

# An Analysis of New York City 311 Service Requests

Predicting the Responding  
Government Agency

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# Data Sources

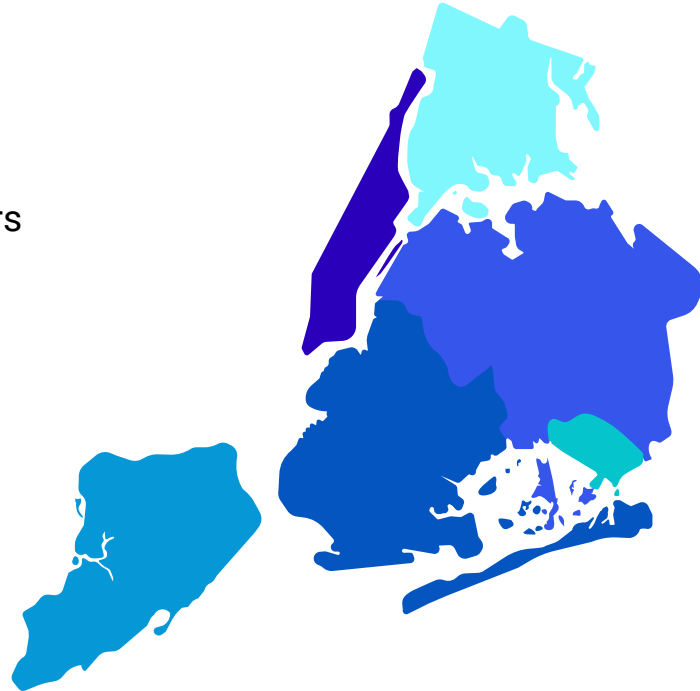


**NYC OPEN DATA:** 311 Service Requests from 2010 to Present

- Sample included 1.5 million requests (Jun.-mid Nov. 2020)



