

PEAK 311

DAV 5200

10/20/24

M6 Project Work:
Improve Previous
Graphs and Add
Additional



Contextualizing the Noise Complaint Data for Acentech's Role



Context for Project Sponsor: Given Acentech's specialization in acoustic consulting, noise, and vibration control, the focus is going to be on how the 311 Noise Complaint data can pinpoint areas where advanced acoustic solutions are most needed. This data will help identify neighborhoods with high noise complaints, categorize them by type (residential, construction, commercial), and provide insights into the patterns and intensity of noise pollution.



Introduction to the Data: The dataset provides an overview of noise complaints across different neighborhoods in New York City, categorized by type. It includes insights into high-incidence areas and distribution of complaints to help Acentech prioritize interventions and tailor solutions for the specific *types of noise* disturbances present in each area.



Strategic Context: For Acentech, understanding the distribution of noise complaints is crucial for:

- Identifying "hotspots" where interventions are needed.
- Tailoring solutions (e.g., sound barriers, vibration control) based on complaint types.
- Collaborating with city agencies and urban planners to deploy noise mitigation strategies in targeted areas

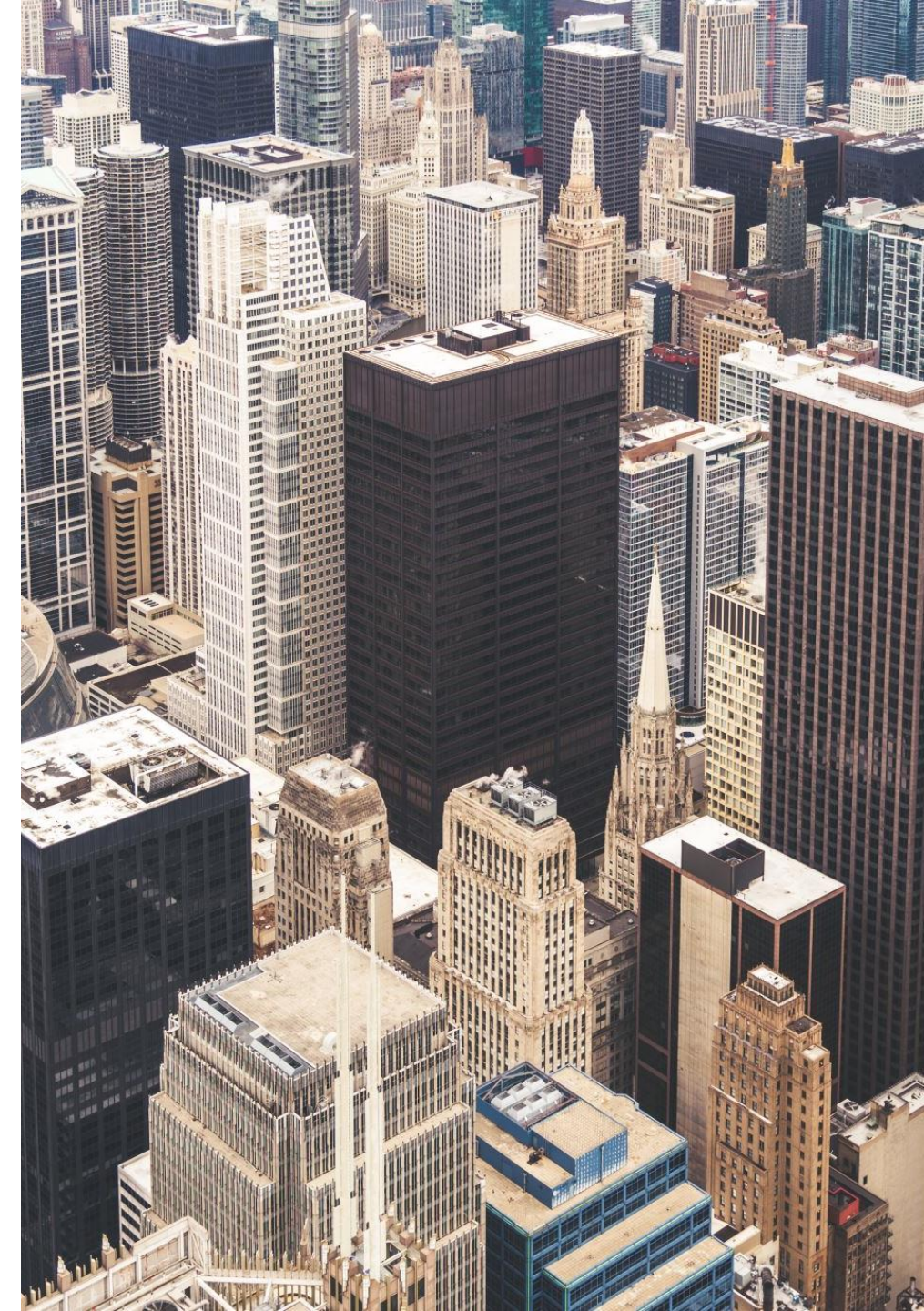


BENEFITS FOR ACENTECH

