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| Victorian Crash Site Executive Summary |
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# Abstract

The Victorian Crash Site analysis tool gives critical insights into road safety within Victoria. Over a 12-month period using our given data set, we had a total of X accidents with an average of X accidents per day. Peak accident hours were identified to be within X and X, emphasizing the need for heightened awareness during these times for at risk commuters.

Our analysis allows the user to highlight accidents associated with a keyword of their choice, giving them pertinent information in their area of concern. Additionally, the impact of alcohol in accidents is significant with X% of accidents within the given time period involving alcohol.

These findings show the importance of data-driven decision making in solving the problems facing road safety in Victoria. The analysis tool gives stakeholders the means to pinpoint high-risk areas and groups allowing them to allocate resources effectively. It’s a vital tool for policymakers, law enforcement, manufacturers and other interested parties to give insights that can drive a positive change and reduce road accidents.

# Introduction

Data-driven decision making ensures road safety. This is a paramount concern for governments, law enforcement, transport authorities and manufacturers. Addressing road safety and minimizing accidents is the top priority and having a tool which can present pertinent information to decision-makers can help them make informed decisions, allocate resources effectively, and as a result reduce road accidents in Victoria.

The purpose of this report is to provide a comprehensive overview of the Victoria Crash Site analysis tool, its capabilities, and its potential impact on road safety initiatives. As proof of concept build much of its features are reduced from what a production version of a similar project would look like, but it will serve as an indication of its future potential. We will cover the period from [start date] to [end date] in which the user can look through our provided data set and draw information from it to understand the who, what, when, where and why of roadside incidents in Victoria.

# **Analysis 1 – User selected period, display all accidents within that period.**

In this analysis, users can select a specific date range for their investigation. The tool then displays all accidents that occurred within that period. Below, there is a snapshot of the results for an example period.

Date Range: x/x/2013 – x/x/2014.

Total Accidents: x

SNAPSHOT

Result Description – This analysis allows the user to view all accidents within a specified time, whether that be 12 months or 12 days. Users can identify accident locations, severity, and other contributing factors important to the user. Any information that the user needs to understand the accidents in this timeframe is available.

# **Analysis 2 – User selected period, produce a chart to show accidents per hour.**

Users can select a specific range, and the tool will generate a chart showing accidents per hour. Below are the results for a 12-month period.

Date Range: x/x/2013 – x/x/2014.

SNAPSHOT

Result Description – The chart above provides a visual representation of accidents per hour within the selected period. It helps users identify peak accident times and potentially allocate resources for increased road safety during those hours.

# **Analysis 3 – User selected period, retrieve accidents caused by a keyword.**

Users can search for accidents caused by specific keywords, for example, Pedestrian struck by Vehicle, Collision with Vehicle, etc. Below is the results for a 12-month period.

Date Range: x/x/2013 – x/x2014

Keyword:

Total Accidents for Keyword:

SNAPSHOT

Result Description – This analysis allows users to retrieve accidents related to a specific keyword, such as collision with vehicle, fall from or in moving vehicle. This will allow stakeholders to find information pertaining to a specific subset of accidents. As an example a motorcyclist would be able to find accidents and the relevant context for falling from a moving vehicle. It enables a deeper dive into the causes of accidents within the chosen period and helps in tailoring safety measures accordingly.

# **Analysis 4 – Allow users to analyze the impact of alcohol in accidents.**

This analysis focuses on the impact of alcohol in accidents. The user can filter information within a given time related to accidents where alcohol was involved. This can be combined with any of the previous analysis techniques to further refine the information to find whether there were external influences rather than standard road safety. This will assist in the development of targeted interventions and policies to combat drunk driving and reduce accidents as a result.

Date Range: x/x/2013 – x/x/2014  
Total Accidents Involving Alcohol:

SNAP SHOT