**NYC DPT. OF CITY PLANNING:** Community District Indicators



## Most Frequent Words in Call Descriptors

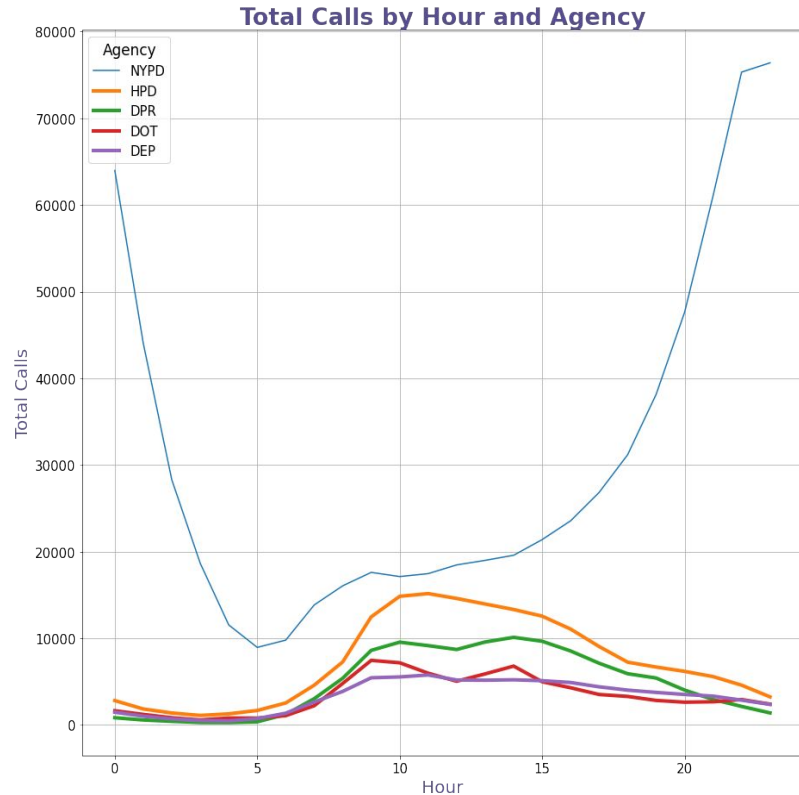
## NYC 311 Call Descriptor Word Cloud



**Words related to the following  
appeared most frequently:**

- noise
- illegal parking
- tree condition
- sidewalk/street condition

# Hours with the Highest Call Volume

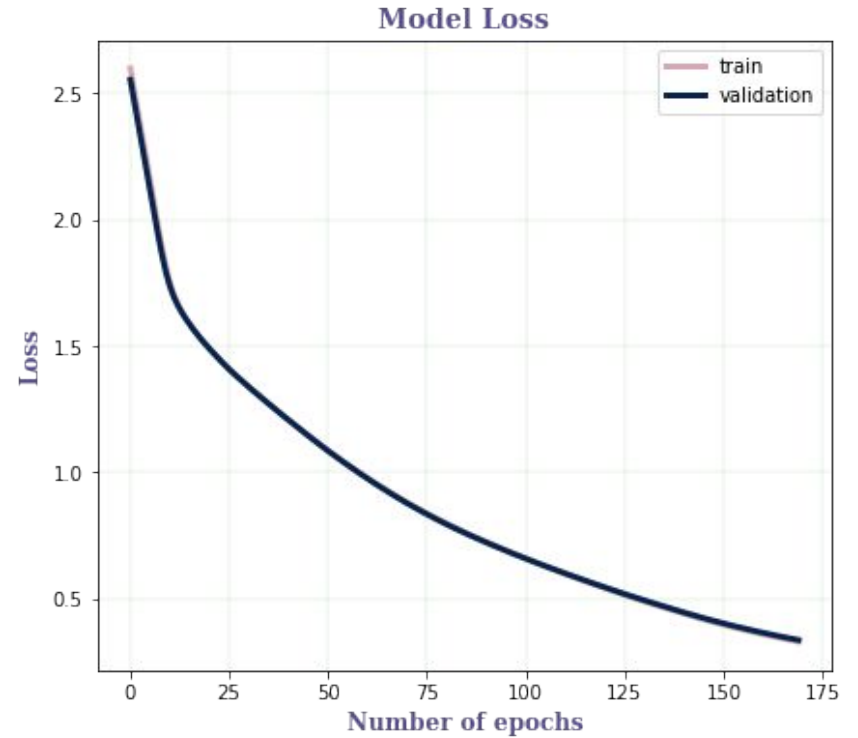
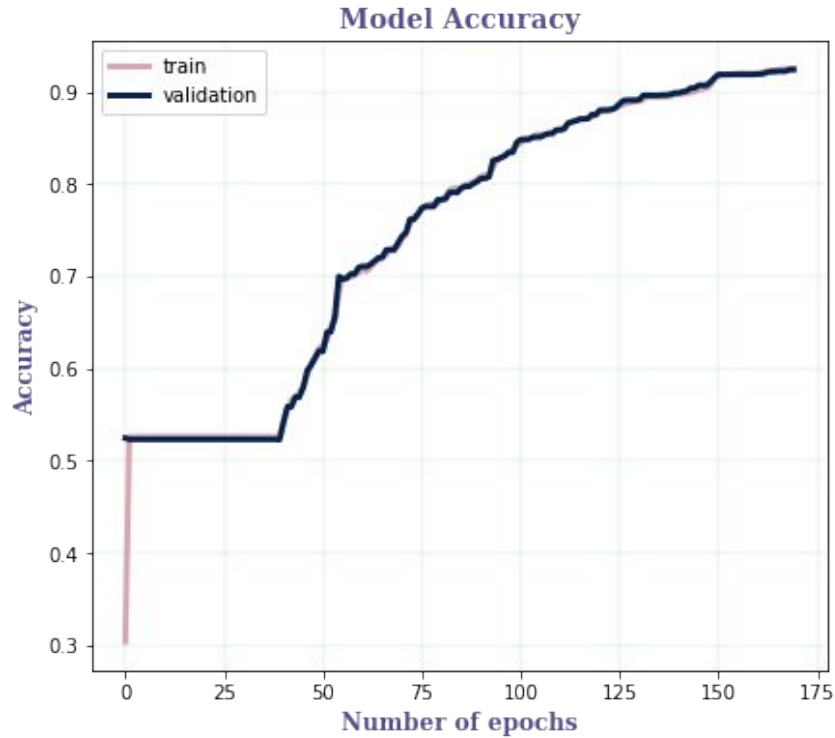


- Most calls assigned to the NYPD are made between 8PM and 5AM
- Most calls to other top agencies are made during the day

# Dashboard

<https://nyc-311.herokuapp.com/>

# Keras Model Accuracy and Loss



# Recommendations



## Develop Classifier for Automatic Agency Referral

Using a larger, more diverse set of description training data

## Prepare for Peaks in Call Volume

Following extreme weather events and at very early/late hours

## Evaluate Current Distribution of Calls to Gov. Agencies

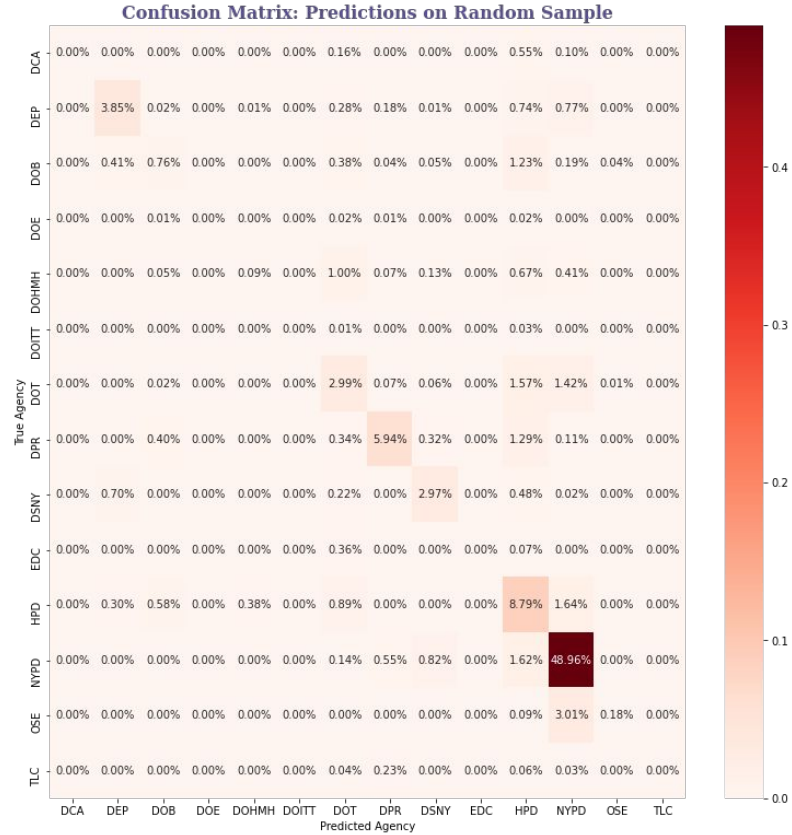
Should agencies other than the NYPD handle a larger share of requests?



**Thank you!**



# Appendix



# Presentation Template Credit

- **Slidesgo**
- **Freepik**