

ANALYSIS OF CRIME INCIDENTS REPORTED IN SAN FRANCISCO 2018-2022

**ALY 6070 - Communication & Visualization for Data Analytics
Final Project**

GROUP-2

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INTRODUCTION

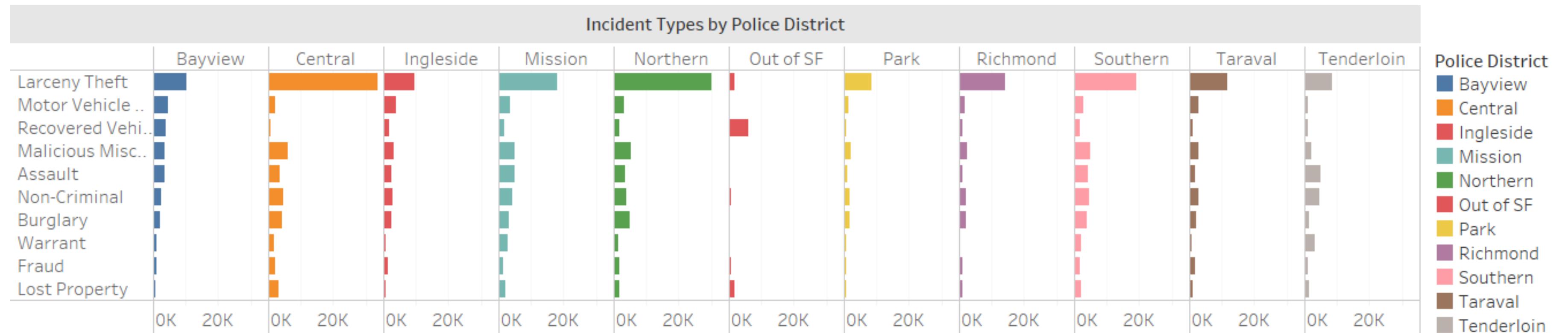
- Crime rates and statistics are one of the most reliable ways to assess the safety of a city or town in the U.S.
- Along with the traditional method of filing a report, San Francisco's Police Department introduced an online self-report filing system for public members.
- As per SFPD's Incident Reports from 2018 to the present, the time frame between the incident actually occurring and being reported was tracked.
- The incident reports are categorized as initial, coplogic, and vehicle followed by supplemental reports which act as follow-up reports.
- The resolution status of an incident gives an idea about the success rate of finding a solution to the crimes that occurred in the city.
- The dataset compiles the data from the SF Police department's Crime Data Warehouse.

RESEARCH QUESTIONS



- How has the trend of reported incidents varied over the years in each police district?
- Which are the top reported crimes in each police district?
- What's the persistence of incidents reported during the hour of the day?
- What is the yearly frequency of reported incident types?
- Which district in the city has the highest crime rate?
- What is the resolution status of reported cases/ arrests of the total cases?
- What types of incidents are frequently reported in the Bayview district?
- What is the total number of incidents reported online in different police districts?

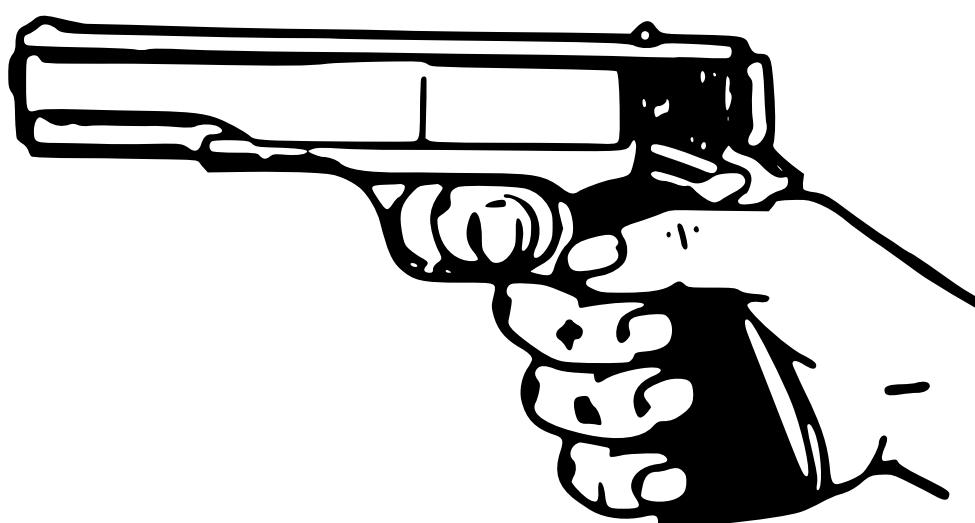
1. Which are the top reported crimes in each police district?



