Project 1

In this analysis I explored a dataset based on the workplace fatalities by state in 2012. My main objective was to analyze 3 main things.

• Which program, state or federal, has the highest rate of fatalities?

• Which state with a state program has the highest number of injuries/illnesses?

• What is the relationship, if any, between “Average of Years to Inspect Each Workplace Once” and “Rate of Fatalities”?

Page 1

In the first page I decided to focus on the rate of injuries by state and the number of inspectors per vs the number of years to inspect each workplace per state by state or federal program. As we look in the ribbon chart, we can see that there’s a negative correlation between number of inspectors and number of years to inspect a workplace with South Dakota having the highest number of years to inspect a workplace but having the least number of inspectors. As we filter the program type in the map view portion, we can see in the ribbon chart that this uneven trend is predominantly in the federally funded states. In the ribbon chart we can see the difference between number of inspectors and years to inspect by the rate of injuries more clearly. Especially for a state such as new Mexico or West Virginia that have a big margin between the number of inspectors and the number of years it takes to inspect each work place once

Page 2

In page 2 I wanted to focus on the fatalities and rate of illnesses/injuries. In the map we can see the how each state ranks in total fatalities for the year 2012 by federal or state funding. In the area chart on the top right, I focused on the number of fatalities compared to the number of injuries/illnesses. At fist glance the graph doesn’t seem to show much but when we go to the slicer and separate the data be either state or federal, we can see that the state funded section has a significantly higher number of states that have a higher fatality count than injury/illness count. Next, we go to the stacked bar chart below it which measures the rate of illnesses/injuries by the rate of fatalities and as you skim through it we can see that the blue portion (rate of illnesses/injuries) stays pretty linear throughout the graph. However, when we take a look at the purple section (rate of fatalities) we can see a lot of variation between the states but when separated in the slicer by state or federal program we can see that the federally funded states have a more states that have a lower fatality rate than 8.

Page 3

I wanted to bring everything together and come to a conclusion. The last and main subjects I wanted to focus on were the cost per penalties for each state compared to all the other variables we analyzed in the previous pages. When looking at the column chart we can see a trend between the average cost for penalties between the states and although California has over twice the cost of cost per average than any other state, the majority of the cost comes from federally funded states rather than state funded states. In the second portion of the page, I focused on the years to inspect each workplace once and the number of inspectors, which we analyzed in the previous pages but this time I added the number of fatalities with it and found a neat curve between all the states, with a few outliers. From this data we can see that the number of fatalities tends to follow the years to inspect in most cases.

**Ideas for future improvement.**

1. I feel like there was a lack of data that could’ve made the story more conclusive, for instance the population per state would’ve made a big difference in the analysis,
2. A better use of the visuals- I could go into the visual database and find better visuals to fit my analysis
3. Clean data more thoroughly. i.e. using more measures and formulas to help my analysis