Assignment 2 Visualization Summary

The purpose of this data analysis is to provide the company AdventureWorks a reliable depiction of profitability margins between different demographics and their own products. A customer of AWI can also use this to

**Chart 1: How Did New Models Affect Sales?**

This shows how the profits AWI makes from selling all their bike models in one year, how much the average price of one bike sale, and most importantly, how the bike model affects sales and profit.

**Chart 2: Global Map of Sales**

Countries with the most amount of sales of any AWI product are distinguished with a larger and a darker circle. The majority of the sales were overseas (compared to the United States) and the city with the most was London in the U.K. with over 790,000. Company should pay most attention to the countries with the most of their sales.

**Chart 3: Profitability of Product**

Bikes had offered the company the highest profits.

Chart 4: Income Level

The median salary families maintained a total of the most purchase when the amount of children varied.

**Chart 4: Income Level (& effect of children)**

Before making a graph, I think there will (potentially) be more purchases of AWI products by families who have a higher income compared to lower income families; but it may not be true given a random sample because someone who has a high income may not be a big fan of biking thus may not purchase many items. If the amount of children are considered, there is a high probability that more items would be purchased in total by that family. If the family income and children amount is commensurably higher than other families, then that family would probably have more biking luxuries. My data analysis does not entirely satisfy my hypothesis. Using Tableau, I noticed that AWI is making a lot more profit from families with no children and most of the profit from families with a median income ($75,000) or less.

**Chart 5: House vs non-House owner**

As I was trying to find attributes that correlate to drastic increments to AWI profits, I related the house owning customers, single or married, to the profits. A single person that owns a house is the customer AWI can most profit off while I based these profits off bike sales since the other products will not affect the overall outcome.

I noticed that the company made over a 50 percent profit on average over all its customers’ cities. Surprisingly, there weren’t that many sales between larger income families compared to those below the median salary.