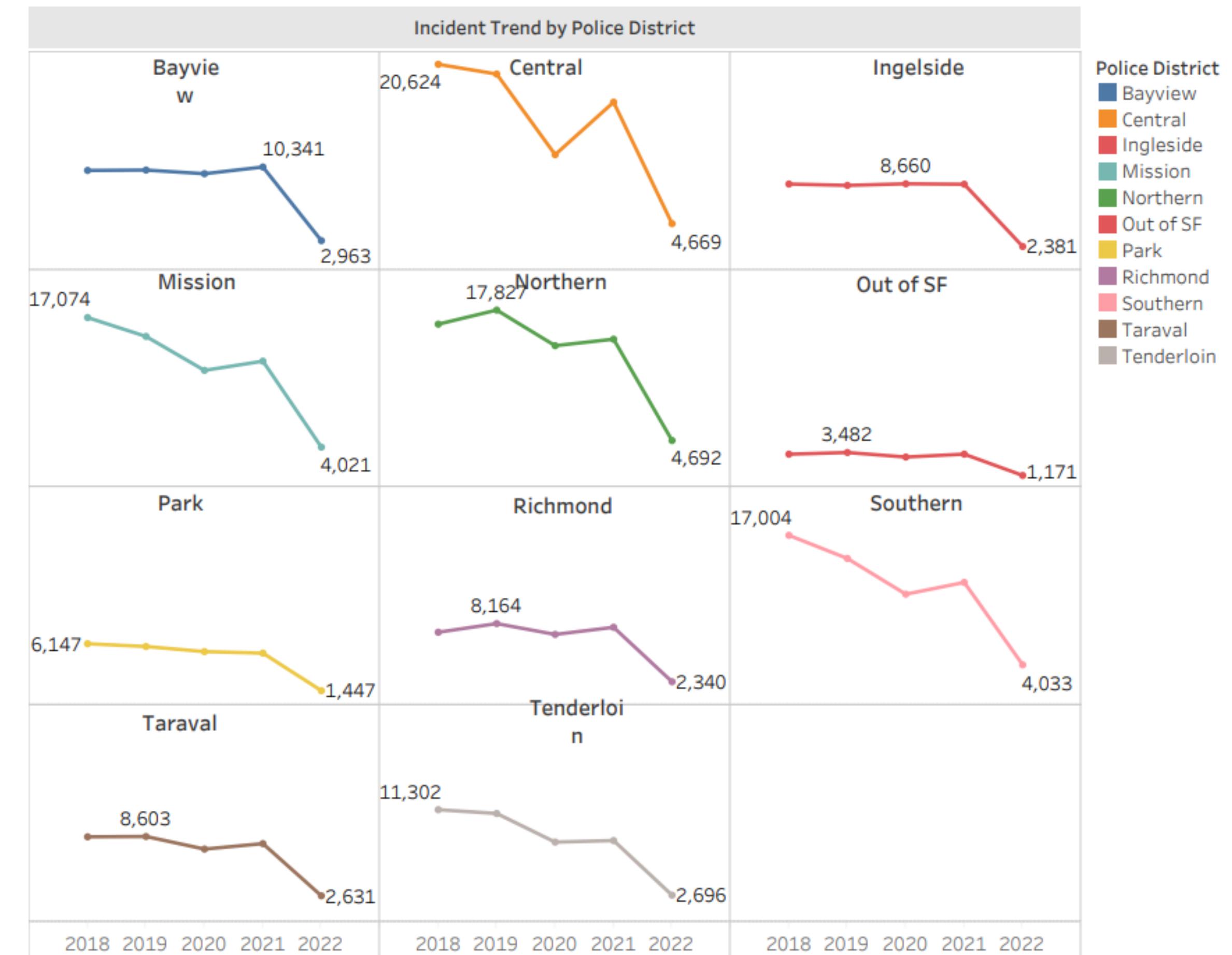
Incidents by year and Police District

District	2018	2019	2020	2021	2022
Bayview	9,019	9,036	8,552	9,133	2,640
Central	18,695	17,790	10,502	15,101	4,266
Ingleside	7,905	7,850	7,815	7,798	2,177
Mission	15,726	13,966	10,720	11,559	3,697
Northern	14,991	16,304	12,872	13,549	4,305
Park	5,619	5,288	4,836	4,715	1,345
Richmond	6,556	7,326	6,377	7,034	2,151
Southern	15,555	13,528	10,121	11,317	3,758
Taraval	7,773	7,763	6,629	7,126	2,391
Tenderloin	10,589	10,213	7,471	7,583	2,551

