Exploratory Analysis of Metro Police Incident Reports

2013 - 2019

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Why Bother?

- Nashville is a growing city with approximately 80 new residents moving in every day.

- Businesses keep moving to Nashville.

- I'm 25 and would like to move out of my parents' house eventually.

Goals

- Find common incident trends occurring in Nashville

- Identify the most dangerous places or places to avoid

- Identify if any changes in incident rates could relate to changes in population.

Terms and Important Disclaimers

Incident Does Not Mean a Crime Occurred

- Incidents are when an officer is requested or required, it does not always mean a crime was committed.
  - Ex: traffic violation and culprit is given warning.

Disclaimer:

- This is an exploratory analysis. I do no have a background in criminology. This project was not meant to identify the causes behind these incidents or ways to reduce these rates.

How Bad is Nashville?

Not that bad.

How Bad is Nashville?

- Between 2013 – 2019, nearly 60% of incidents reported were non-violent: Traffic Violations, Business Checks, and request for Officer Investigation

- By 2015, incidents report have steadily declined.

Worst/Best Places to Go?

Top 5 Busiest Zip Codes
- 37203 – 562,840,000 incidents
- 37211 – 488,710,000 incidents
- 37207 – 464,600,000 incidents
- 37209 – 431,240,000 incidents
- 37115 – 388,760,000 incidents

Top 5 Least Busy Zip Codes
- 37015 – 976 incidents
- 37122 – 909 incidents
- 37143 – 705 incidents
- 37064 – 128 incidents
- 37152 – 16 incidents

Top 5 Biggest Growing
- 37240
- 37189
- 37013
- 37135
- 37210

Notable Trends & Fun Facts Pt.1

Data Quality:

- Years 2018 and 2019 are incomplete. 2018 contains 9 months, 2019 contains 10 months.

- 19% of all incidents reported between 2013 – 2019 are have locations outside of Tennessee or in the Atlantic Ocean.

Notable Trends & Fun Facts Pt.2

Notable Trends:
- March is the busiest month of the year, while December is the least busy.
- Shootings and gun-related incidents has steadily grown
- Vehicle-related incidents has gone down despite more commuters

Fun Facts:
- Most popular Lunch Break location: Ole Smokey Moonshine
- Most Fights location: Dixieland Bar
- Most Bomb Threats location: Nashville Airport

Links & Sources

- Sources:
  - Police Incident Reports: www.data.nashville.gov
  - Zip Code GeoJson Outlines: www.data.nashville.gov
  - Population by Zip Codes: https://data.world/lukewhyte/us-population-by-zip-code-2010-2016

- Links:
  - Power BI Dashboard: https://app.powerbi.com/view?r=eyJrIjoiNzJjMmVmYTctNTkxZS00MDk5LTgzYzEtZjkwYTJhNjc3Y2JmIiwidCI6IjEwMWRhNTg3LTE4NDMtNGY1Mi04YjhhLTE3YjA2OWM2NmQzMyIsImMiOjJ9

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