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| Executive Summary |
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**Abstract**

This analysis provides a comparative examination of accident data from 2014 and 2017, visualized through bar graphs. The predominant accident type for both years was "Collision with vehicle," with 2014 witnessing a slightly higher frequency. While certain categories like "Collision with a fixed object" demonstrated consistency over the two years, "Struck Pedestrian" incidents showed a notable decline from 2014 to 2017. The frequencies of accidents categorized under "Vehicle overturned (no collision)," "No collision and no object struck," and "Collision with some other object" remained relatively stable. Categories with lower frequencies, such as "Fall from or in moving vehicle" and "Struck animal," exhibited minimal variations. A distinct category, "Fall from or in moving vehicle," emerged in 2017, absent from the 2014 data. This comparative study underscores the shifts and consistencies in accident types over the two-year span, offering insights into areas of focus for enhancing safety measures.

**Introduction**

The purpose of this report is to analyse the difference between the Victorian crash data of 2014 and 2017. The analysis encompasses various facets including the hourly accident trends, date select, keyword-based search, alcohol impact filter and the geospatial accident visualization.

Analysis 1 – Keyword based search

Categories – All

Date – January 2014

A graph with blue bars

Description automatically generated

Categories - All

Date – January 2017

A graph with blue bars

Description automatically generated

The most predominant accident type in both years was "Collision with vehicle." In 2017, this category neared 500 incidents, while in 2014, it was slightly higher, approaching 600. "Collision with a fixed object" maintained a consistent frequency in both years, hovering around the 100 mark. Accidents involving pedestrians showed a decline from 2014 to 2017, with figures nearing 100 in 2014 and dropping slightly above 50 in 2017. The frequency for "Vehicle overturned (no collision)" was fairly stable between the two years, settling around the 50 mark. The "No collision and no object struck" category displayed a minimal decrease from 2014 to 2017, as did "Collision with some other object," which stood close to 40 in both years. Low-frequency categories, "Fall from or in moving vehicle" and "Struck animal," showed little variation between the two years, each ranging between 10-20 incidents. Notably, 2017 introduced a new category, "Fall from or in moving vehicle," which wasn't present in the 2014 data.

Analysis 2 – Date select

2014 (1st of January – 31st of December)

A graph with blue and white bars

Description automatically generated

2017 (1st of January – 31st of December)

A graph with blue bars

Description automatically generated

The bar charts for 2014 and 2017 present an insight into the patterns of vehicular accidents for each year. The top three accident types: "Collision with vehicle", "Collision with a fixed object", and "Struck Pedestrian", remained the predominant accident categories in both years. Their sustained prominence shows the recurrent nature of these incidents and possibly points to areas that may require heightened safety and preventive measures.

There were notable shifts in certain categories, though. "Vehicle overturned (no collision)" and "Collision with some other object", for instance, saw a decrease in 2017 compared to 2014. This decline could be attributed to enhanced vehicle safety features, improved infrastructure, or more effective public awareness campaigns in 2017.

While some accident types showed potential improvement, others remained relatively stable. "Struck animal", "Fall from or in moving vehicle", and "Other accident" maintained low frequencies across both years, suggesting that these incidents have not witnessed any significant shifts.

The persistent nature of the top accident categories indicates the continued need for interventions, innovations, and strategies to enhance road safety further. The data offers a valuable perspective for policymakers, urban planners, and transportation departments to base their future decisions and initiatives upon.

Analysis 3 – Alcohol impact filter

  None functional

Analysis 4 – Geospatial accident visualization

  None functional

Analysis 5 – hourly report

  None functional