



Montreal crime study  
from January 2015 to  
May 2021

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# Overview

- 1 Main presentation
  - exploratory data analysis
- 2 Second Section



# Introduction

Montreal's police department has witnessed changes due to the current pandemic and the closing and merging of stations over the last few years. A dataset of criminal acts<sup>1</sup> became available on the open data portal<sup>2</sup> of the city. For each act we have its category, the date and time, the geographic location and the police division assigned with it. The dataset covers the time from 01 January 2015 until today and is updated regularly. We wish to analyze the effects of the covid situation on crime trends.



# exploratory analysis

A sample of 3 observations.  
Total number of observations is 191,611

Obs	Crime Category	district	Police Division	Time of Day	Date	Location Long.	Location Lat.	Police Division ID	Month	Year
1	Break and Enter	Verdun	Île-des-Sœurs, Verdun	Day	22/01/2017	-73.5679	45.4529	16	Jan	2017
2	Auto Burglary	Ville-Marie	Centre-ville (Ville-Marie Ouest), parc du Mont-Royal	Day	04/08/2018	-73.5705	45.5064	20	Aug	2018
3	Auto Burglary	Ville-Marie	Centre-ville (Ville-Marie Ouest), parc du Mont-Royal	Evening	19/05/2015	.	.	20	May	2015

## Montreal Crime Study

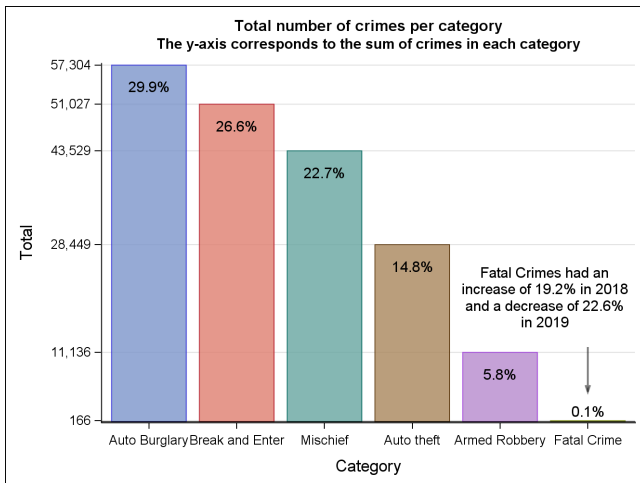
### Exploratory Analysis

#### 1. Missing Values Analysis

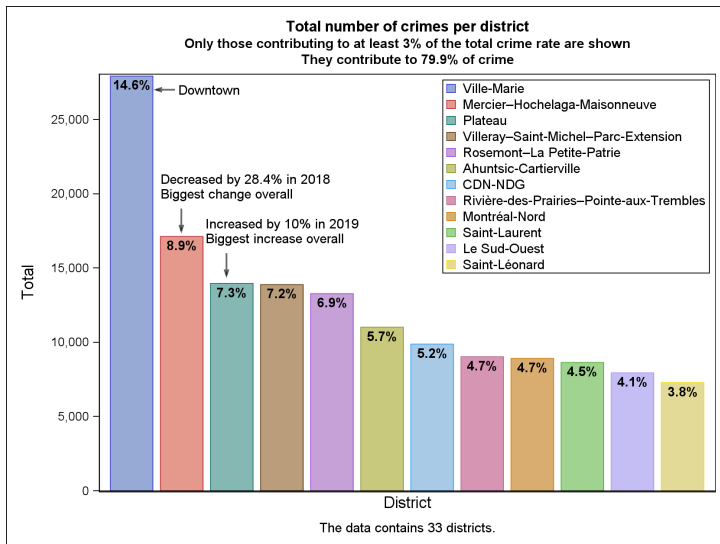
Variable	Count	Percent
location	33,063	17.0%
district	5,423	3.0%
Police_Division	0	0.0%