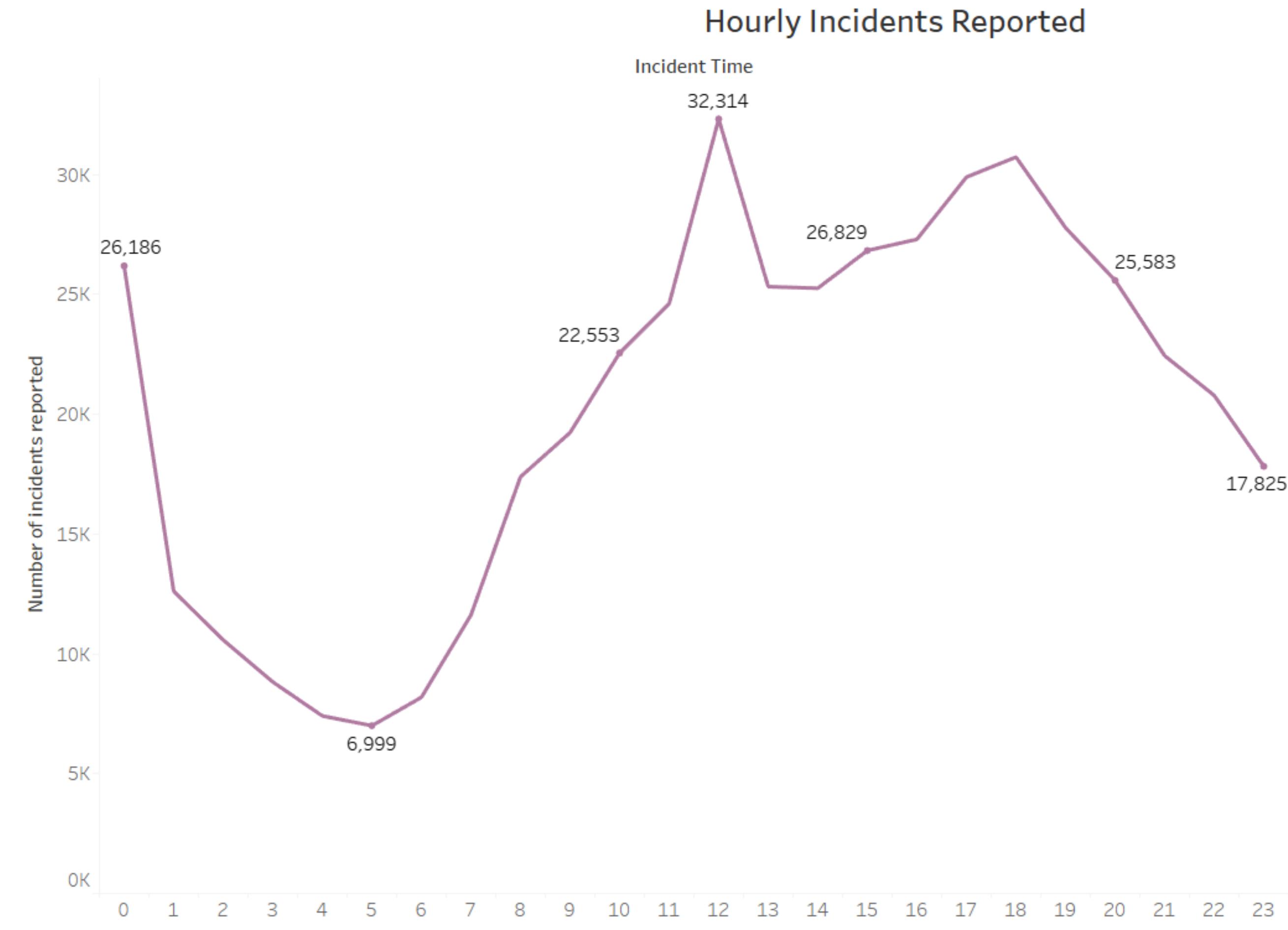
Incidents
1,345 18,695



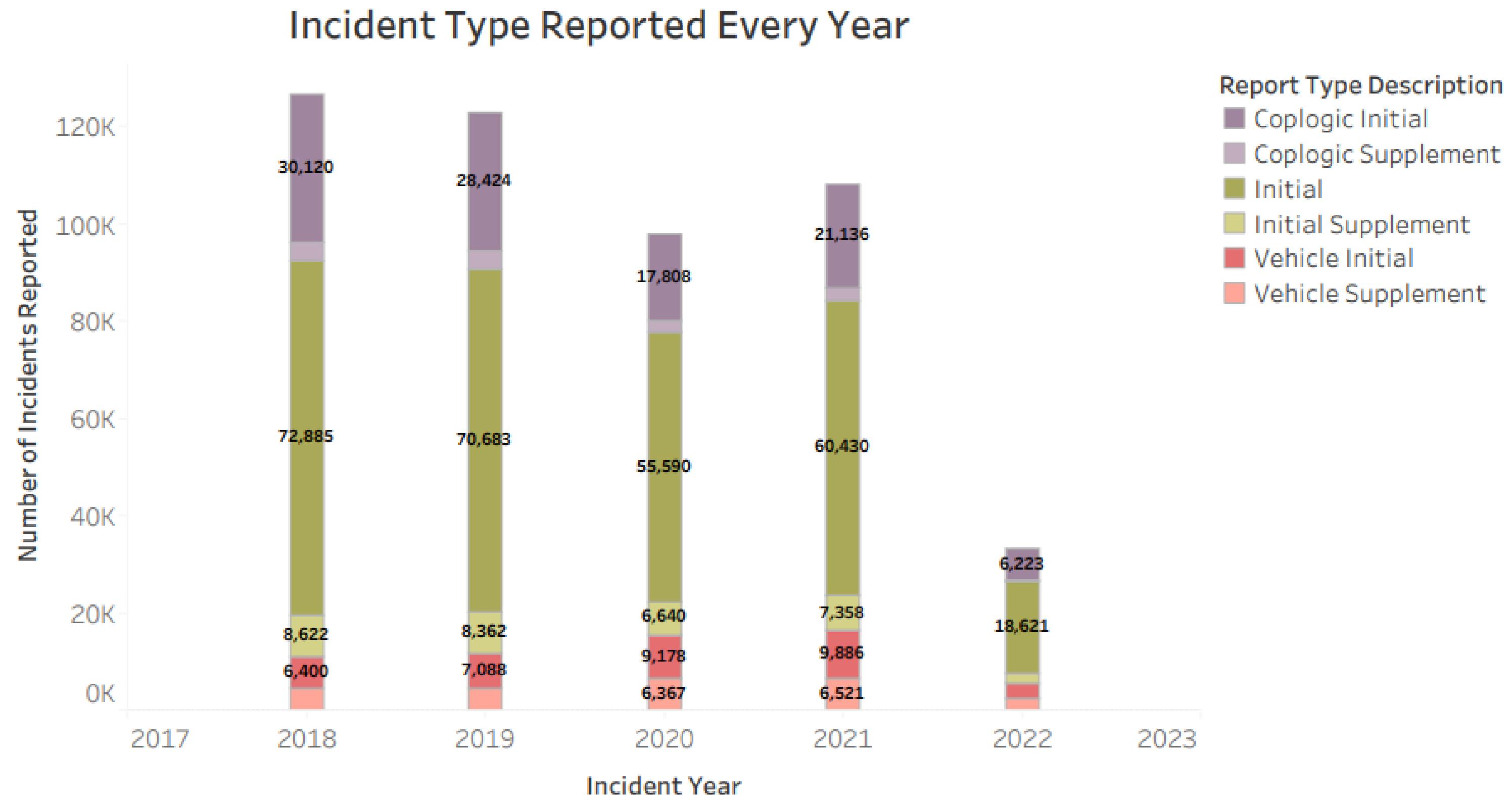
2. How has the trend of reported incidents varied over the years in each police district?