- This collaboration would interest Acentech as it presents a lucrative business opportunity to generate revenue and solidify its position as the top acoustic consultant for complex urban noise issues. Teaming up with NYC on prominent projects will raise their profile and credibility, attracting new clients such as developers, government agencies, and infrastructure planners. This participation will enable them to test and improve cutting-edge noise control solutions, establishing themselves as leaders in the industry. The resulting success stories can validate higher service rates, broaden their project portfolio, and create opportunities for similar impactful projects worldwide, ultimately increasing profitability and long-term expansion.

Targeted Noise Mitigation Solutions

- Acentech tackles noise complaints in NYC by implementing measures such as installing soundproofing in residential buildings, setting up noise barriers at construction sites, and soundproofing commercial establishments. Additionally, they can assist in designing noise barriers for urban areas, conducting assessments of noise impact, and utilizing advanced technologies like active noise control systems. Their expertise can be valuable in shaping city-wide noise management strategies, engaging with stakeholders, and developing policies to enhance urban sound environments.



Data Visualization and Analysis



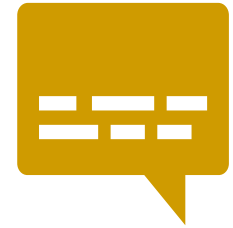
Summary of Noise Complaints by Neighborhood:

Provides a quick overview of the total number of complaints from 2019 to 2023 by neighborhood.



Complaint Distribution by Category:

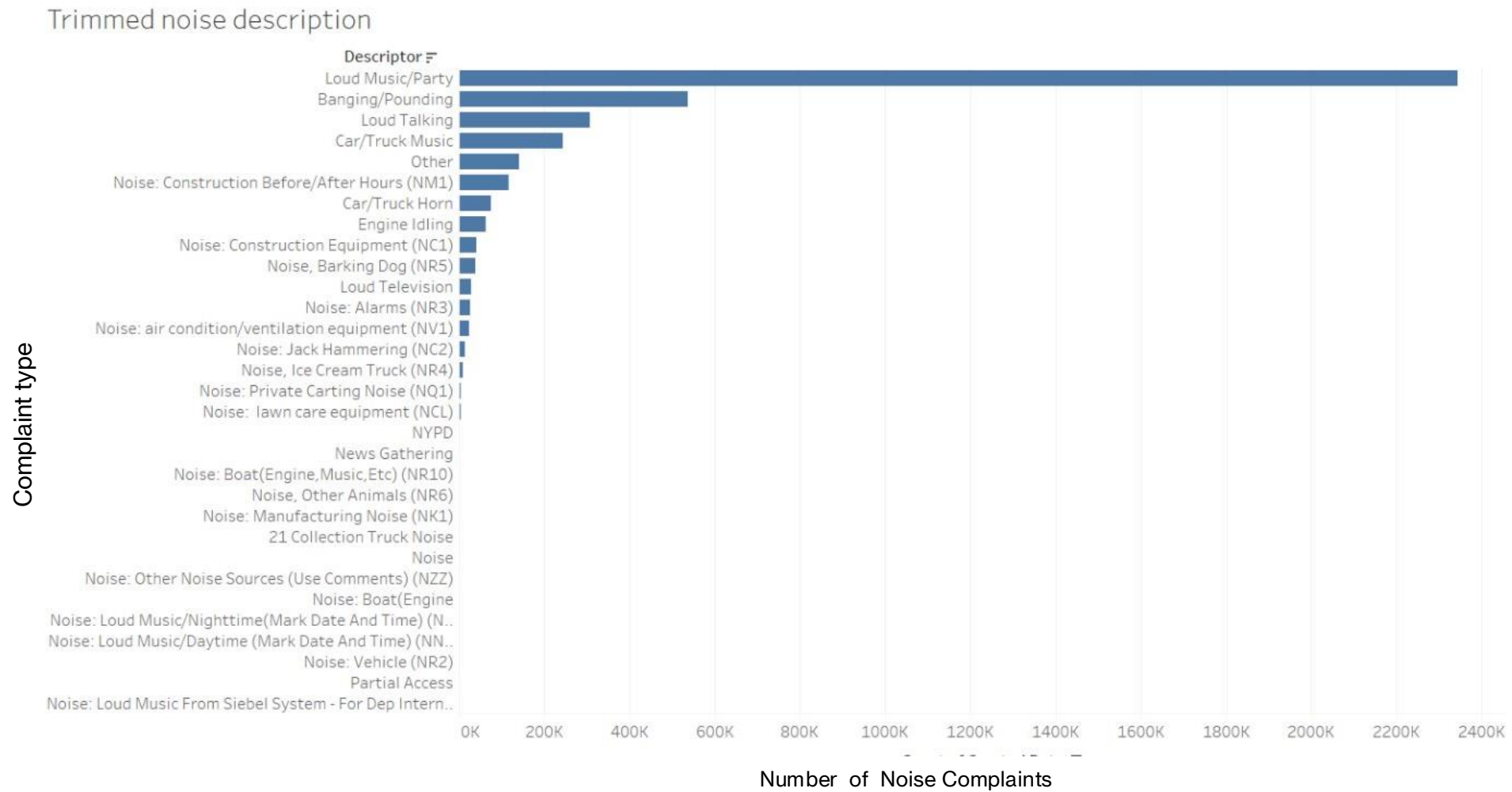
Breaks down the proportion of each complaint type (residential, construction, commercial) to understand the primary sources of noise.