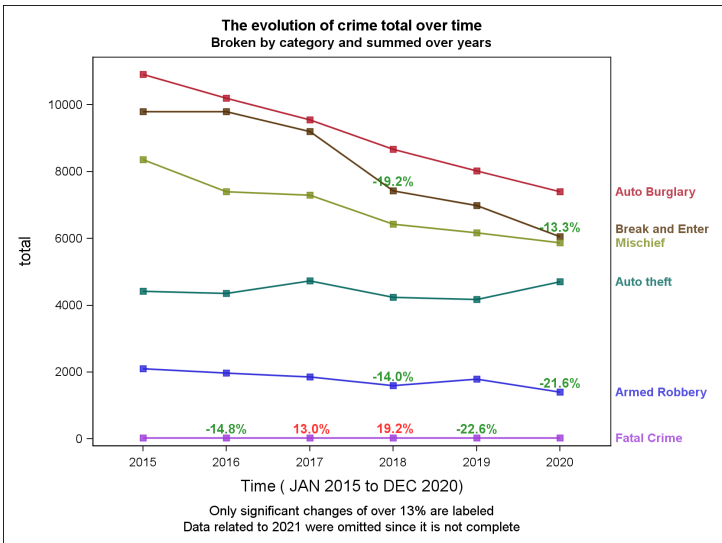
# exploratory analysis



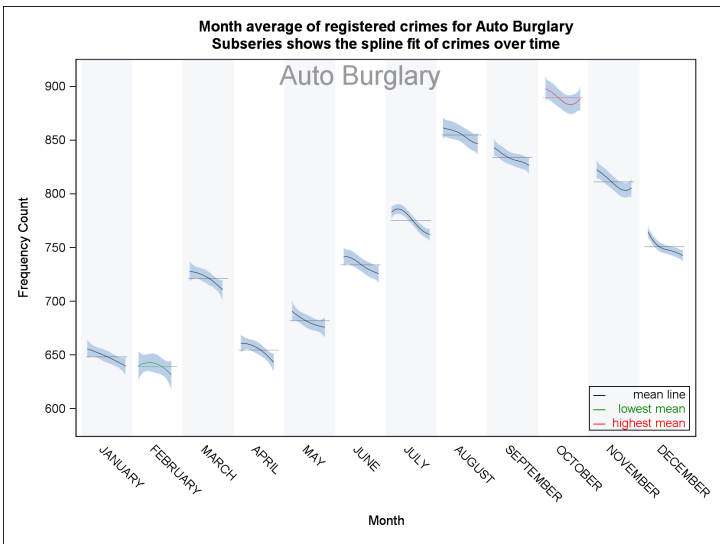
# exploratory analysis



# exploratory analysis

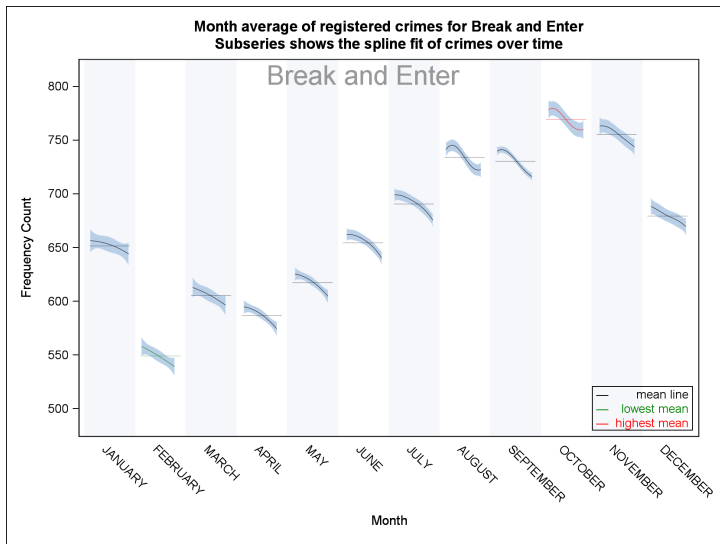


# exploratory analysis

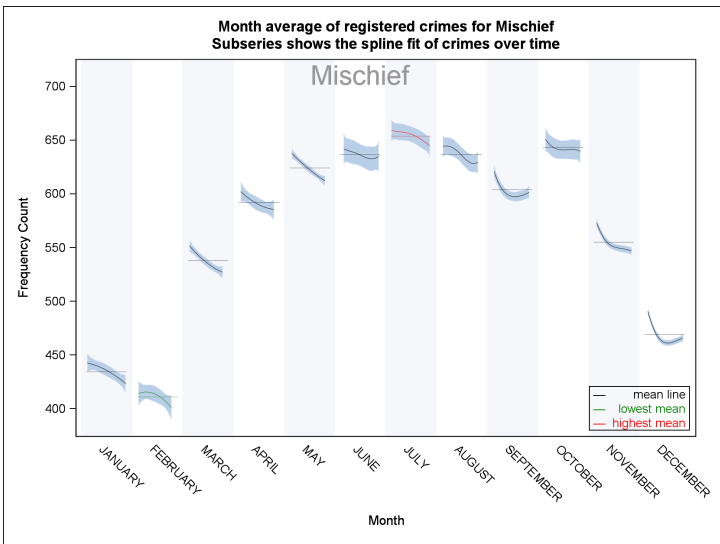




