

# NYC 311 Noise Complaints

Data Visualizations

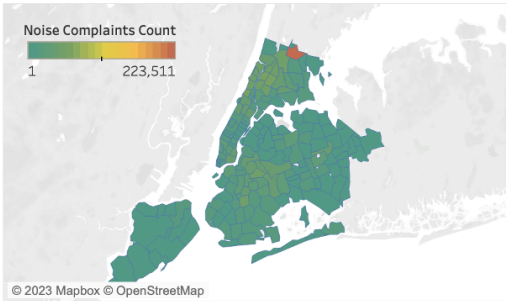


## Project Description

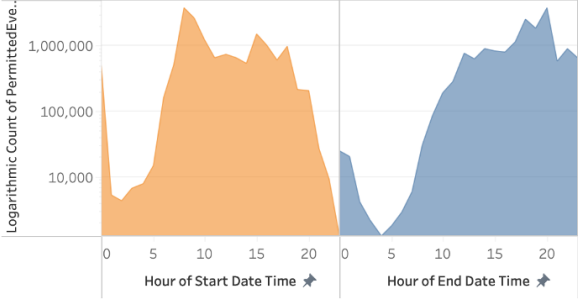
In a city that never sleeps, noise is a given. As part of my Data Warehousing graduate course group project, we were tasked with selecting a NYC 311 Complaint Type dataset and another publicly found dataset to explore a potential correlation. Naturally, we chose to focus on the most popular NYC 311 complaint type among the 228 types: noise, which has 7 subcategories. To complement our study of noise complaints, we decided to analyze the NYC Permitted Events dataset by examining attributes such as event type, time of day, location, and date. Python scripts were used to clean both the Permitted Events Data and NYC 311 Noise Complaints Data in order to build two data warehouses based on what we determined was necessary. I then utilized tableau to combine the two data warehouses and create the data visualizations below.

