

Different Type of Accidents Trending

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Introduction

Between 2012 and 2024, there is a consistent trending for most of the common types of accidents such as driver inattention/distraction, failure to yield right-of-way, and following too closely, and the time when the accident happens. This is part of the Transportation Data Science Project.

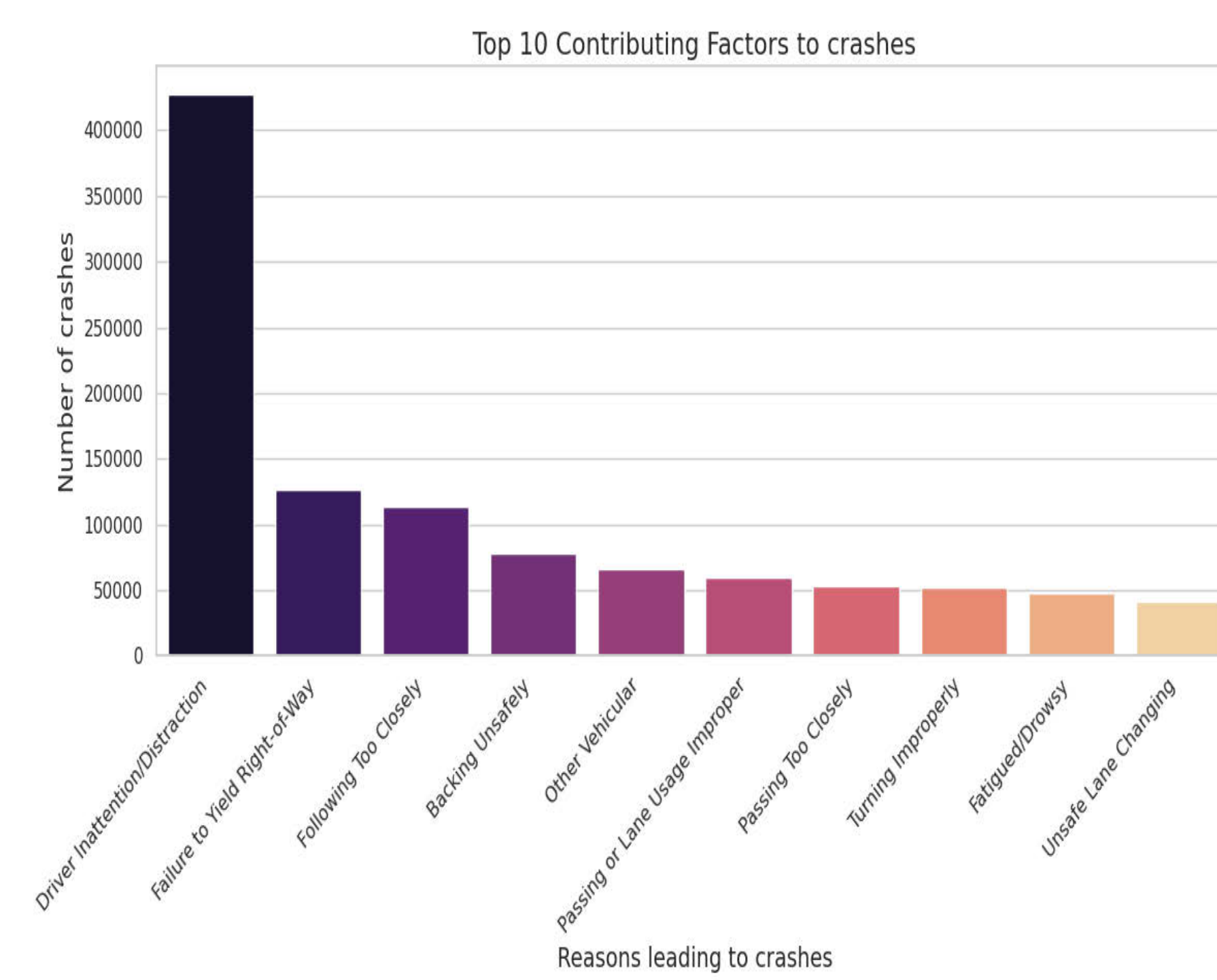


Figure 1. Top common crashes

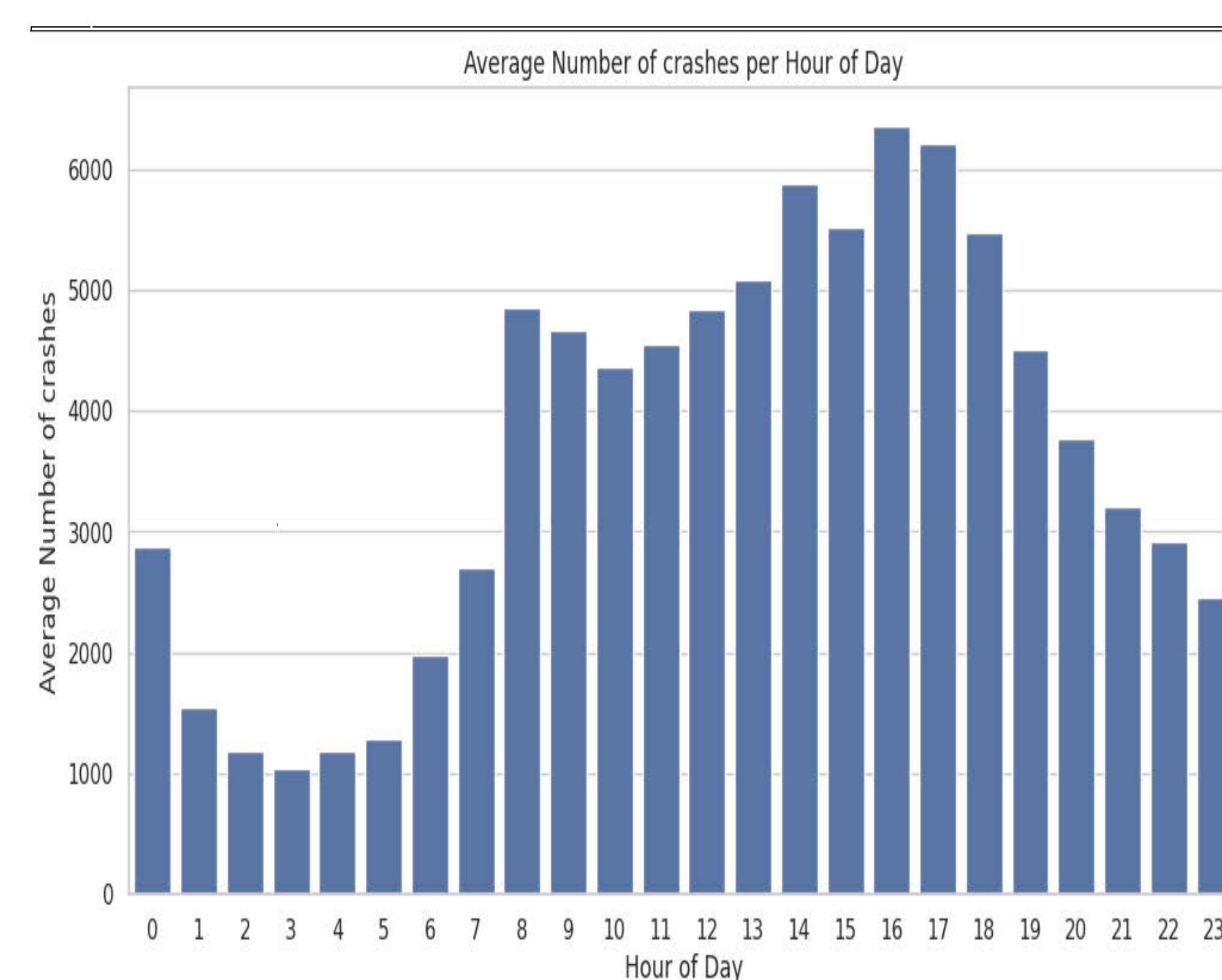


Figure 2. Average number of crashes per day

Methods

Provided by Police Department (NYPD), I explored, manipulated, and cleaned the data using Python libraries and Google Colab to visualize different type of graphs to gain insights about type of accidents and when they occurred during the day.