Total Noise Complaints to 2023:

Summarizes the overall number of complaints to indicate the scale of the issue across all neighborhoods

What is being complained about?

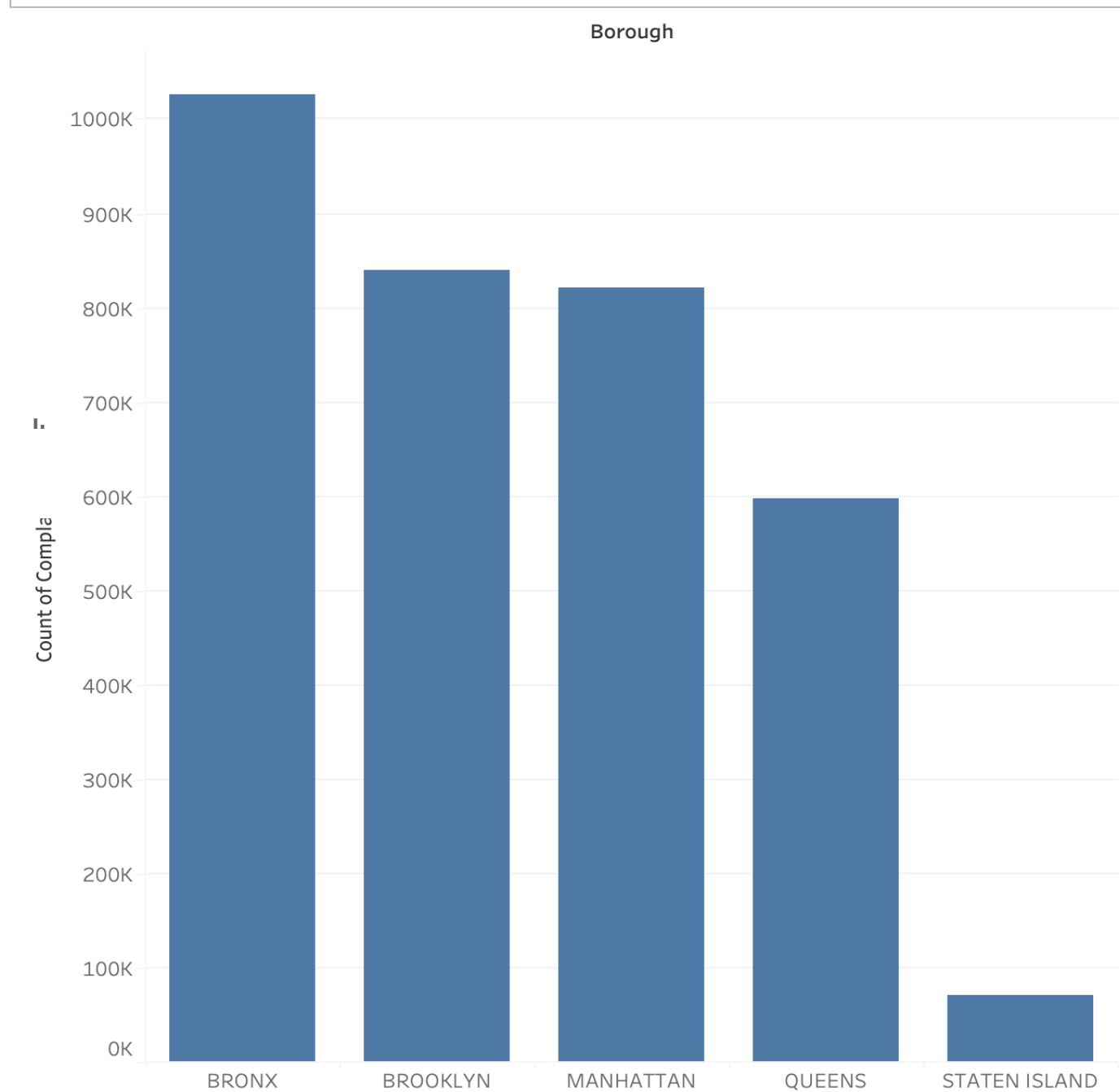


Loud music has been the most complained about, followed by banging and loud talking.

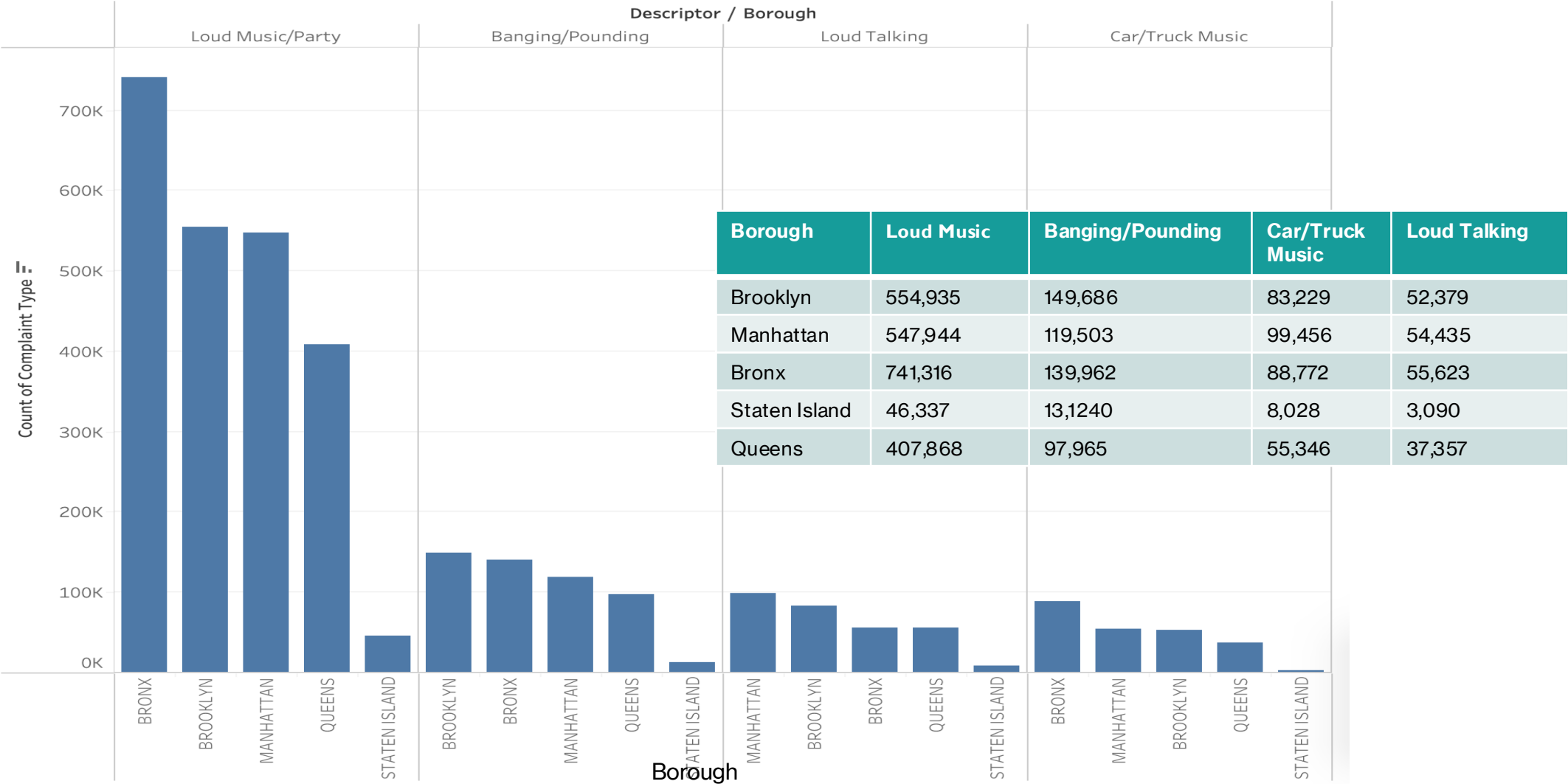
Who's complaining the most?

