

PHASE 3

CSI 4142

Dr. Herna L. Viktor

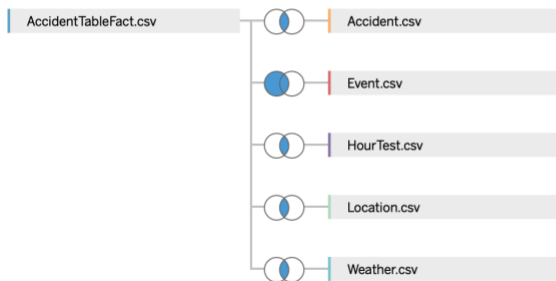
Aanan Rahman 8390154 | Aethelind Racic 7686783

Introduction

All the dashboards were created in Tableau, this was done by first connecting to the data by connecting to the CSV files containing all the data for AccidentFactTable, AccidentTable, LocationTable, HourTable, WeatherTable and EventTable. All the correct data was retrieved by doing a Inner Join with the AccidentFactTable with all the other tables except for EventTable, a Left Join between the AccidentFactTable and the EventTable had to be used.

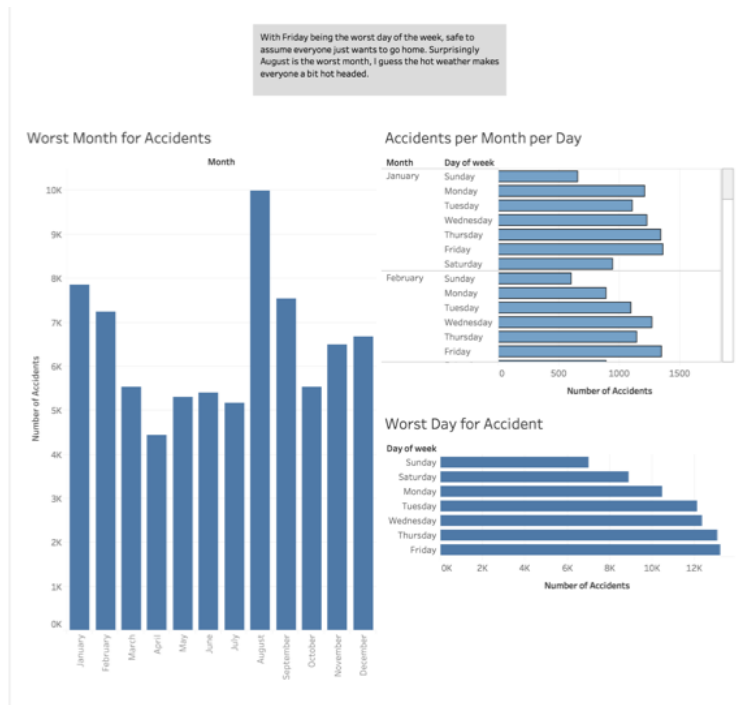
AccidentTableFact.csv+ (Multiple Connections)

Filters
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After the data was uploaded to the BI Tool, we proceeded to create each relevant graph one by one.

Dashboard 1



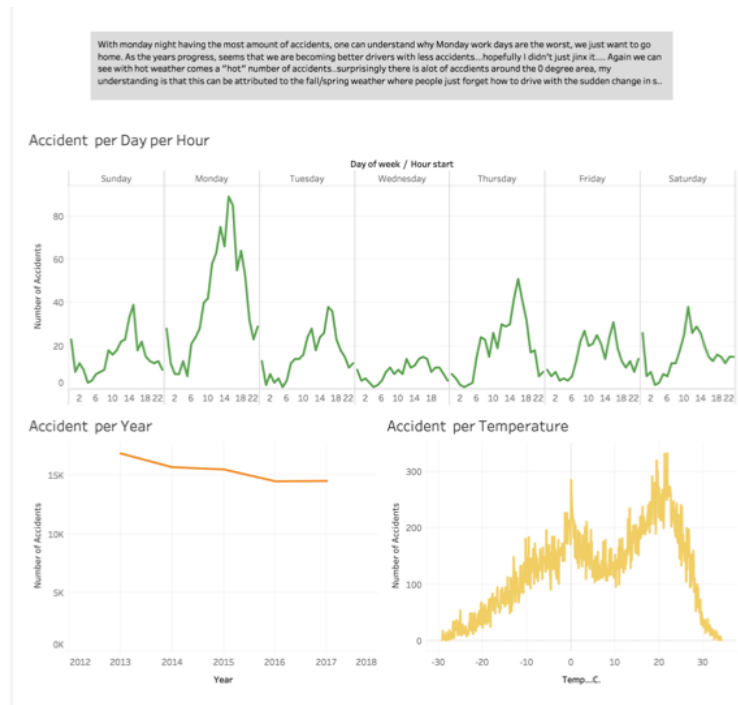
When looking at the day of the week with the most accident, it was surprising to see that the worst days weren't the weekends. Instead it was the 3 days leading up to the weekend. It was even more surprising to see that the month with the most amount of accidents wasn't a winter one, but instead a summer month. I would have never known this without the Dashboard.