4. What's the persistence of incidents reported during the hour of the day?

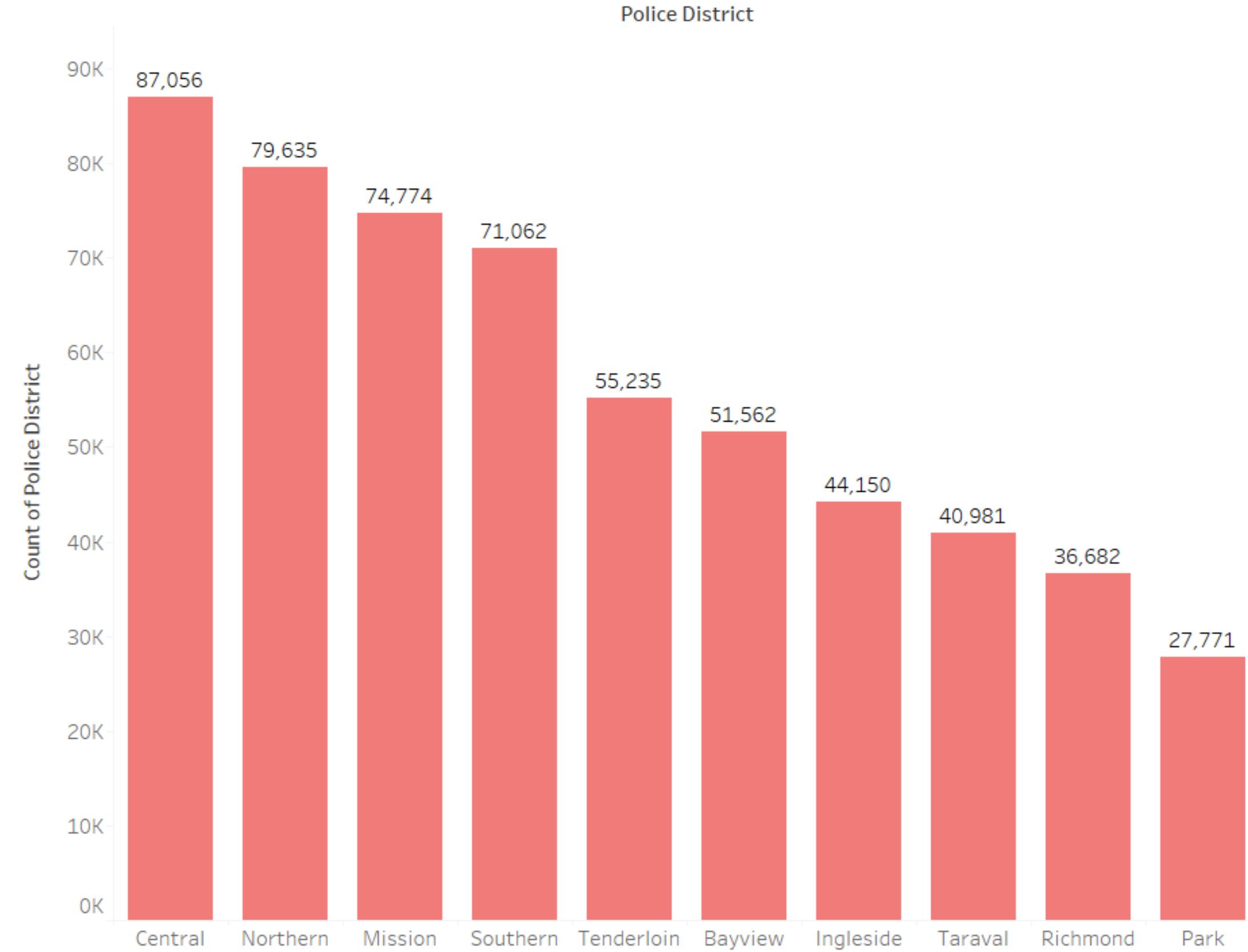


