**Executive Summary**

*Motor Vehicle Crashes cause significant social harm and economic losses.*

*On average, there are 6.75 million car accidents in the U.S. every year. That’s roughly ​18,510 per day. Around 38,000 people die in automobile crashes on annual basis and an additional 3 million are injured or disabled.*

*There’s a lot of factors that can influence spike in the number of traffic accidents but for this project I wanted to analyze how the population growth in past several years have been affecting the state of Tennessee, specifically Metro Nashville area and how it compares to other states.*

*For comparison I’ll be using traffic data for the following states TX, FL, GA, NC.*

*The states were chosen based on analysis of the Map of the Fastest Growing Counties in the United States (2010 to 2020), following states had the highest count of Metro areas affected by population growth.*

*For this project I’ll be using population data set from www.census.gov along with reports from:*

*TN Department of Safety & Homeland Security*

*Texas Department of Transportation*

*Florida Highway Safety and Motor Vehicles*

*Georgia Department of Public Safety*

*Connect NCDOT*

**Motivation**

*My main motivation for this project was my husband mentioning on multiple occasions how driving in Nashville Metro area have been less safe and that he never had this issue back when he lived in MI.*

*Through research I’ve found that in the past decade MI only had around 0.19% increase in overall population whereas TN had around 0.86%, which led me to a decision to dig deeper into the traffic accident data.*

**Data Question**

* *How population growth historically affects the number of traffic accidents?*
* *What type of accidents are more predominant in Metro areas?*

**Minimum Viable Product (MVP)**

*Python and Excel will be used for formatting, cleaning, and analyzing the data.*

*Final analysis findings will be presented in a form of a dashboard and a formal presentation.*

**Schedule (through 4/30/2021)**

1. Get the Data (05/14/2022)
2. Clean & Explore the Data (06/04/2022)
3. Create Presentation of your Analysis (06/18/2022)

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI

1. Internal demos (6/21/2022)
2. Demo Day!! (6/28/2022)

**Data Sources**

[*TN Department of Safety & Homeland Security*](https://www.tn.gov/safety/stats/crashdata.html)

[*Texas Department of Transportation*](https://www.txdot.gov/inside-txdot/forms-publications/drivers-vehicles/publications/annual-summary.html)

[*Florida Highway Safety and Motor Vehicles*](https://www.flhsmv.gov/resources/crash-citation-reports/)

[*Georgia Department of Public Safety*](https://dps.georgia.gov/annual-reports)

[*Connect NCDOT*](https://connect.ncdot.gov/resources/safety/pages/crash-data.aspx)

[*Map of the Fastest Growing Counties in the United States (2010 to 2020)*](https://www.zipdatamaps.com/national/population/map-of-fastest-growing-counties-in-the-united-states)

[*National Population Totals and Components of Change*](http://www.census.gov)

**Known Issues and Challenges**

* *Each state has its own way of keeping historical records of traffic accidents which means none of the reports are standardized.*
* *Grouping counties based on urban and rural areas*