Borough	Amount of complaints
Bronx	1,025,673
Brooklyn	840,229
Manhattan	821,338
Queens	598,266
Staten Island	70,595

Showing the borough with highest complaints, which is Bronx

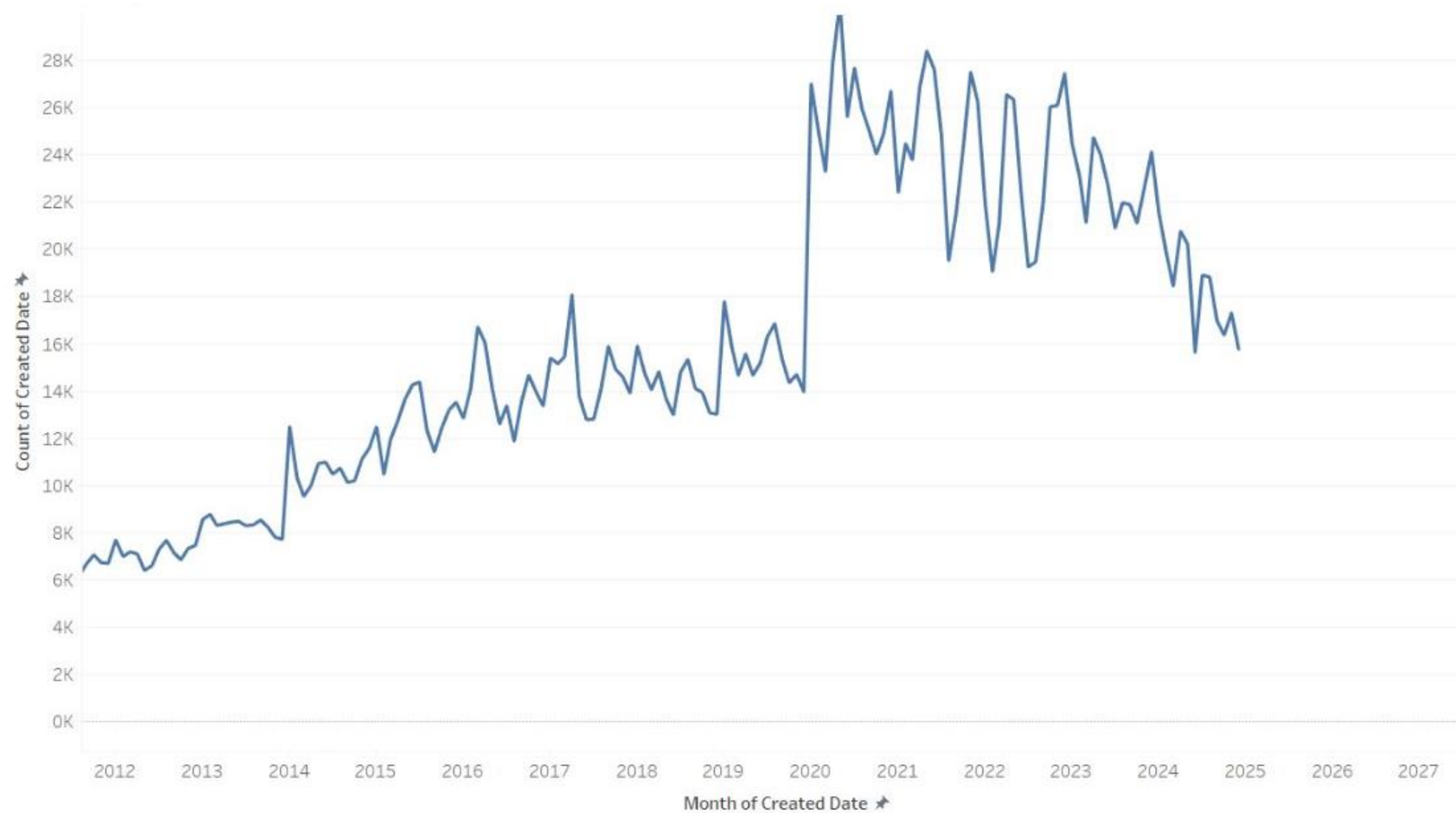


Are boroughs complaining about the same thing?