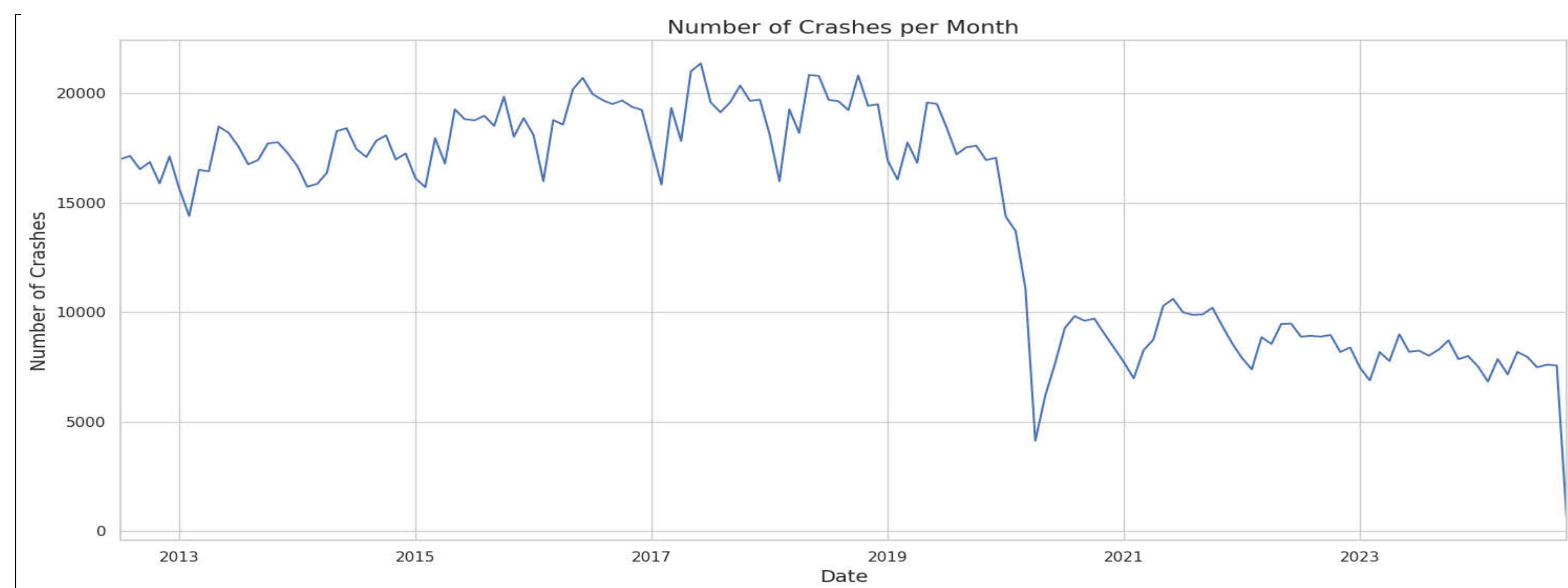


Figure 3. Line chart about number of crashes per month throughout the years

Conclusion

- The graphs show that most accidents happen during the working hours 8 AM - 5 PM. Most happen around the time when people go to work (8 AM - 9 AM) and come back from work (4 PM - 6 PM).
- The number of accidents shows consistently throughout the year and during the day for most of the common accidents.
- There is a correlation between the time of the day and the number of the accidents happen during the day.

