**Analysis and Conclusions**

As we dug into the data of accidents involving fatalities from 2012 to 2016 in Arizona we asked the data many questions and were able to conclude that how much federal spending goes into the county can correlate to a reduction in accidents with fatalities. We found that risky behavior such as distracted driving can cause more pedestrian fatalities. As we looked at accidents over time, the accidents involving fatalities were more likely during night time. And Pedestrian accidents happen more frequently during the hours of 5 to 7 pm. And lastly when we plot out where the accidents happen on a map we can visually see that accidents a far more likely to happen in the major cities and more specifically on the streets of the city instead of the highways.

How much does govt spending by county relate accidents?

The chart below shows the per capita data that helps show that the counties that have a higher spending per capita has a lower per capita accident rate.

A graph of a number of people

Description automatically generated

How does risky behavior effect total fatalities?

The chart below is able to show how speeding is the highest contributor to accidents with fatalities.

A blue bar graph with numbers

Description automatically generated

How does risky behavior effect pedestrian fatalities?

This question is giving us the ability to see that distracted drivers and drinking and driving are the main reasons for pedestrian fatalities.

A graph with text on it

Description automatically generated

Do move crashes happen on weekdays vs weekends?

As you can see in the bar chart below crashes happen far more frequently on weekends then on weekdays by comparing the average crash per day.

A graph of crash and crash

Description automatically generated with medium confidence

What types of crashes happen over the course of the day by hour?

By looking at the data based on hour of the day you can see that more crashes happen during the afternoon hours when more people are on the road and pedestrian accidents spike between 5-7pm.

A graph of a crash type

Description automatically generated

Does light conditions have any impact on fatalities?

With this heatmap you can more visually see that the average fatalities per crash based on month and light conditions that there are higher rates during night time.

A graph of a graph of statistics

Description automatically generated with medium confidence

In which counties do the most accidents happen? What factors contribute to that?

As you can see there are far more accidents in the major city centers where there are much higher populations when you see it on a map like this it makes it much easier to visualize.

A map with different colored dots

Description automatically generated

A map of a city

Description automatically generated