Dashboard 2



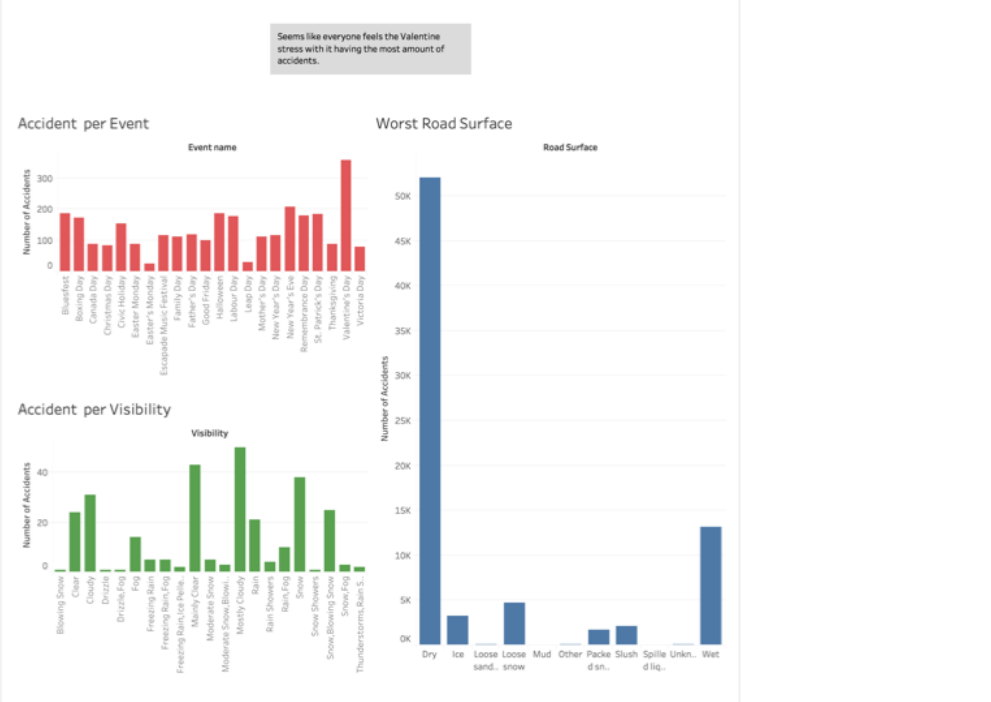
It can be seen that most of the accidents do near the dense areas such as downtown, and the further one moves away the less accidents there are. This can be attributed to the fact that more people traverse these area, therefore there is more of a chance for accidents to occur, it can be seen that accidents again start to occur more frequently in certain area away from the downtown core, and these are the suburban areas of Kanata and Barrhaven. Which can have traffic areas.

Dashboard 3



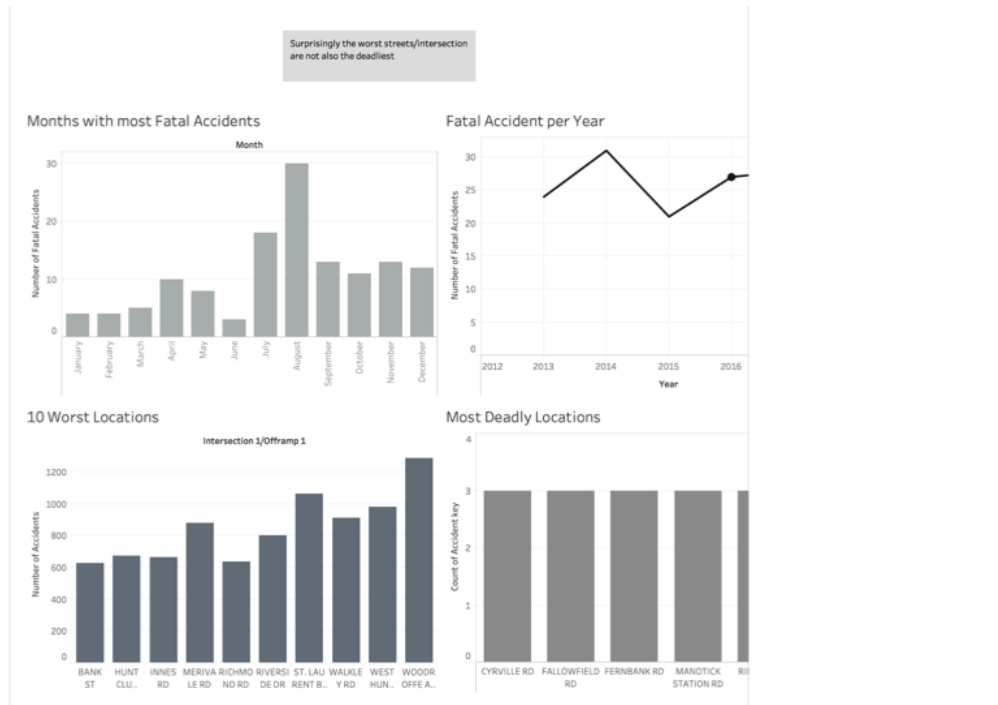
It was surprising to see that Monday evening had the highest frequency of accidents. It was also surprising to see that as temperatures increases so did the number of accidents. There is also a staggering amount of accidents surrounding the 0 degree area, but this can be attributed to the Fall and Spring season, where the random changes in weather can cause an influx of accidents.

Dashboard 4



The biggest take away is that Valentine’s day has the highest number of accidents. For the **Worst Road Surface** table, there were an immense number of “Unknown”, which signify that the road surface was not recorded, that column has hidden.

Dashboard 5



It was interesting to see that the 10 worst locations were not also the deadliest. With the most accidents occurring in August, it can be understood why it also has the most amount of Fatal accidents.