

# Introduction to Tableau for Health and Policy Analysts

Doug Joubert, NIH Library

April 19, 2017

## Overview of classes

- This series of classes will introduce you to Tableau Desktop
- Using policy data, students will learn about the Tableau interface, how to manage data in Tableau, and how to construct simple visualizations and dashboards.

## Overview of classes

NIH Library  
Office of Research Services

- Webinar 1: Introduction to Tableau
- Webinar 2: Design essentials and basic charts
- Webinar 3: Advanced charts in Tableau
- Webinar 4: Building Tableau dashboards

## Objectives

NIH Library  
Office of Research Services

- By the end of this webinar, participants should be able to:
  - Discuss the different versions of Tableau
  - Use Tableau to connect to and manage data sources
  - Distinguish between dimensions and measures
  - Locate the Tableau Data pane
  - Compare the three primary sections of the Tableau Analytics pane
  - Describe how to save and export your work in Tableau

## DataViz@NIH Library

NIH Library  
Office of Research Services



Principles of Data  
Visualization



Scientific Communication  
and Data Storytelling



Analyzing Policy Data in  
Tableau

## Data Tools@NIH Library

NIH Library  
Office of Research Services



Text Analytics using JMP®



## What is Tableau?

NIH Library  
Office of Research Services

- Tableau is a tool that allows you to easily connect to data, then visualize and create interactive, sharable dashboards.
- There is a completely free version called [Tableau Public](#). Some limitations in terms of data sharing.
- Tableau Desktop gives you all of the functionality, plus the ability to connect to databases.



## Tableau Public

NIH Library  
Office of Research Services

+tableau:public GALLERY AUTHORS BLOG RESOURCES ACTIVITY SIGN IN

 **yvan fornes**  
Amadeus | Antibes, France  
11 Workbooks 228 Followers 92 Following

Workbooks 11 Followers 228 Following 92

**FEATURED**

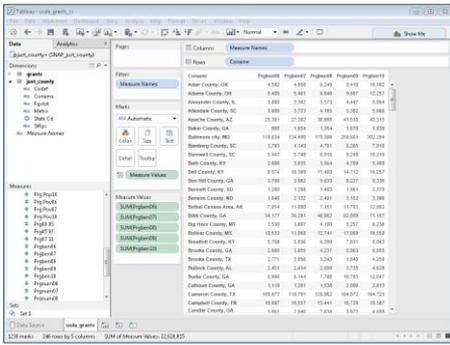
**FOOD a world of inequality**  
631 views

**1524 Ultra Peaks**  
4609 views

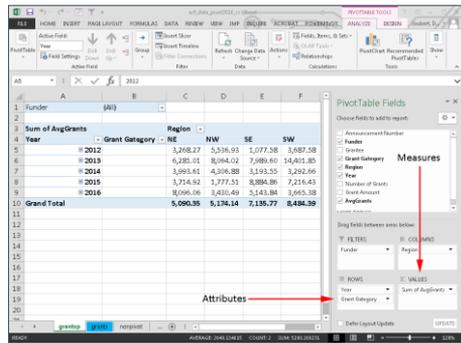
**UNICEF Children's Well-being index**  
1719 views

# Tableau is like...

NIH Library  
Office of Research Services



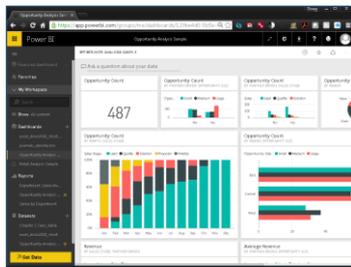
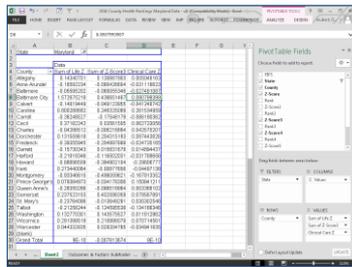
Tableau



