable data analysis.

For a quick-start guide through these visualizations, questions, and tips for interacting with information on this website, explore the guide below. More information about the data visualization software is available on the Tableau software website.

Interacting with Dashboards

A *dashboard* is a formatted data visualization that allows users to interact with the data. A dashboard can display two or more visualizations that are linked and share data filters and data sources. The dashboard displayed in the example below has four separate *tab views*, circled in blue. Clicking on a tab will display the data tables for that dashboard.

Enrollment Headcount Data Dashboard

Academic Term:	Report Type:		Student Level:	
Spring 2017	Academic Level		(All)	

| Campus	College	Undergraduate	Graduate	Professional	Non-Degree	Grand Total
Crookston	Univ of Minnesota, Crookston	1,658			538	2,196
	Total	1,658			538	2,196
Duluth	College of Liberal Arts	1,291	48		3	1,342
	College of Pharmacy			231		231
	Education & Human Service Pro	1,676	225		4	1,905
	Graduate School		71			71
	Labovitz School of Bus & Econ	1,971	30			2,001
	School of Fine Arts	475	18		2	495
	School of Medicine, Duluth			123	25	148
	UMD-Sci & Eng. Swenson Coll of	2,921	233			3,154
	University Studies				648	648
	Total	8,334	625	354	682	9,995
Morris	Univ of Minnesota Morris	1,539			55	1,594
	Total	1,539			55	1,594
Rochester	Center for Learning Innovation	368			14	382
	Total	368			14	382
Twin Cities	Carlson School of Management	2,417	1,686		56	4,159
	Center for Allied Health	72	202			274
	Col of Educ/Human Development	2,424	2,250		69	4,743
	Col of Food, Agr & Nat Res Sci	1,932	634		9	2,575
	Coll of Continuing Education	656	279		3,187	4,122
	College of Biological Sciences	2,040	240		14	2,294
	College of Design	1,275	247			1,522
	College of Liberal Arts	12,930	1,550		80	14,560
	College of Pharmacy		113	432	2	547
	College of Sci and Engineering	5,113	2,575		42	7,730
	College of Veterinary Medicine		61	430	2	493
	Humphrey Schl of Publ Affairs		413		27	440
	Law School		14	625	11	650

Each dashboard also has *data filters*, outlined in yellow squares above. Users can select from the available filter options through the drop-down menus to customize a report to their interests. If multiple tables are displayed on a dashboard, a filter selection will alter the data displayed for all tables on that dashboard.

## Other Terms and Tips for Interacting with Data Dashboards

Tooltips

Tooltips are pop-up boxes of information that can be activated by hovering over items in the visualizations (see example below). Tooltips give more information about the specific object, including exact data for that point.
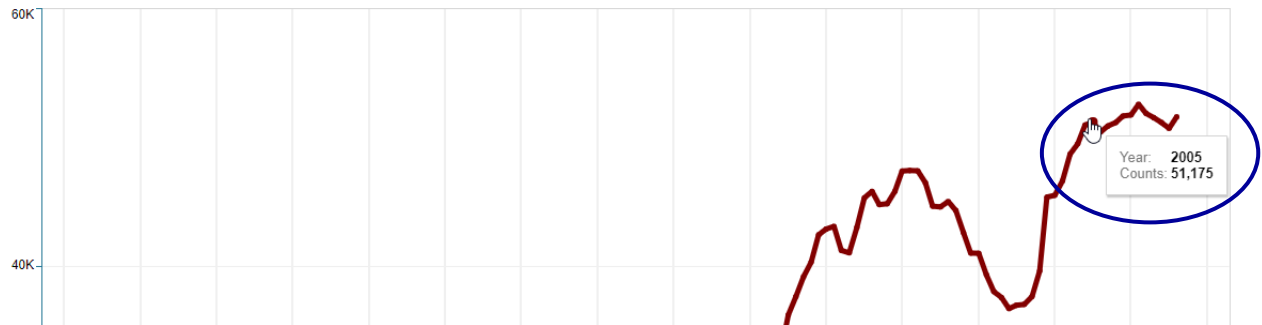
Filtering within a Visualization