## Dashboard Overview

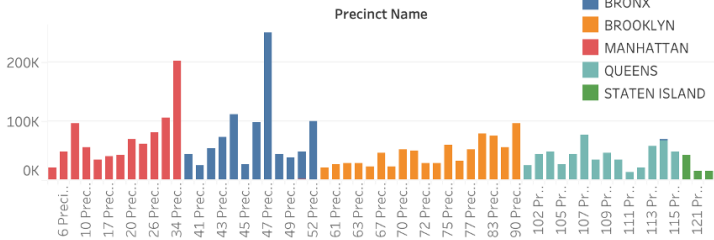
Complaints by Zip Code



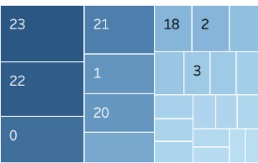
Events by (Military) Hour



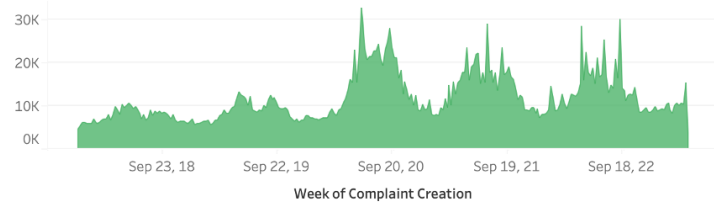
Precinct Workload



Most Popular (Military) Hours to Complain



Timeline of Noise Complaints

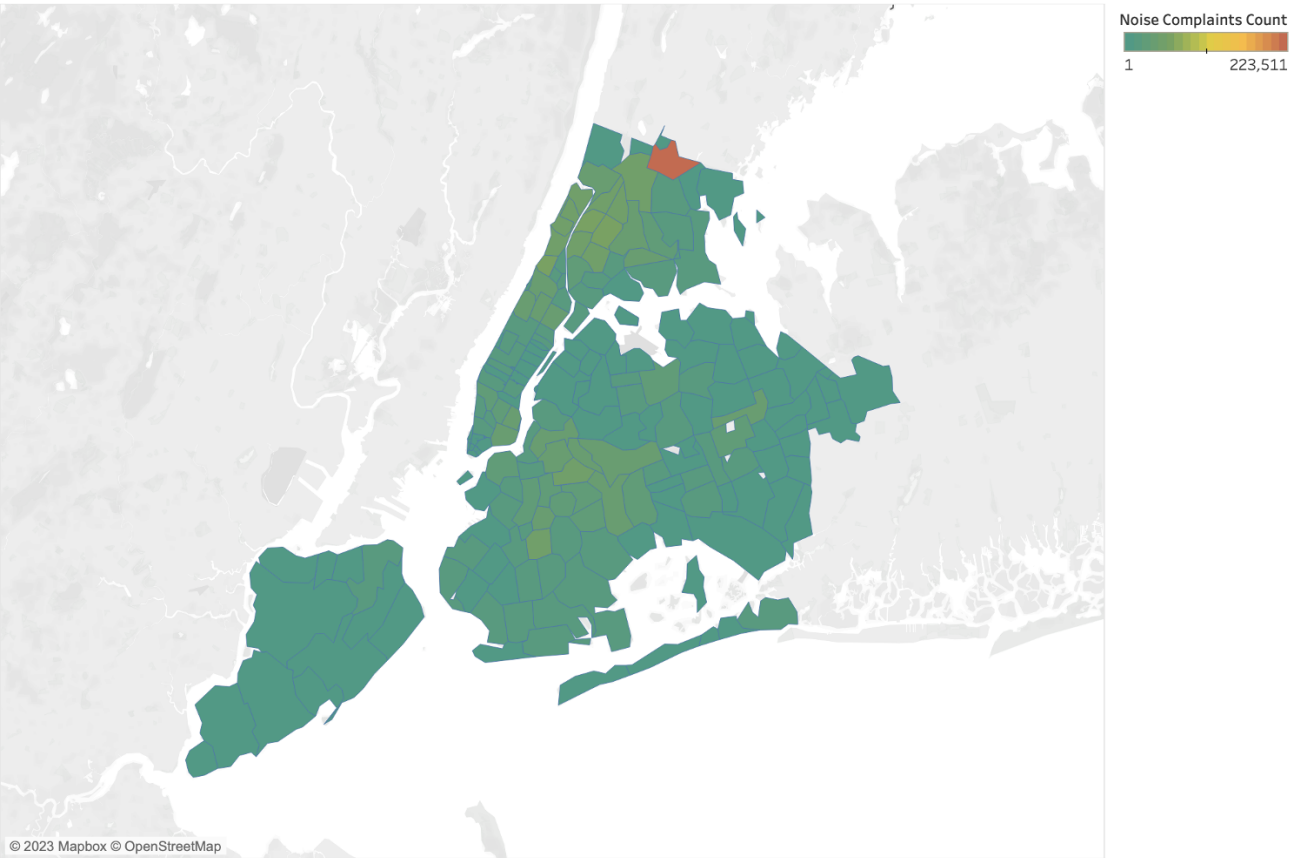


Popular Permitted Events

Event Name	
Soccer - Non Regulation	2,038,529
Miscellaneous	1,301,190
Soccer - Non Regulation	1,187,800
Baseball - 12 and Under (Little League)	931,873
Soccer -Regulation	912,257
Baseball - 13 and Older (Little League)	513,837
Soccer -Regulation	490,821
Softball - Adults	488,301
Baseball - 12 and Under (Little League)	480,520
Softball (Little league)	416,527

# Comprehensive Visual Analysis

## Complaints by Zip Code



Map based on Longitude (generated) and Latitude (generated). Color shows count of Data311NYC. Details are shown for Zip Code and Borough.

