

STEP 1

Stakeholders:

Primary Stakeholder: Acentech, a company specializing in acoustic consulting, noise insulation, and vibration control.

Secondary Stakeholders: City agencies such as the New York City Department of Environmental Protection (DEP), urban planners, and residents affected by urban noise pollution.

Pain Point:

Acentech's challenge is understanding where and what types of noise complaints occur in NYC to effectively prioritize and tailor solutions. They require actionable insights from complex datasets to pinpoint hotspots and types of noise issues.

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Objectives:

1. Identify noise complaint hotspots across neighborhoods and boroughs.
2. Categorize complaints by type (e.g., Loud Music, Banging).
3. Develop targeted, efficient noise mitigation solutions to enhance urban sound environments.
4. Use the insights to position Acentech as a leading expert in noise control and expand its market presence.

STEP 2

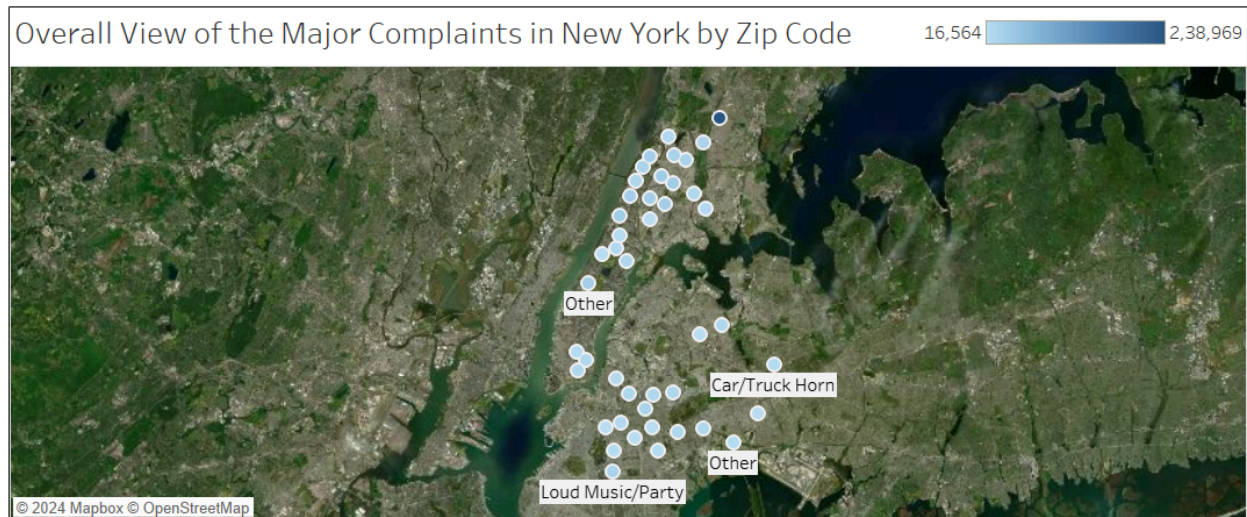
Insights to Deliver:

1. Hotspot Identification: Pinpoint neighborhoods and boroughs with the highest noise complaints to prioritize interventions.
2. Complaint Categorization: Show the most common noise types (e.g., loud music, banging) to guide targeted solutions.
3. Source Locations: Identify exactly where the noise originates (e.g., streets) for precise mitigation strategies.
4. Strategic Focus: Recommend borough-specific and noise-type-specific interventions to maximize impact and efficiency.

STEP 3

Insights/Graphs: Insights Delivered by Each Visualization:

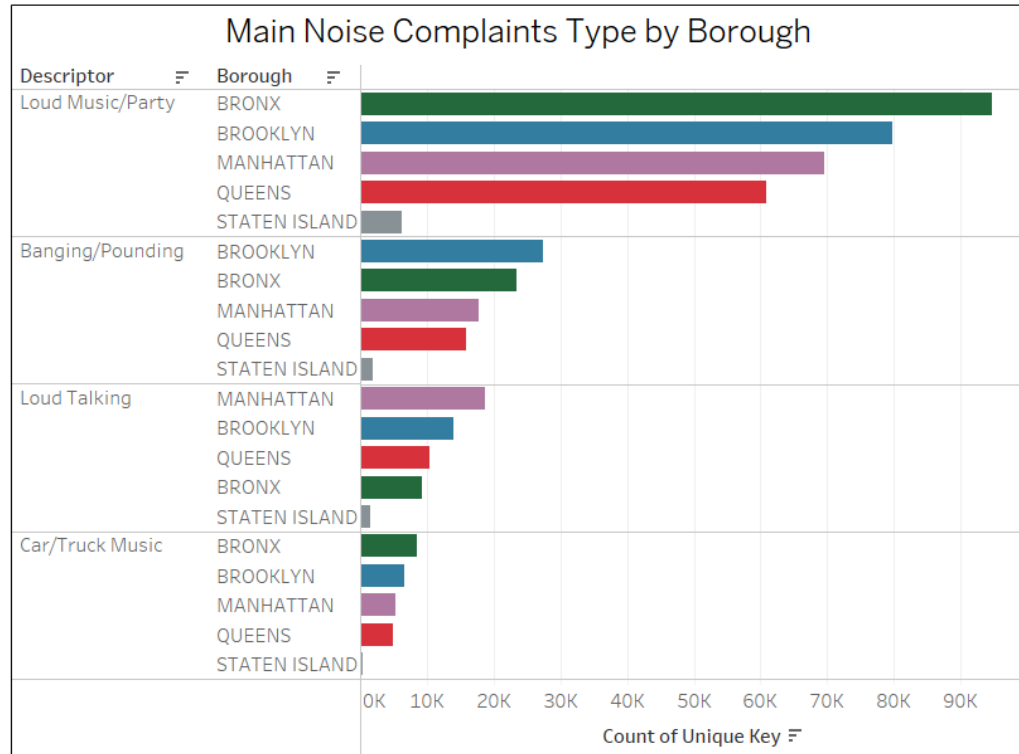
1. Overall View of Major Complaints in New York by Zip Code (Map):
 - Insight: Visualizes noise complaint clusters and intensity by area.
 - Purpose: Supports Hotspot Identification and Strategic Focus, offering a geographic guide for prioritizing solutions.