Selecting an object within a data visualization will filter that visualization by the object selected.
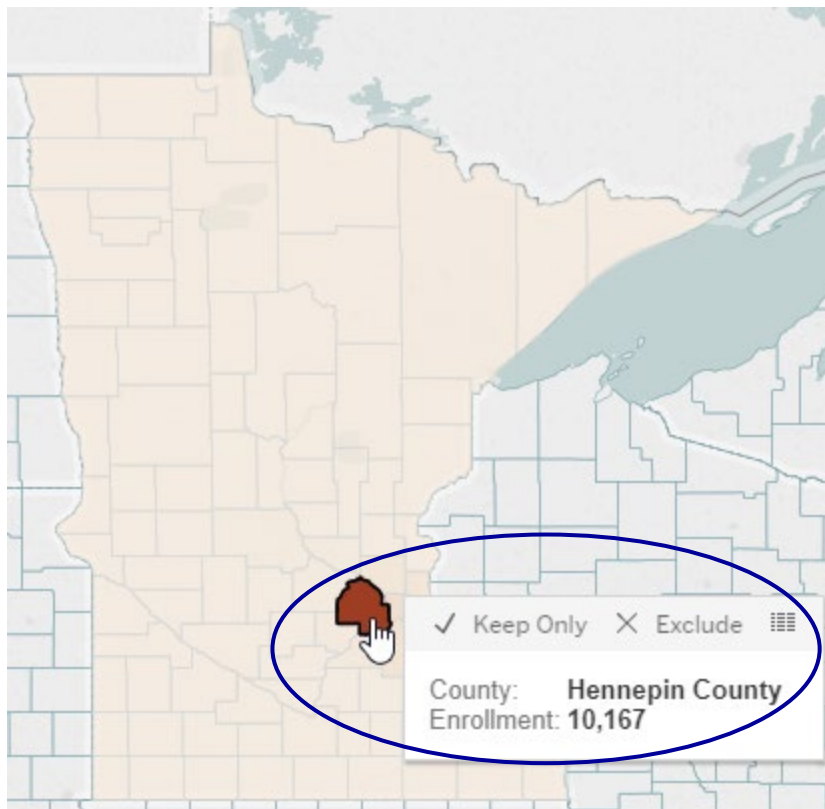
In the Enrollment Map Dashboard above, selecting a particular county on the map filtered the visualization for the number of students enrolled from Hennepin County for the selected academic year.

In the Enrollment Data Dashboard below, selecting one field in the view will similarly highlight information on that selected field and fade out all other points. Clicking on any blank space within the visualization will cancel the selected filters.


Revert, Redo, & Undo

In addition to clicking on blank space within a view to alter their filter selections, users can utilize the gray tool bar footer at the lower left of all visualizations.
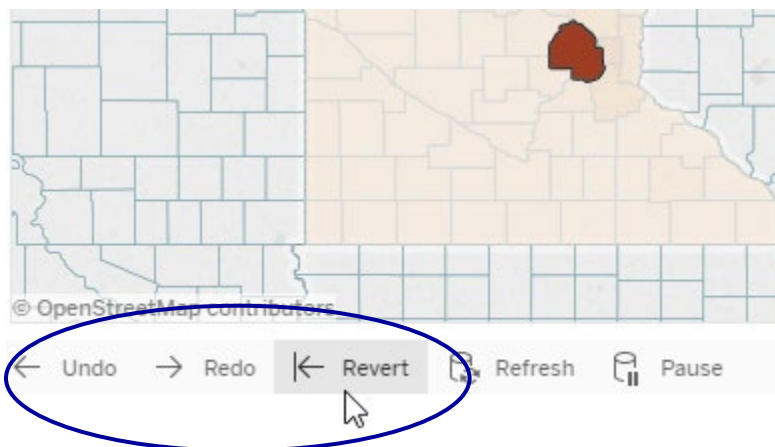
Selecting *Revert* restores the dashboard to the original layout and selections. *Undo* will take the user back one step in their interactions with a dashboard (like the back button on a web browser), and *Redo* will restore the undone selection.