As the data shows, loud music is the most frequent complaint across all boroughs.

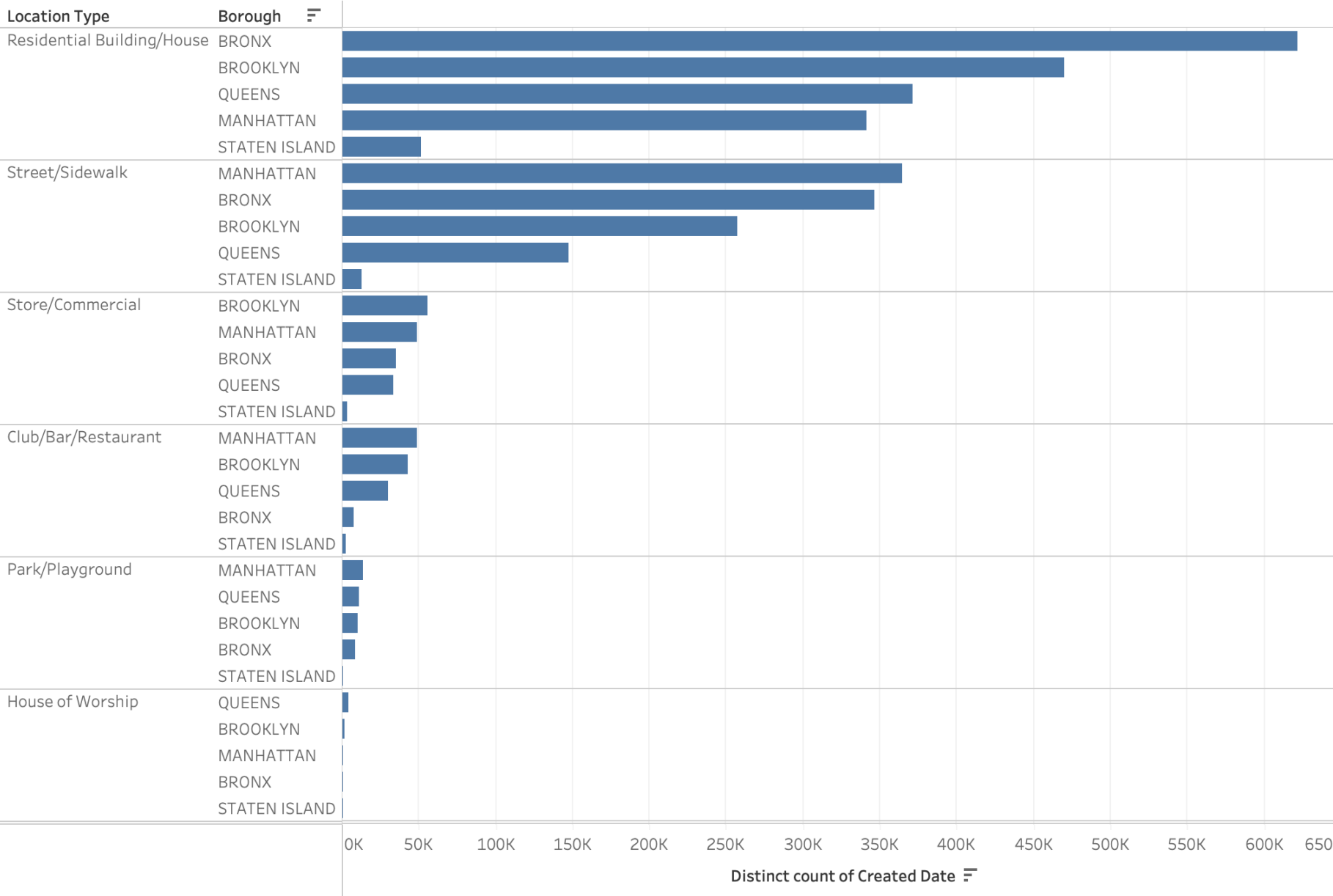
How were the complaints over the years?



