

DSC 640

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Video Presentation, Supporting Documentation

This project has really made me think more about the way data should be presented, or even ways to present data to have your audience convinced of a certain idea. In terms of convincing an audience that air travel is safer than automobile travel, presenting data in such a manner was not difficult, but all aspects of the presentation needed to be brought into consideration.

Throughout the video, I display several pairs of visuals including pie charts to show proportions of traveling accidents and fatalities, bar and line graphs to show fatalities over time in comparison and statistical metrics to gain a better understanding of the fatality rates for each automobile travel and airline travel. Furthermore, the entire video is done using the same color scheme. This color scheme was devised to help the audience sway toward believing air travel is safer because the color used for airplanes was lighter and more cheerful whereas the color used for automobiles was a deep, brooding color that was in a way foreboding. In addition to the colors being visual cues to the audience I also included several photos throughout the video all of which showed either car crashes or planes flying in the air. This drills into their minds, cars end in crashes and planes fly safely.

Starting out, this video presentation involved six metrics to display and compare the data from airline and auto incidents and fatalities. I chose to use pie charts to show the total number of incidents and the total number of fatalities broken down by types of travel. These visuals are successful because there are so many more auto accidents and fatalities per year that the entire pie charts basically show the dangers of automobile travel covering the entire visual and discounts the dangers of air travel with such a small sliver.

Next, to show the comparison of fatalities between auto and airline accidents throughout time I use a pair of visuals including a grouped bar chart and a line graph. These visuals can be successful in convincing an audience of the safety in airlines over automobiles because of just how little the bars are for airplane fatalities being stacked next to the extremely tall bars for auto fatalities. The bars for airplane fatalities are barely visible. The success of the line graph lies within the volatility of the auto fatality line and with how high up it is on the y-axis show so many more fatalities. In this visual, the airline fatality line is completely flat and lies right along the bottom of the graph showing almost zero fatalities per year for airplanes.

Lastly, in order to dig deeper into the statistical numbers I wanted to calculate a fatality rate in a way that would be easy for the audience to understand. So I started out by calculating the total number of passenger miles traveled for each type of travel. Following this I wanted to get the fatality rate per 100,000 miles so I divided the total number of passenger miles traveled by 100,000 and then was able to divide the average annual fatalities by the average annual miles travel (divided by 100,000) in order to get the fatality rate per 100,000 miles. I showed the fatality rates staying on brand with the color scheme and in a clear and concise manner that proves to the audience automobiles have a death rate of about twice the amount that airlines have.