



# CALGARY CRIME ANALYSIS REPORT

Insights and Results

DATA 039 – Data Architecture

16 October 2025

Tishya Sohankumar Thakkar

[linkedin.com/in/tishya-thakkar/](https://www.linkedin.com/in/tishya-thakkar/)

## Contents

INTRODUCTION	2
PROJECT OBJECTIVE	2
DATASET OVERVIEW	2
KEY QUESTIONS EXPLORED	3
DASHBOARD DEVELOPMENT	3
KEY METRICS AND KPIS	3
DASHBOARDS	4
INSIGHTS AND TAKEAWAYS	5
CONCLUSION	6

## Introduction

In today's data-driven world, understanding crime patterns is no longer just the domain of law enforcement—it's a collaborative effort involving analysts, planners, and communities. As part of my recent project, I explored crime trends in Calgary using Power BI, aiming to uncover insights that could inform public safety strategies and resource allocation.

The project focused on analyzing publicly available crime data from 2018 to 2023, sourced from the City of Calgary's Open Data Portal. Through interactive dashboards, I examined how crime varies across time, location, and population size. This article shares my journey through the analysis, the challenges I faced, the visualizations I built, and the key findings that emerged from the data.

## Project Objective

The goal was to build interactive dashboards that visualize crime data from 2018 to 2023. These dashboards were designed to help:

- Residents understand crime trends in their neighborhoods
- City planners identify high-risk areas
- Law enforcement allocate resources more effectively

## Dataset Overview

I used the Calgary Crime Statistics dataset from Kaggle, sourced from the City of Calgary Open Data Portal. It included over 66,000 records with fields such as:

- Sector (e.g., Northwest, Northeast)
- Community Name
- Crime Category (e.g., Assault, Theft)
- Crime Count
- Resident Count
- Date, Year, Month
- Community Center Point (for mapping)

This dataset was rich in geographic and temporal detail, making it ideal for community-level analysis.

## Key Questions Explored

To guide the analysis, I focused on three main areas:

### 1. Time-Based Trends

- How do crime incidents fluctuate over time?
- Are there seasonal spikes?

### 2. Location-Based Patterns

- Which communities report the highest crime rates?
- What types of crimes are most common in each sector?

### 3. Comparative Analysis

- Is there a link between population size and crime frequency?
- Do smaller communities experience disproportionately high crime?

## Dashboard Development

Using Power BI Desktop, I:

- Imported and cleaned the dataset
- Created relationships between fields like Community and Date
- Built calculated columns such as Crime Rate per 1,000 residents
- Designed an Executive Dashboard focused on population-based crime analysis