### Zip Code with Most Noise Complaints:

10466 in the Bronx

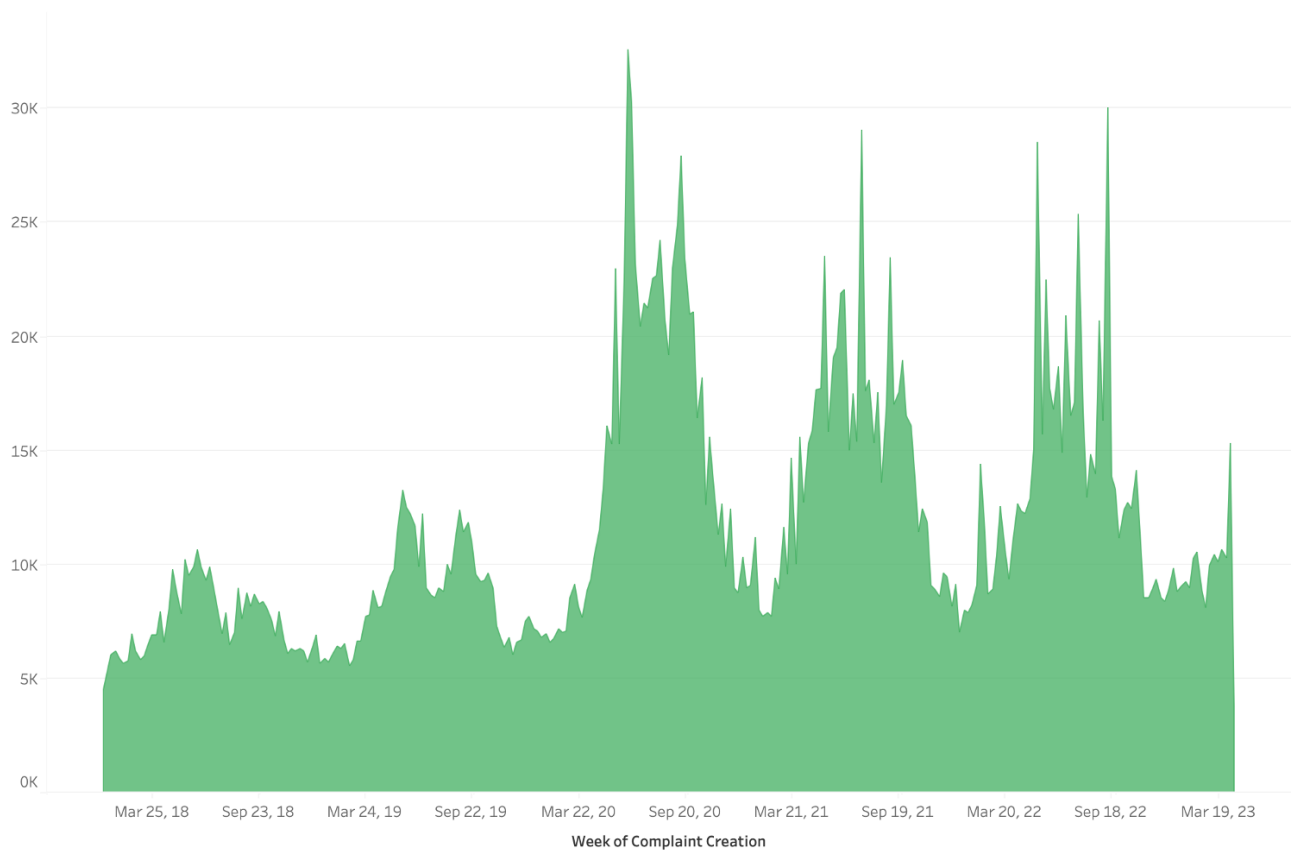
- Complaint Count: 223,551
- Square Miles: 2.02

### Zip Code with Least Noise Complaints:

10176 in Manhattan

- Complaint Count: 1
- Square Miles: 0.00952430
  - One Block between 46th and 5th Ave

Timeline of Noise Complaints



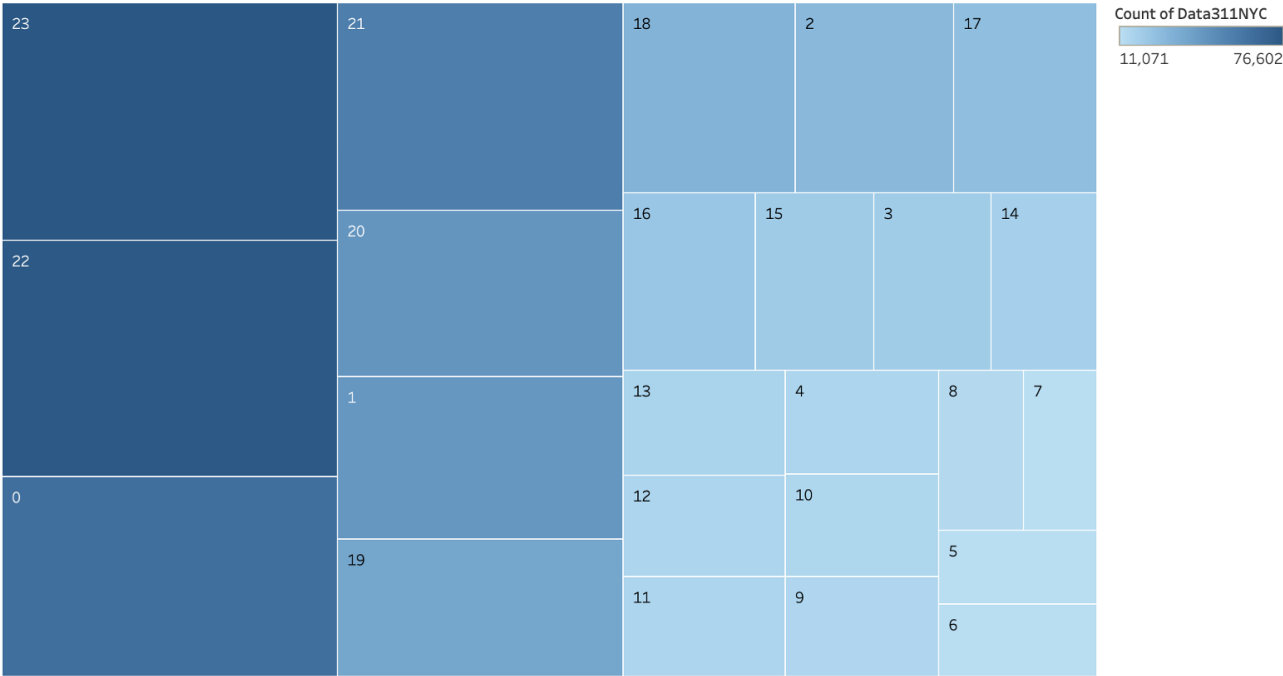
The plot of count of Data311NYC for Created Date Time Week.

