



NYC 311 Service Requests Analysis (Jan–Nov 2021)

Analyzed using Google BigQuery and Looker Studio

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1 Executive Summary

Between **Jan–Nov 2021**, approximately **2.2M** NYC 311 requests were analyzed.

Key Insights:

- Noise complaints = 30.5% of requests
- Brooklyn + Queens = 51.9% of requests
- NYPD handled 51.8% with fastest response (0.07 days)
- Housing agency slowest (10.99 days vs avg 4.65 days)

Recommendations:

- Add staff in Brooklyn & Queens
- Improve Housing agency response times
- Replicate NYPD best practices
- Adjust staffing for seasonal/weekend peaks

2 Tools Used

- Google BigQuery – SQL for cleaning & aggregations
- Google Looker Studio – dashboard for visualization & reporting

3 Methodology

1. Cleaned dates, removed nulls, validated response times
2. Aggregated complaint types, boroughs, and agency performance
3. Created Looker Studio dashboard for visualization

4 Key Findings

- Complaint Patterns: Noise (30.5%), Parking Traffic (21.5%), Water (11.03%) = approx. 63% of all requests
- Boroughs: Brooklyn (28.3%) + Queens (23.6%) = 51.9%

- Agency Performance: NYPD fastest (0.07 days), Housing slowest (10.99 days vs avg 4.65)
- Trends: Seasonal spikes in summer, higher weekend volume

5 Dashboard

View the full interactive dashboard here: <https://lookerstudio.google.com/s/nlDFA1epp54>

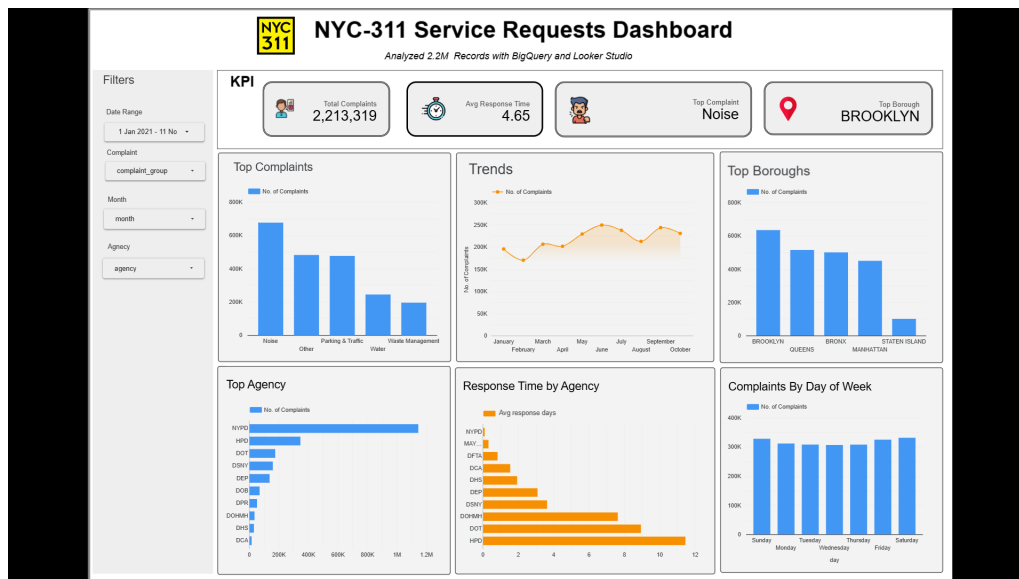


Figure 1: NYC 311 Dashboard Preview (Looker Studio)

6 Conclusion & Recommendations

- Focus staffing on Brooklyn & Queens
- Improve Housing agency efficiency
- Benchmark NYPD methods across agencies
- Prepare for summer & weekend surges

7 References

- NYC Open Data – 311 Service Requests
- <https://cloud.google.com/docs>
- <https://cloud.google.com/looker/docs/studio/find-your-way-around-looker-studio>