2. Main Noise Complaints Type by Borough:

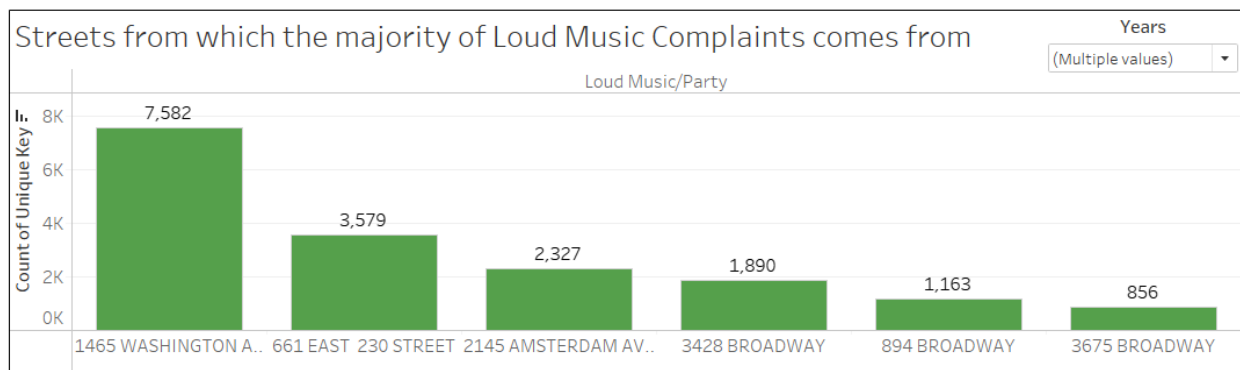
- Insight: Identifies noise hotspots by borough and the most frequent complaint types (e.g., loud music in the Bronx).

- Purpose: Addresses Hotspot Identification and Complaint Categorization to focus on borough-specific and noise-type-specific solutions.



3. Streets with the Majority of Loud Music Complaints:

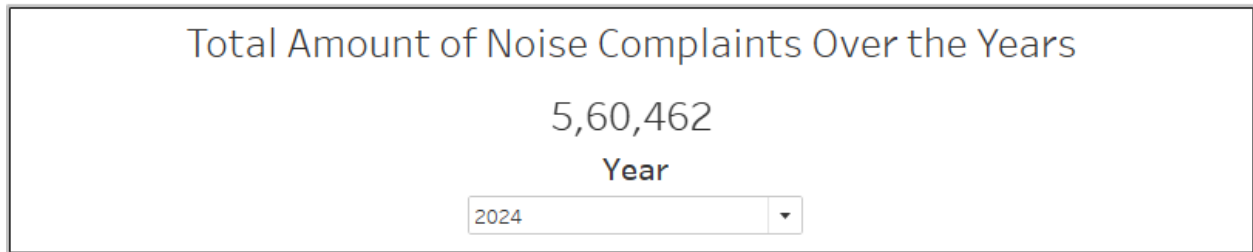
- Insight: Pinpoints specific streets with high loud music complaints (e.g., 1465 Washington Avenue).
- Purpose: Contributes to Source Locations by identifying exact locations for targeted interventions.



4. Total Amount of Noise Complaints Over the Years:

- Insight: Shows the overall scale of noise issues in NYC.

- Purpose: Supports Temporal Trends by highlighting the magnitude of the problem and validating resource allocation needs.



Step 4

Actions/Recommendations:

1. Prioritize Hotspots: Focus noise mitigation efforts on boroughs with the highest complaints, such as the Bronx, Brooklyn, and Manhattan.
2. Tailor Solutions: Use soundproofing for music and vibration dampeners for banging; enforce noise rules and schedule loud work for daytime.
3. Leverage Temporal Trends: Allocate resources during periods of expected complaint spikes, informed by past trends (e.g., holiday seasons or pandemic-related surges).
4. Engage Stakeholders: Collaborate with city agencies and urban planners to address high-complaint neighborhoods with targeted policies and technologies.
5. Market Expertise: Use the insights to position Acentech as the go-to expert in urban noise control, securing future projects and partnerships.