Week with Most Noise Complaints:

June 14, 2020

- Count: 32,571
- Most likely due to the rise in BLM protests in 2020
- Noise Complaints spike from June - September
  - Can be due to seasonality

Most Popular Hours to Complain

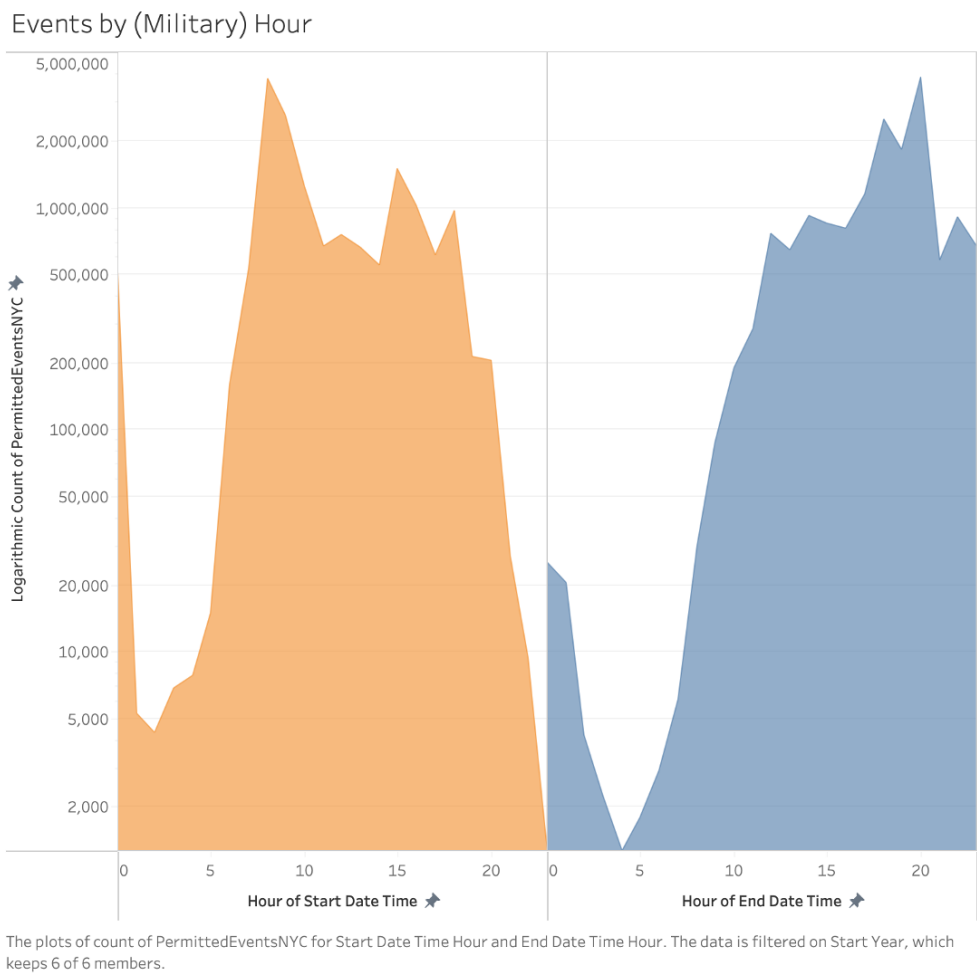


Created Date Time Hour. Color shows count of Data311NYC. Size shows count of Data311NYC. The marks are labeled by Created Date Time Hour. The data is filtered on Created Date Time Year, which keeps 2022.