- What is the yearly frequency of reported incident types?



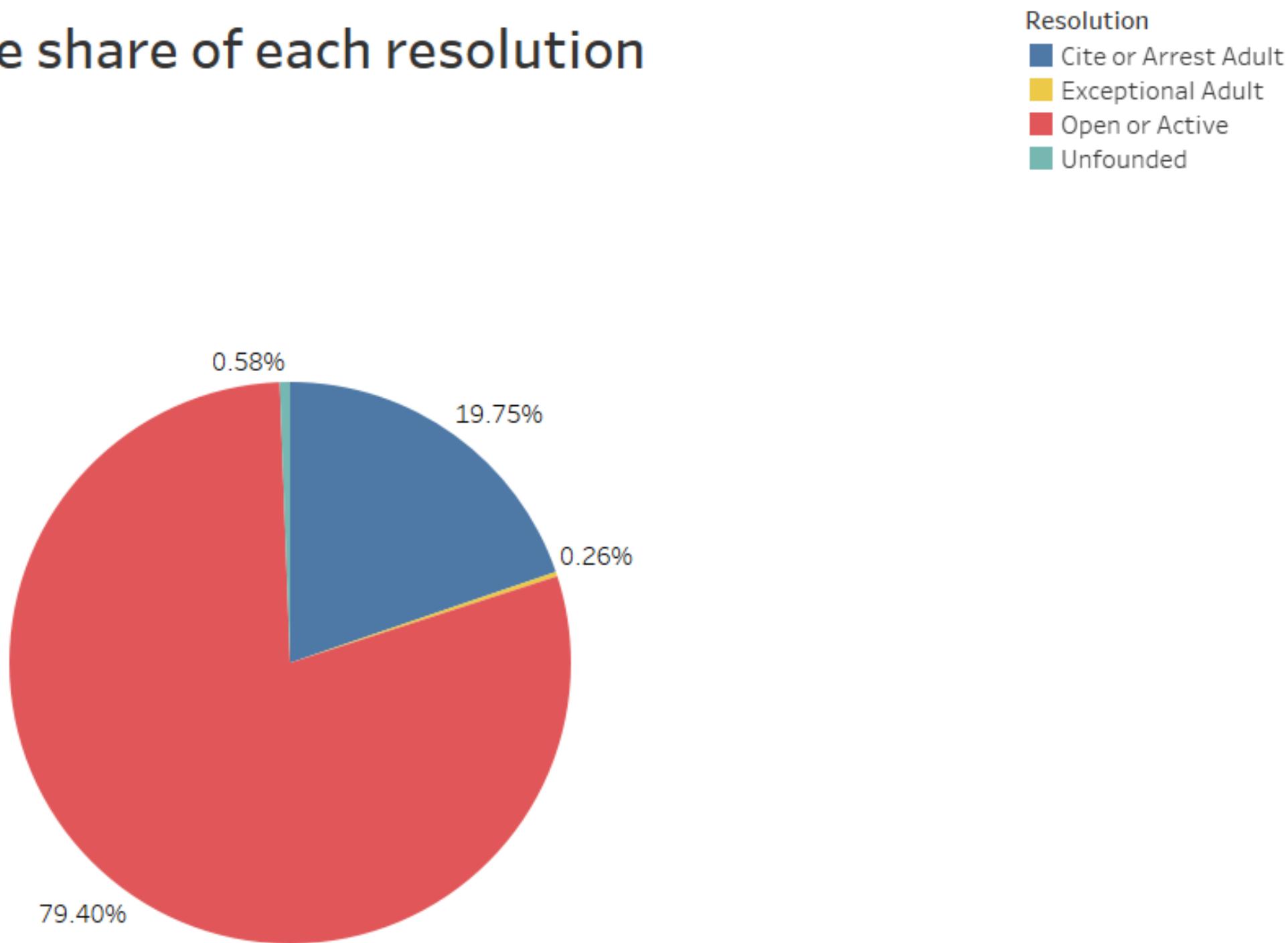
- Which district in the city has the highest crime rate?