Excel PivotTable

# Other tools of the trade

NIH Library  
Office of Research Services



## Tableau File Types

NIH Library  
Office of Research Services



- There are five types of Tableau files:
  - Tableau workbook (twb). Stores a visualization without including the source data.
  - Tableau datasource (tds). Stores the server address, password, and other information required to access a datasource.
  - Tableau bookmark (tbm). Tableau bookmarks are a connection to a worksheet in another Tableau workbook.
  - Tableau data extract (tde). Store Tableau data as a filtered and aggregated extract.
  - Tableau packaged workbook (twbx). Store extracted data and visualizations for viewing in Tableau, or Tableau Reader.

## SNAP Data

NIH Library  
Office of Research Services

United States Department of Agriculture  
Economic Research Service

[About ERS](#) | [Careers](#) | [FAQs](#) | [Contact Us](#)

Topics
Data
Publications
Newsroom
Calendar

[Site Map](#) | [A-Z Index](#) | [Advanced Search](#) | [Search Tips](#)

You are here: [Home](#) / [Data Products](#) / [Supplemental Nutrition Assistance Program \(SNAP\) Data System](#) / [Time Series Data](#)

Stay Connected

Supplemental Nutrition Assistance Program (SNAP) Data System

[Overview](#)

[Time Series Data](#)

[Documentation](#)

[Go to the Map](#)

**Related Topics**

[Food & Nutrition Assistance Research](#)

[Food Security in the U.S.](#)

[Poverty & Income Volatility](#)

[Supplemental Nutrition Assistance Program \(SNAP\)](#)

[WIC Program](#)

Time Series Data

Time-series data are available for program participation counts annually since 1997 (and before then, for 1989, 1993, and 1996). Estimates of program benefits are available since 1969; some county-level benefits data are imputed. Estimates of population counts and persons in poverty are available for selected years.

Information in this dataset is provided in an Excel spreadsheet, consisting of four worksheets:

1. Notes—describes coding conventions and data sources.
2. Flag—identifies States and years in which program benefit data have been imputed by the Bureau of Economic Analysis and re-imputed by ERS.
3. State—provides State-level data, and
4. County—provides county-level data. In general, the same variables are available on both the State- and county-level files.

[Download the Excel file](#)

6

## SNAP Data – County Level

NIH Library  
Office of Research Services

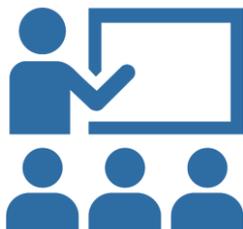
- FIPS: Federal Information Processing Standards code
  - Used to perform a join
- **CONAME**: County name and two-digit State identifier
  - County names used to view the SNAP by region

## SNAP Data – Participation Counts

NIH Library  
Office of Research Services

- Participation counts at the county level are provided primarily by the Small Area Income & Poverty Estimates (SAIPE) program of the U.S. Census Bureau.
  - **PRGNUMxx**: Estimated number of active SNAP/Food Stamp Program (FSP) participants. The last two digits (xx) indicate the year for the data.
  - PRGNUM06, PRGNUM07, and PRGNUM10
  - Used to examine participant counts by county

# Let's Go Live!



## Class Evaluation and Manual

**NIH Library**  
Office of Research Services

**NIH Library: Doug Joubert**

**General information**

Thank you for attending this class. This should take less than 5 minutes to complete. The results of the evaluation will help us design more effective classes.

Your participation in this evaluation is voluntary and completely anonymous. Your responses will be combined with the responses of all other participants and you will not be individually identified on any report prepared. If you have questions, please contact Doug Joubert at [douglas.joubert@nih.gov](mailto:douglas.joubert@nih.gov).

\* 1. **Instructor name**

Doug Joubert

\* 2. **Training session**

\* 3. **Date of training session**

Date / Time      MM / DD / YYYY

/  /

\* 4. **Your institute, center, agency name, office or operational division:**

\* 5. **How did you participate in this training session?**

