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DSC 640 – Project Task 1: Dashboard

With the recent unfortunate airline crashes, and the media portraying air travel as a no longer being a safe way to travel, the following information was collected to assist in dispelling such reports. First, a list of sources utilized to capture the needed data for analysis and display.

Data Sources

[Airline Safety](#), Aviation Safety Network

[Death Rate Per Year](#), Bureau of Aircraft Accident Archives

[Safety Record of U.S. Air Carriers](#), Airlines for America

[Annual Financial Results: U.S. Passenger Airlines](#), Airlines for America

[World Airlines Traffic and Capacity](#), Airlines for America

After the initial analysis was completed, the design methodology was established. To help counterbalance the sensationalized reports, a color palette of blue was chosen. This was selected for being a color that is easily identifiable by all (including those with various degrees of colorblindness) and blue is known to have a calming effect, even known to lower pulse rates. This color selection allows for the masses to easily follow any color changes in the visualizations, as well as stay calm while interpreting the information. One color exception was made, choosing green to highlight profitability in a chart. Additionally, the overall appearance of the dashboard is one semi-formal. To offset the imagery and methods used by the media, it was determined that a simple, semi-formalized approach would assist in delivering the proper tone. This subject matter at hand, safety, should not be watered down with frivolous GIFs or imagery that can take away from the message.

Upon selecting the visualizations, variety and familiarity became important. People find comfort in receiving information that they are familiar with and do not have to try and uncover something new. While much of the information is similar in nature, delivering it in various forms helps keep the reader engaged, as well entertained. With this, the visuals selected are easy to follow, as they are ones often appearing in print and online media and are varied to avoid being repetitive.

When sharing this information with the internal team and executive leadership, a straightforward walkthrough of each chart explains the process and the findings at once.

Chart 1 – Air Travel Fatalities – U.S. & International Carriers (2000 -2019) – This chart has the task of highlighting the downward trend in air travel fatalities over the past 19 years.

Chart 2 – U.S. Air Carrier Total Accidents vs Fatal Accidents (2000 – 2019) – This chart highlights just how safe air travel is with U.S. carriers. The data from 2000 – 2019 highlights this by showing how accidents occur, and how these accidents predominately result in zero fatalities.

Chart 3 – Carriers with Fatal Accidents 2000 – 2014 (5 largest fatality totals) – This chart does an excellent job of showing that over the 15 year period, even the largest incidents resulted in low number of fatalities, as well as showing that many of the incidents occurred with International Carriers.

Chart 4 – Annual Global Air Passengers vs. Annual Air Related Fatalities (2010 – 2019) – This chart shows a steady increase in annual global air travel, while fatalities remain consistently low.

Chart 5 – Annual Comparison of U.S. Carrier Total Accidents (2009 – 2019) – In this chart, we see that over the previous 10-year period, there is little change in the number of total accidents that U.S. Carriers from year to year. The numbers remain extremely small.

Chart 6 – U.S. Passenger Carriers Annual Pre-Tax Profits – Financials are especially important in an industry like air travel. This chart shows how the past 5 years have been the most profitable of the past ten. This, in conjunction with the previous charts showing the increase in annual air travelers, illustrates that industry is financially healthy and that demand for air travel is on a growth projection.

Overall, the findings solidify the fact that air travel is extremely safe and has been consistently safe. These findings and visuals can be utilized in amplifying the voice for safety in the industry, when communicating with media and other mediums.