

The goal of this lab is to filter and visually represent your **Tableau Training Data**. In this lab you will list two questions you want to answer with your Tableau Training data, filter the data to extract only the data needed to answer the two questions and generate visualizations of the filtered data.

By the end of this lab you should be able to:

Remember	<i>Describe</i> what happens in the represent stage.
Understand	<i>Describe</i> what stages are impacted by the represent stage and how.
Apply	<i>Demonstrate</i> the ability to use the appropriate visualization tool/chart/layout for the task.
Evaluate	<i>Determine</i> if the data is sufficient or if additional data is needed.
Analysis	<i>Determine</i> if sufficient data is available to visually represent the data.
Create	<i>Plan, generate, and produce</i> insightful visualizations.

You should create two visualizations. For each visualization provide a paragraph to support the visualization. You may use any visualization tool of your choosing. Make sure you use data visualization best practices (See Data Visualization Check list).

Take a screen capture of your visualizations and save each visualization as a separate .jpg file:

LastnameFirstInitial_Fig1.jpg

LastnameFirstInitial_Fig2.jpg

(PNG files WILL NOT be graded)

Upload your supportive paragraphs in this file.

Fig1 Caption:

The first figure represents total U.S. construction spending on infrastructure both public and private, residential and nonresidential, over the course of 15 years, starting from 2002 and ending in 2016. The dependent variable on the left represents the dollars spent per quarter, in millions of dollars. From 2002 to the first half of 2007, the construction is steadily increasing, but starting from the fourth quarter of 2007, the construction spending slowly starts declining, then in 2009-10 it sharply declines until 2011 where it steadily rises again. It is interesting to see the profound effect the Great Recession had on one of the most heavily affected industries.

Fig2 Caption:

In the second figure, the construction category is represented using different colors. The notable thing is that residential spending is much higher than the rest, and that is probably due to every person requiring housing to live in, whereas other types of infrastructure could service thousands or millions using only one facility. In the Great Recession, residential took the greatest hit due to the nature of the recession. Other categories were affected, though not as severely. Some, such as power even increased.