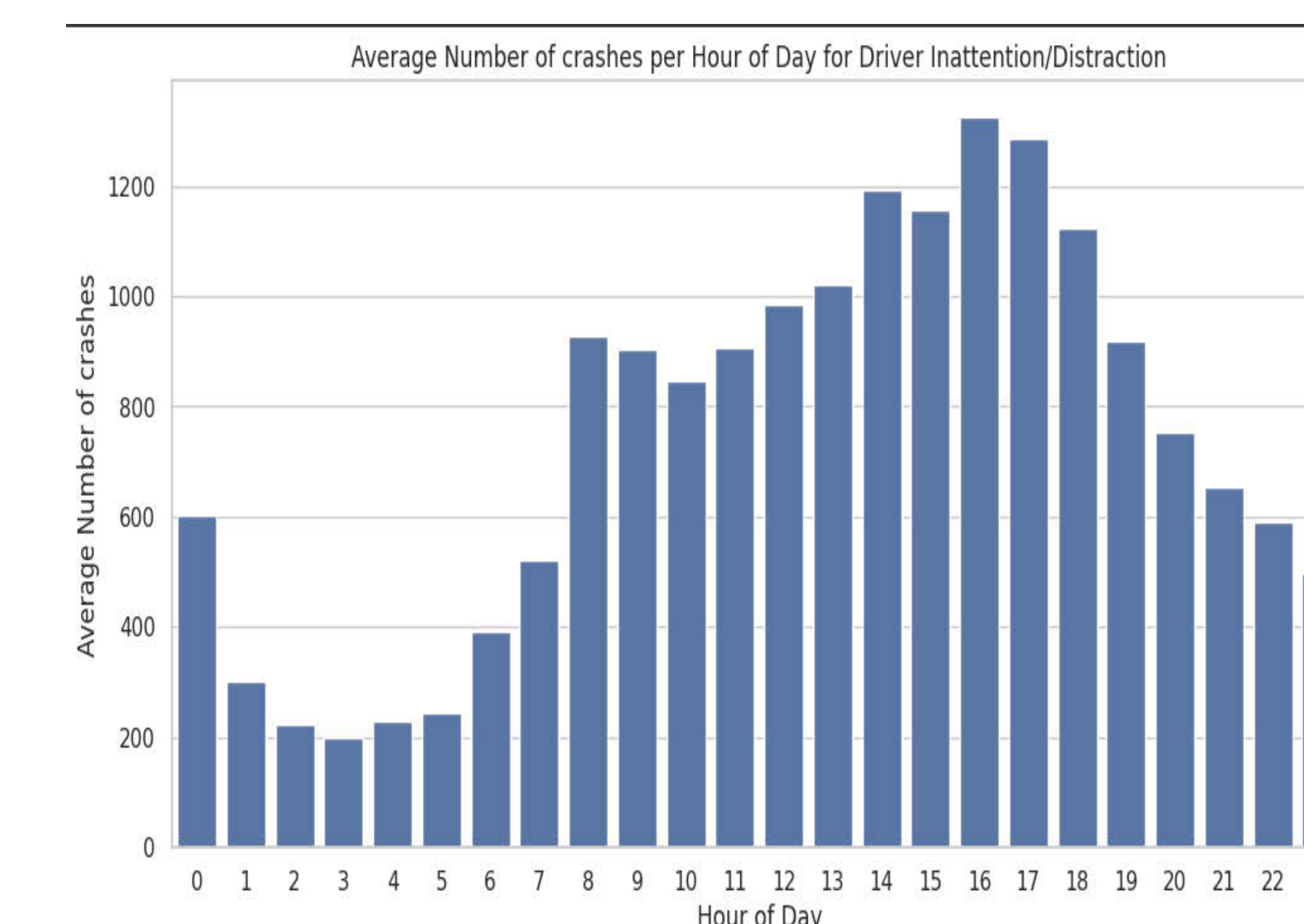


Figure 4. Average number of Crashes per hour of the day

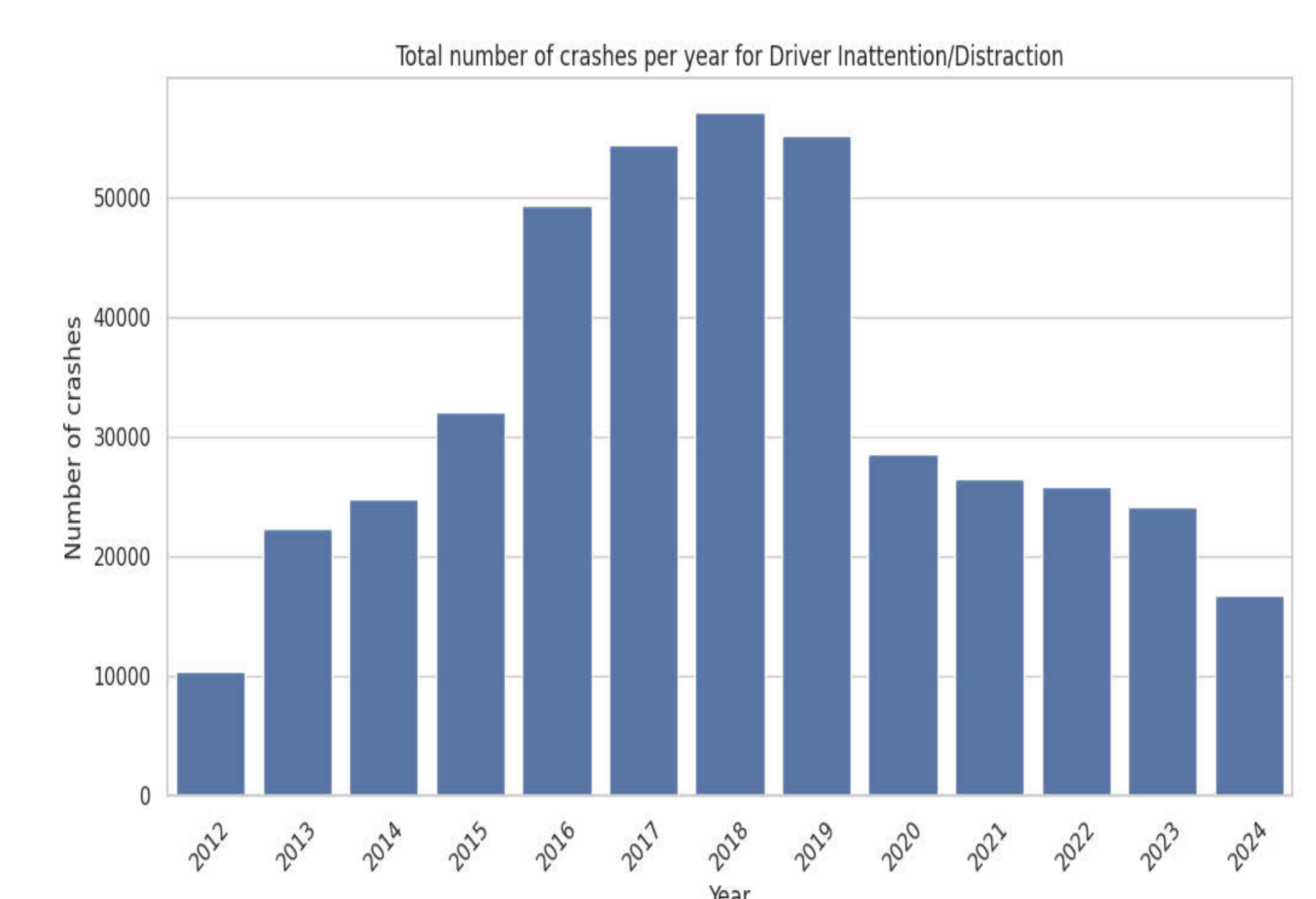


Figure 5. Total crashes per year

Future Direction

- Further analyzing psychology behavior of people during the time of the day.
- How people mood can affect driving.

Acknowledgments

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References

Police Department (NYPD)
NYC Open Data