Crime Rate in SF Districts(Highest to Lowest)



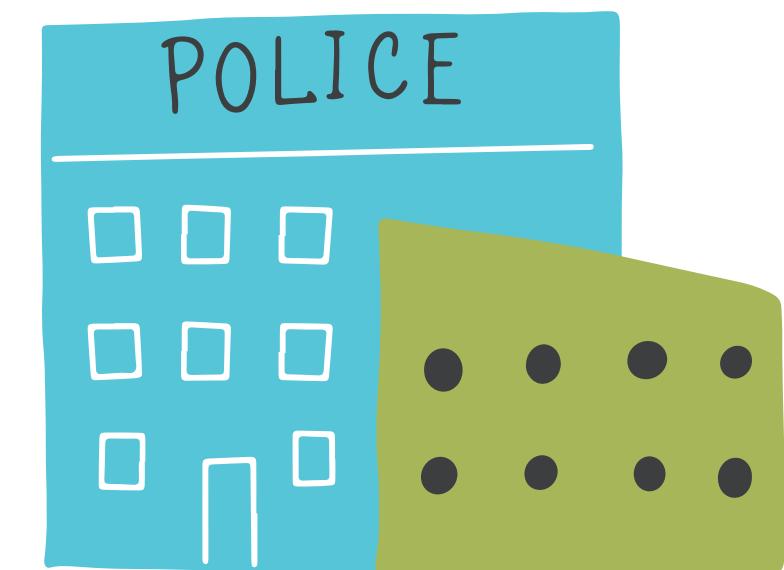
- What is the resolution status of reported cases/ arrests of the total cases?

Percentage share of each resolution



- What is the total number of incidents reported online in different police districts?

Number of Cases Filed Online in Police districts



CONCLUSION

- In conclusion to the analysis performed on the SFPD's incident report data, among the different types of incidents reported, the Larceny Theft reporting count was the highest in many of the Police Districts.
- The majority of incidents were reported at 12 pm, and a high reporting count was observed between 10 am and 9 pm.
- The police department's resolution rate was found to be low since 79.4% of cases were open/active and



REFERENCES

- Police Department incident reports: 2018 - Present. Retrieved from- Police Department Incident Reports: 2018 to Present | DataSF | City and County of San Francisco (sfgov.org)
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