Here we can see the impact of Covid that lead to very important spike in 2020.

Where are the complaints originating from? Streets, parks ...

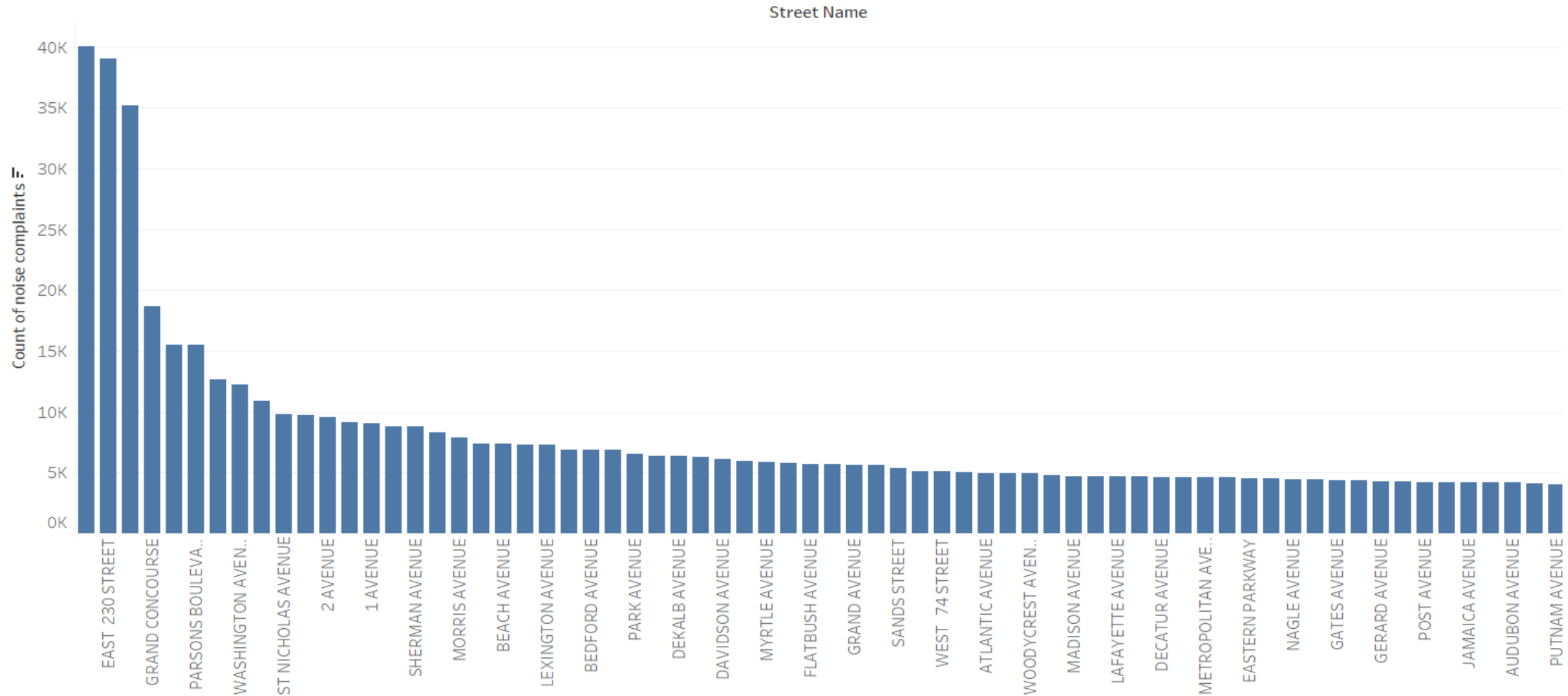
Location of complaints by borough



Mainly residentials,
followed by streets
and stores

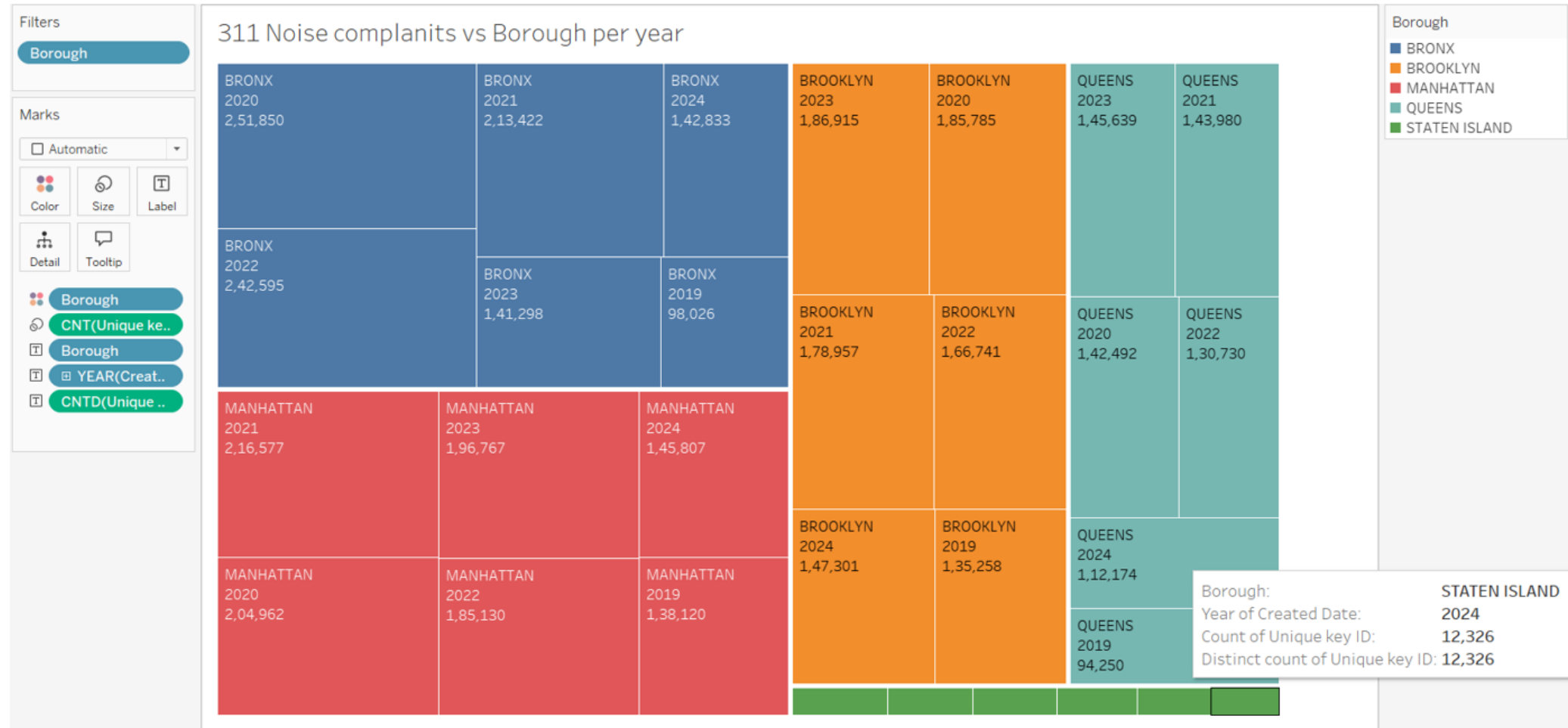
Which streets are the noisiest?

Noise complaint per street



Understanding the characteristics of the noisiest streets (e.g., traffic patterns, types of buildings, commercial vs. residential) can inform the development of new noise control technologies and strategies.

Noise Complaints by Borough and Year (2019-2024)



Complaints are broken down by borough (Bronx, Brooklyn, Manhattan, Queens, and Staten Island)

The data is presented for multiple years, spanning from 2019 to 2024

Each box represents the number of complaints for a specific borough in a specific year

IN SUMMARY

Top 3 Noise Complaint Types in NYC



Loud Music/Party

41%



Banging/Pounding

18%



Loud Talking

12%

The simple visualization provides a clear, at-a-glance understanding of where Acentech should focus their efforts to have the most significant impact on urban noise issues in New York City. It complements the existing neighborhood and borough-level data by providing a city-wide perspective on the types of noise that are most problematic.

Using the insights, here are some suggestions for the stakeholder

- **Identify High-Demand Areas:** Focus on boroughs with the most noise complaints (e.g., Manhattan).
- **Target Marketing:** Tailor marketing to high-complaint years and boroughs (e.g., Brooklyn in 2023-2024).
- **Resource Allocation:** Allocate resources efficiently to areas with the highest demand.
- **Trend Analysis:** Predict future demand based on trends (e.g., increasing complaints in the Bronx).
- **Customer Outreach:** Target outreach to areas with recent complaint spikes.
- **Product Development:** Develop products tailored to specific noise issues.
- **Partnerships:** Form strategic partnerships in high-complaint areas.

THANK YOU!