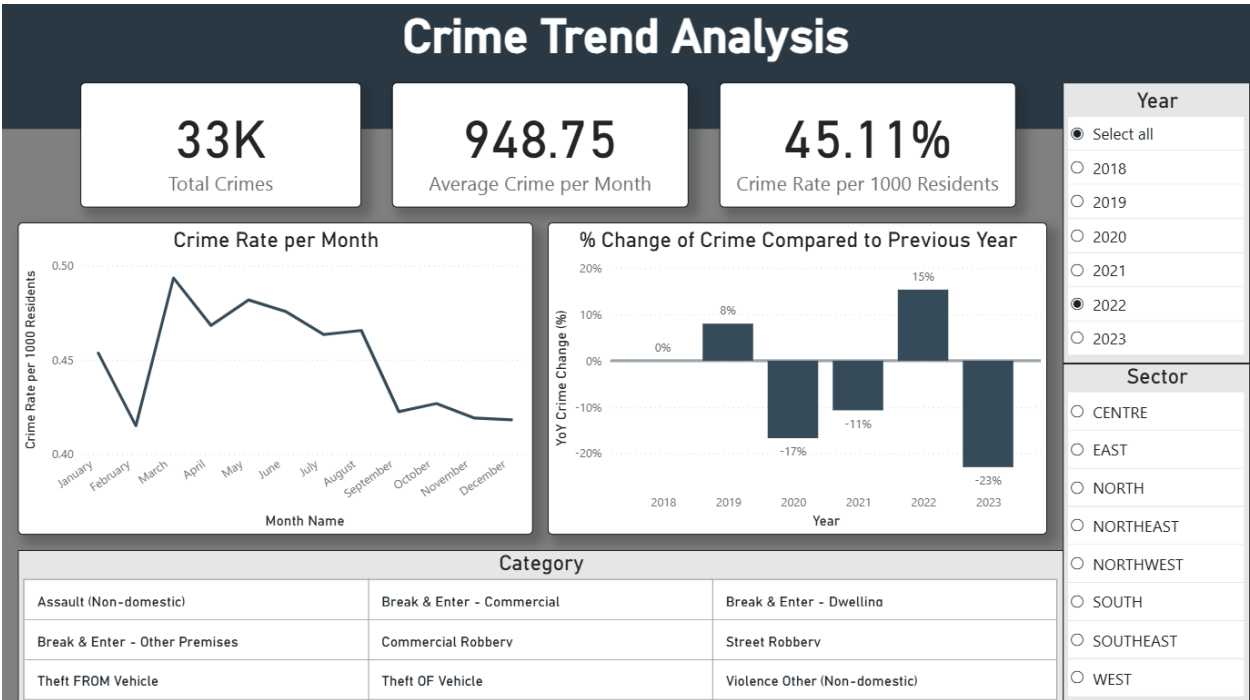
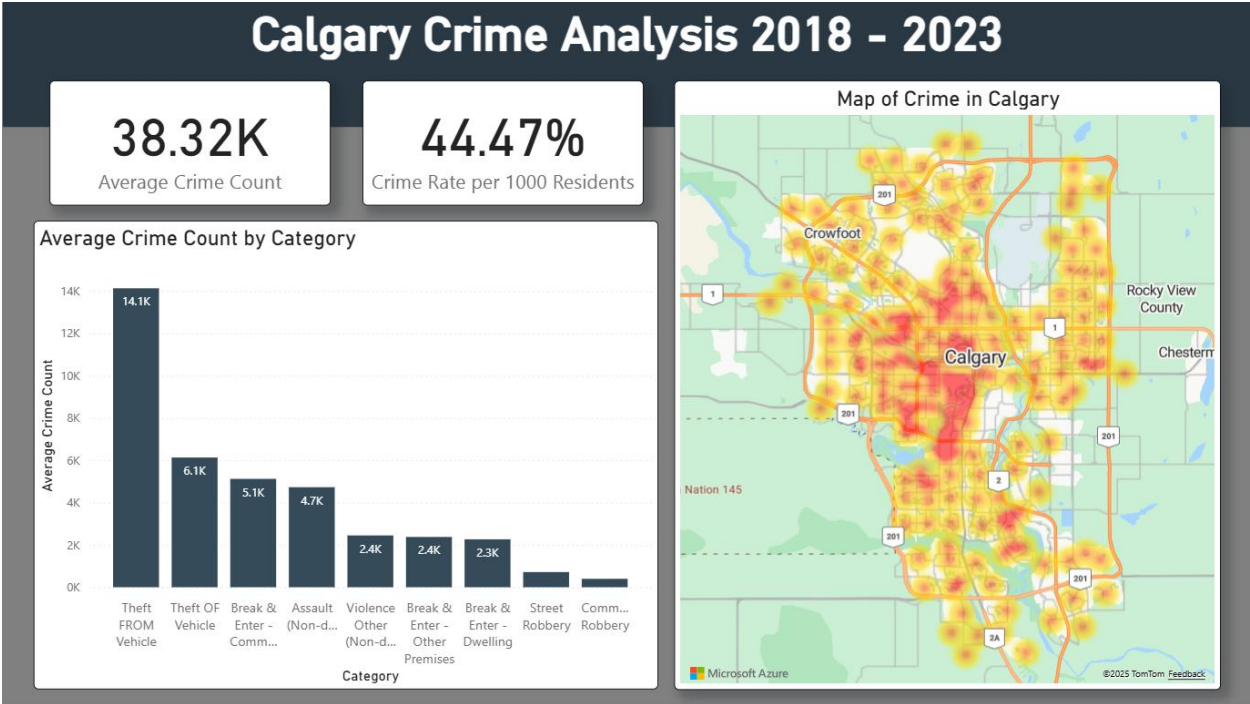
## Key Metrics and KPIs