Downloading

Users can download a dashboard in four different formats—as a PDF file, a CSV Crosstab, a CSV Data file, and as a PNG Image—by selecting the *Download* option on the gray footer bar located at the bottom right corner of any dashboard.
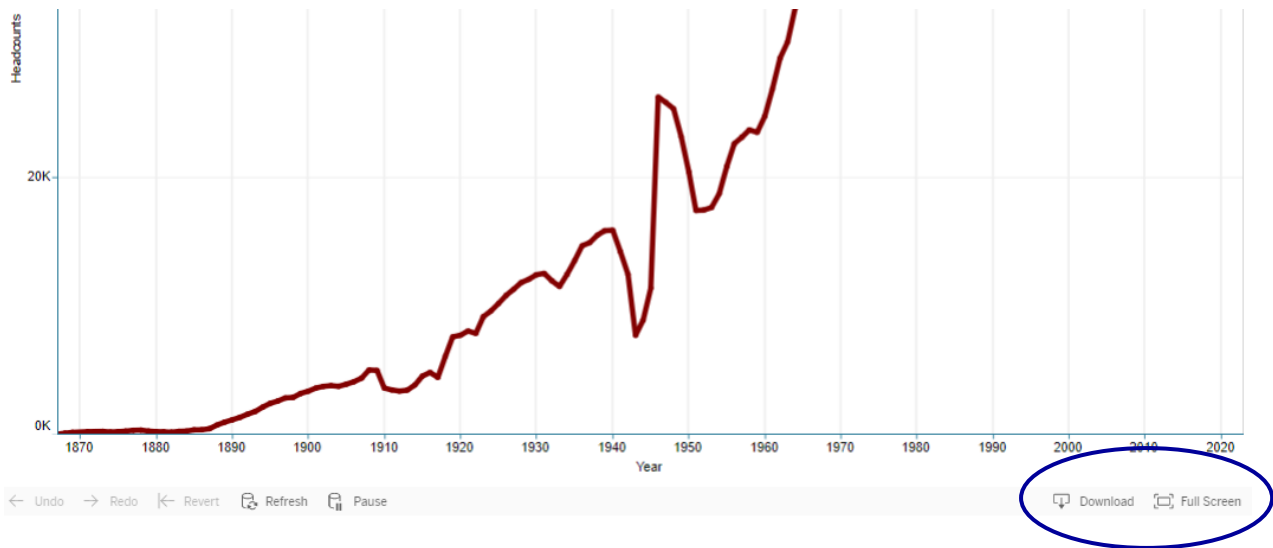
The *PDF* or *Image* download options will yield a static image of the current dashboard view. The *Crosstab* download option results in a data table formatted as shown in the current dashboard view. The *Data* download option gives the data in the current view in a simplified database format.

Tableau Workbook
PDF
Crosstab
Data
Image

⤓ Download   ⛶ Full Screen

Sorting

ACT and SAT

Score Type:
ACT English ▼

Campus:
Twin Cities

College		36-31	30-28
Carlson School of Management		43.5%	27.6%
Col of Educ/Human Development		9.7%	11.2%
Col of Food, Agr & Nat Res Sci		19.3%	17.0%
College of Biological Sciences		51.2%	24.2%
College of Design		22.2%	19.0%
College of Liberal Arts		27.9%	19.2%
College of Sci and Engineering		62.6%	19.8%
School of Nursing		33.3%	33.3%
Grand Total		36.0%	19.9%

Users can also sort data through most tooltips. Using the same ACT and SAT dashboard below, the descending sort is selected in the tooltip for the 36-31 column of ACT English scores. This sort changes the order within the dashboard view so that the colleges are listed in descending order according to which had the highest percentage of students with ACT English scores in that range.
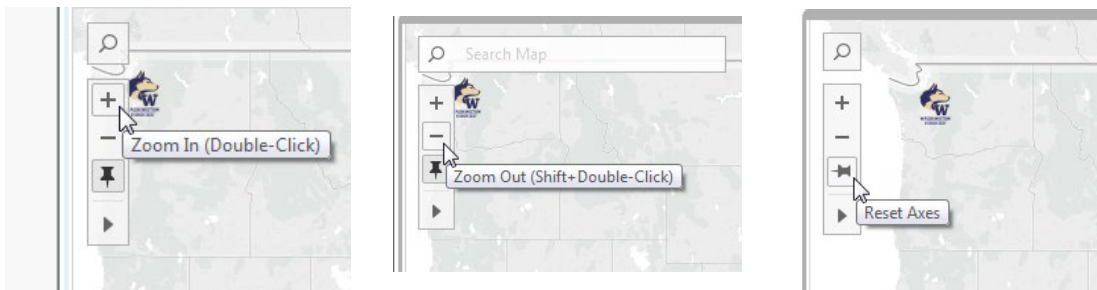

Interacting with Maps

All maps carry a menu bar in the upper left corner that gives the user additional options. Users can *zoom in*, *zoom out*, and *pin* the map in place. Deselecting the pin button resets the map to include all data points in view.

This menu also has a *search* option, an *area zoom* option, and *selection* option. Drawing a selection over the map will select and highlight any data points within that space and filter out any that fall outside of the shape.