SEIS 632 Data Analytics and Visualization Class Project

Due: 12/6/19 by midnight (on Canvas)

In order for you to complete this project, you should be comfortable using Tableau. You should have gone through some of the Tableau videos at http://www.tableau.com/learn/training. If you have not already done so, you should take the time and complete that first.

<u>Data</u>: Each team has been informed about the dataset you will be working on.

<u>Dashboard</u>: You will tell a story through a dashboard using a dataset. Open or download the spreadsheet and take a closer look at the data. You should begin examining the data by considering the following questions as a starting point:

- What data attributes are present, and which ones might be interesting?
- Is there missing data? Do you see any obvious mistakes in the data?
- What initial questions come to your mind?

Import the data into Tableau and explore. As you construct different visualizations you will find that your questions evolve - often they will become more specific. Keep track of the questions that occur to you along the way and construct several worksheets with different views on the data.

- Pick a few related visualizations that together present an interesting aspect of the data.
- You should make use of the **Story** feature in Tableau. That way, you are guiding the user through a story and then leading to an interactive dashboard at the end.
- Add your specific questions as titles to each visualization.
- The visualizations in the Story Points should go from high level/overview to more detailed/specific as you proceed.
- The interactive dashboard should also follow a similar structure of having overview visualizations at the top and detailed visualizations at the bottom.

When constructing this dashboard, keep the following questions in mind:

- Who is your audience? What questions would they be most interested in?
- Are you addressing an overarching issue?
- Does your dashboard tell a story? Are your questions answered in the titles, captions, and annotations?

Your project will be evaluated based on the following criteria:

- Each visualization communicated key insights (captions, titles, annotations)
- Appropriate design choices to present data
- Visualizations exhibit good design principles
- Consistent look and feel: Visualizations have a consistent color scheme, fonts, arrangements, etc.
- Presentation, Story, Dashboard together communicate a clear story about the data.

Deliverables:

- Submit the Tableau packaged workbook (.twbx) file on Canvas, and power point slides (not more than 2-3 slides)
- You will be presenting to the class and narrating a visual story navigating through the visualizations and the interactive dashboard, assuming the audience does not know anything about the data.
- Presentation will be a maximum of 20 minutes.