Hour with Most Noise Complaints:

11 PM

- Count: 76,602
- Hours use Military Time
- Noise Complaints tend to pickup from 7PM to 1AM



### Most Popular Event Start Time:

8 AM

- Count: 3.85 Million
- 1 million events start at 6 PM

### Most Popular Event End Time:

8 PM

- Count: 3.87 Million
- Close to 1 million events end at 10 PM
  - 10 PM is the second most popular hour to complain about noise

## Popular Permitted Events

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Miscellaneous	1,301,190
Soccer - Non Regulation	1,187,800
Baseball - 12 and Under (Little League)	931,873
Soccer -Regulation	912,257
Baseball - 13 and Older (Little League)	513,837
Soccer -Regulation	490,821
Softball - Adults	488,301
Baseball - 12 and Under (Little League)	480,520
Softball (Little league)	416,527
Celebration	337,461
Softball - Adults	257,382
Baseball - 13 and Older (Little League)	244,341
Softball (Little league)	243,870
Miscellaneous	236,238
Football - Youth	217,061
Basketball	187,372
Tennis	154,905
Football - Youth	154,437
Basketball	133,386
Football - American Flag Football	129,303
Lawn Maintenance	117,904
Mobile COVID-19 Test Site	114,870
Party	101,215
Baseball - Adults	100,728

Count of Event Name broken down by Event Name. The data is filtered on Event Type, which keeps 36 of 36 members. The view is filtered on Event Name, which keeps 25 of 38,707 members.

### Most Popular Permitted Event:

Soccer

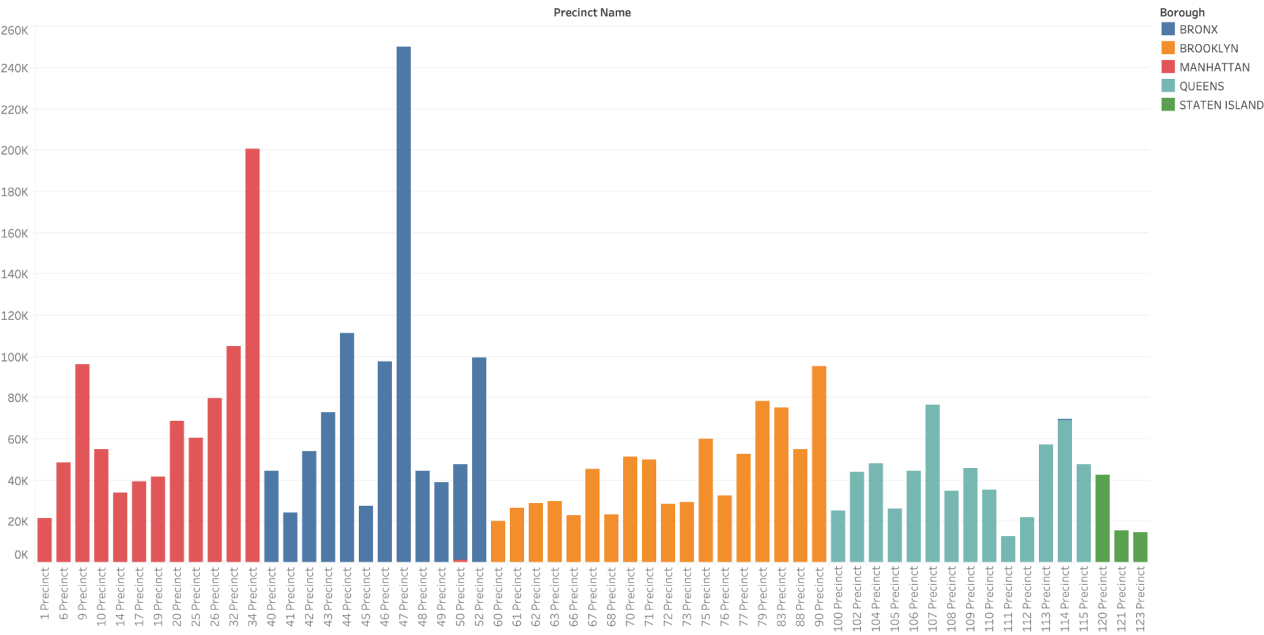
- Top Event Name with over 2 million counts
- Sport events are categorized by age and regulation

### Least Popular Permitted Event:

Dominican Day Parade

- 1 Official Count in 8/24/2019 at 12:30 PM
  - Permitted Events data seems inaccurate because the Dominican Day Parade runs on an annual occurrence since 1982, besides the year of 2020 due to COVID-19

Precinct Workload



Count of Data311NYC for each Precinct Name. Color shows details about Borough.

Precinct with Highest Noise Complaint Volume:

47th Precinct in the Bronx

- Count: 249,991

Precinct with Lowest Noise Complaint Volume:

111th Precinct in Staten Island

- Count: 12,785