Basic Data Prep & Visualization with Tableau
September 24-25, 2019, Arlington, VA

Learn how to clean, shape, aggregate, and merge frequently used workforce and economic development datasets, including industry and occupational projections, in Tableau Prep and then organize your visualizations in Tableau Desktop. Analyzing big data using charts, graphics, and images is becoming more and more necessary for decision-making. This 2-day course not only introduces you to the basic features and functions of Tableau Prep and Tableau Desktop but also shows you how to incorporate complex calculations in ways that improve insights, make charts more relevant, and create the most impactful dashboard graphics.

Training pre-requisites

Skills: No prerequisite experience is needed

Tools: Laptop, wired mouse, Tableau Desktop (personal, professional, or public version), and Tableau Prep.

- Public version of the Tableau desktop is available at
  https://public.tableau.com/s/download
- Tableau Prep Software can be downloaded here:
  https://www.tableau.com/products/prep/download

Day One – Tableau Essentials

9:00 - 9:15   Introduction and Overview of Today's Agenda

SECTION 1:
9:15 - 10:30   Data visualization with Basic Chart Types
Discussion/exercises
Learn how to manage data sources, worksheets and workbooks, sort and filter Tableau data. Explore ways to create stunning visualizations with basic charts such as column and stacked column charts, line and area fill charts, pie charts, scatter plots, histograms, highlight tables, and heat maps.

10:30 - 10:45   Break

10:45 - 12:15   Data visualization with Advanced Chart Types
Discussion/exercises
Learn more advanced chart types such as Individual axes chart, blended axes chart, side by side bar chart, dual axes chart, combination chart, scatter plot, Box & whisker plot, and maps.

12:15 - 1:30   Lunch

SECTION 2:
1:30 – 4:30 (with 15-minute break)   Creating Calculated Fields
Discussion/exercises
Learn how to create complex calculations with string, arithmetic, logical, conditional statements, "table calculations", and parameters. See best practices of preparing data in Tableau, including merging, splitting, and renaming variables through data interpreter panel.

Day Two – Tableau Prep and Dashboard in Tableau

9:00 - 9:15   Recap from Yesterday

SECTION 3:
9:15 - 10:30   Cleaning and Shaping Data with Tableau Prep
Discussion/exercises
Discover the data preparation cycle and learn how to connect and examine data using the preview pane. See best practices in cleaning and reshaping your data in Tableau Prep.

10:30 - 10:45   Break

10:45 - 12:00   Combining and Previewing Data in Tableau Prep
Discussion/exercises
Learn how to combine data from different sources and platforms using data joins and unions and then export into comma separated values for further analysis in Tableau Desktop.

12:00 - 1:15   Lunch

SECTION 4:
1:30 – 4:00 (with 15-minute break)   Combining Multiple Visualizations into a Dashboard
Discussion/exercises

Learn more about interactive dashboard design within Tableau. See best practices in visual designs and explore how to produce dashboards of your own through hands-on exercises. Create an interactive dashboard in a small group with 3+ sheets using your choice of dataset(s). Publish your dashboard to Tableau Public.