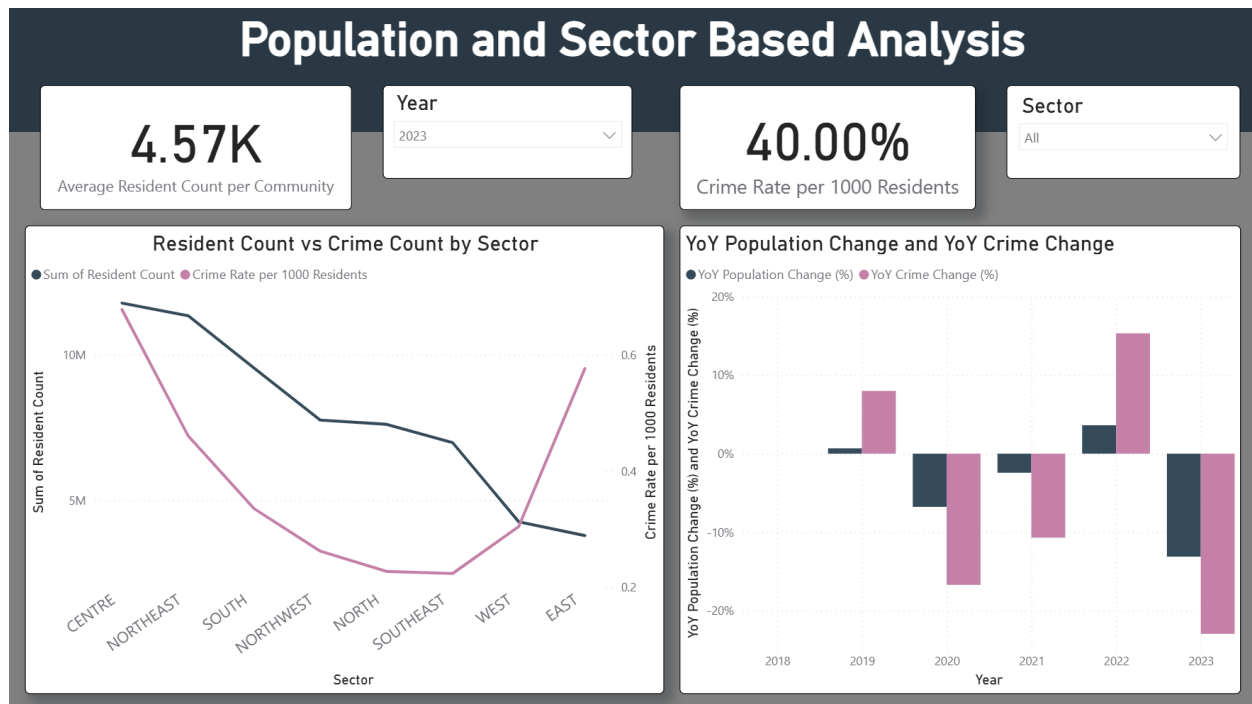
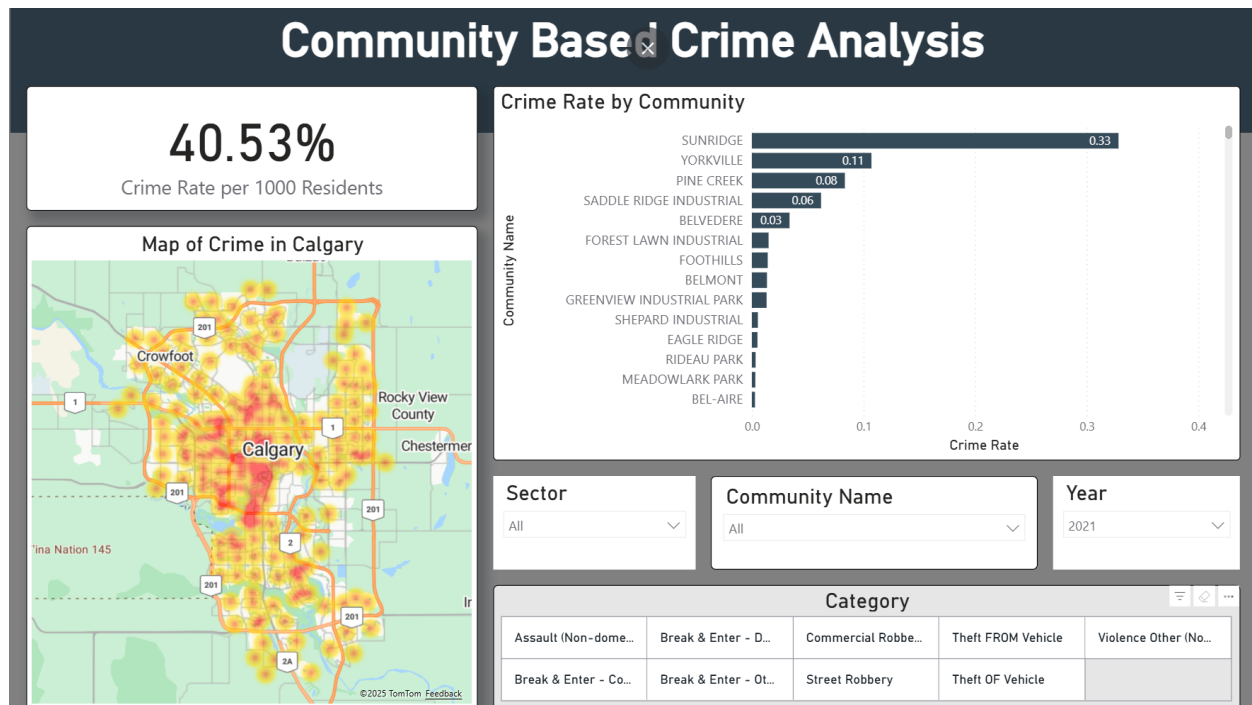
The dashboards tracked:

- Total Crime Count
- Crime Rate per 1,000 Residents
- Year-over-Year Crime Change (%)
- Average Crime per Month
- Average Resident Count per Community
- Population Change (%)

These metrics helped uncover patterns that raw data alone couldn't reveal.

Dashboards





## Insights and Takeaways

- **Seasonal Spikes:** Crime tends to increase during summer months.
- **Hotspot Identification:** The Northeast sector consistently shows the highest crime rate, with Theft and Assault being the most frequent.

- Population vs. Crime: Some smaller communities have disproportionately high crime rates, challenging assumptions about population-based crime distribution.

## Conclusion

This project highlighted the power of data in understanding and addressing community safety. Despite the challenges, the insights gained were invaluable. Crime in Calgary varies by time, location, and population, and data-driven strategies are essential for effective intervention.