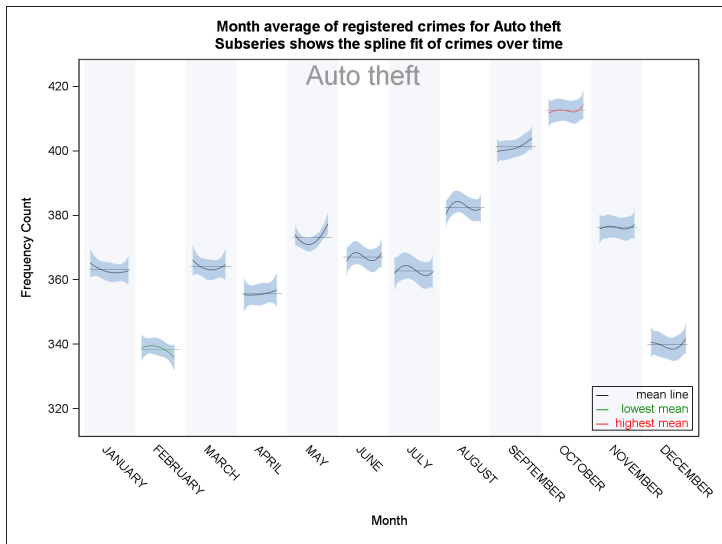
# exploratory analysis



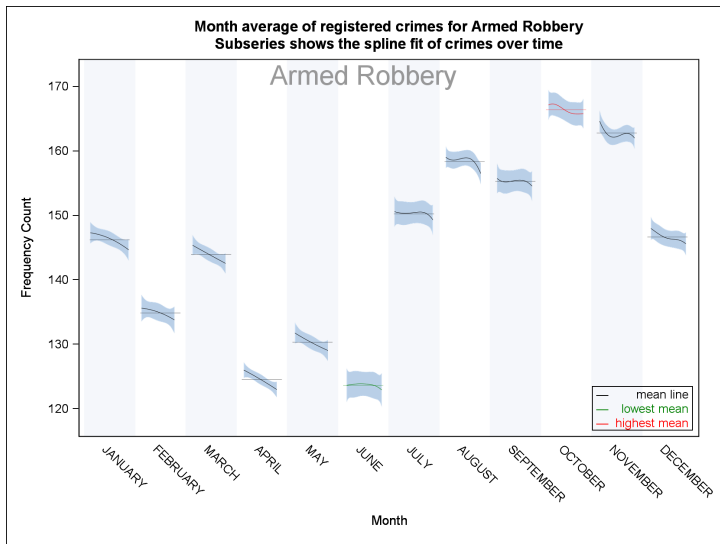
# exploratory analysis



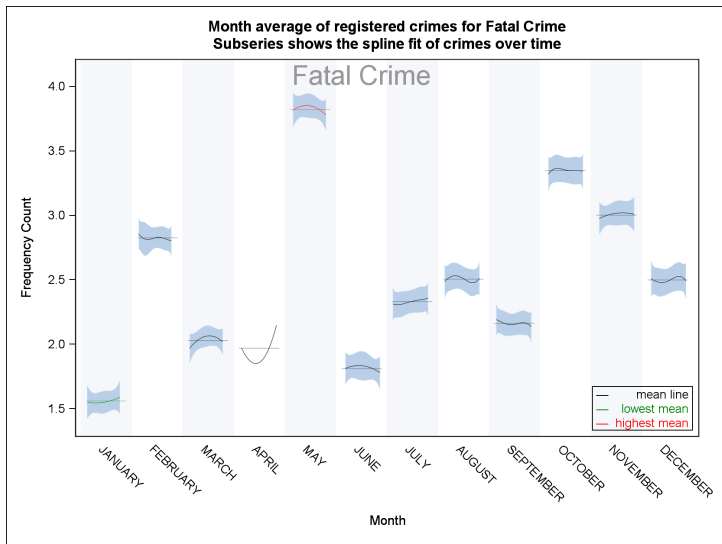
# exploratory analysis



# exploratory analysis



# exploratory analysis



# The End

