**Statistical Analysis of Traffic Incidents**

**and Weather Conditions**

A logo of a university of calgary

Description automatically generated

**Data 602 Group Project**

Anitha Joseph, Jincy Thomas, Megha Radhakrishnan Sanitha, Prichelle Lal

February 12th, 2025

**Introduction**

Transport Canada has undertaken to release a subset of its National Collision Database (NCDB) – a database containing all police-reported motor vehicle collisions on public roads in Canada. Selected variables (data elements) relating to fatal and injury collisions for the collisions from 2001 to 2021 data is collected from NCDB Online.

Highlights

1. Do weather variables, such as wind, rain, snow, speed limit, significantly influence road traffic incidents?
2. what are the specific effects of each weather parameter on traffic conditions? Additionally, to what extent are these impacts likely to be interconnected?
3. Gaining insight into the connection between weather and traffic could lead to more effective management of traffic and transit systems.

**Literature review**

<we have to some sentences here>

**Statistical Analysis**

Exploratory Data Analysis & Visualization

* Independent & dependent variables
* relationships
* What we exmained & analyzed – initial insights
* Graphs/charts

Hypothesis Testing

* Null hypothesis
* Alternative hypothesis
* Monte carlo
* Distribution

Conclusion

Recommendations & Next Steps

References