

# MTA Traffic Analysis

By: Abdullah Alshami

# Introduction

- The Children's Scholarship Fund (CSF) is a non profit organization based in New York City.
- Aims to maximize educational opportunity for all children by offering tuition assistance.
- The organization wants to find the top five subway stations located in Manhattan with the highest foot traffic to promote their services.



# Data

- MTA turnstiles dataset containing cumulative entries and exits of each turnstile in each station in NYC.



# Data

- Dataset starts from the beginning of 2021 up to October 9<sup>th</sup>.
- Only Manhattan stations were selected.



# Data Preparation



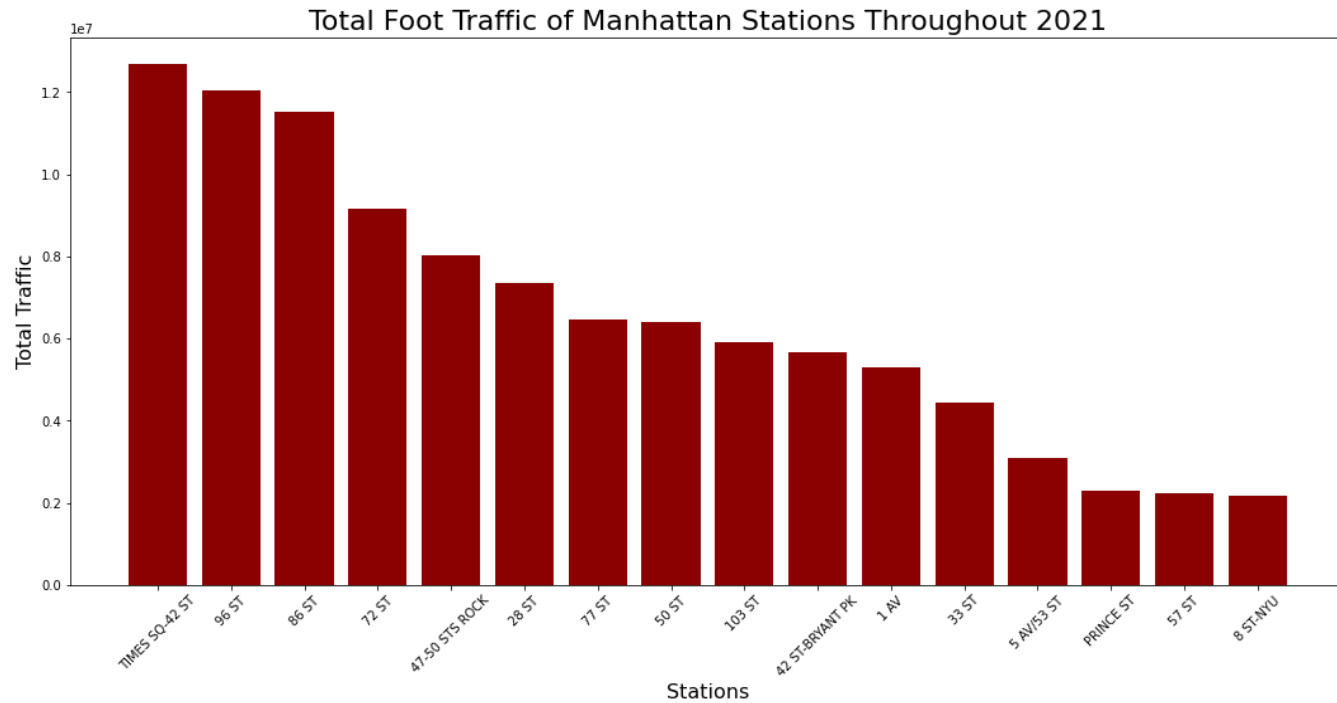
```
graph LR; A[Calculate Daily Entries, Exits, and Total Traffic] --> B[Find and Drop Anomalies and Outliers]; B --> C[Get Day of The Week From each Date]
```

Calculate Daily  
Entries, Exits, and  
Total Traffic

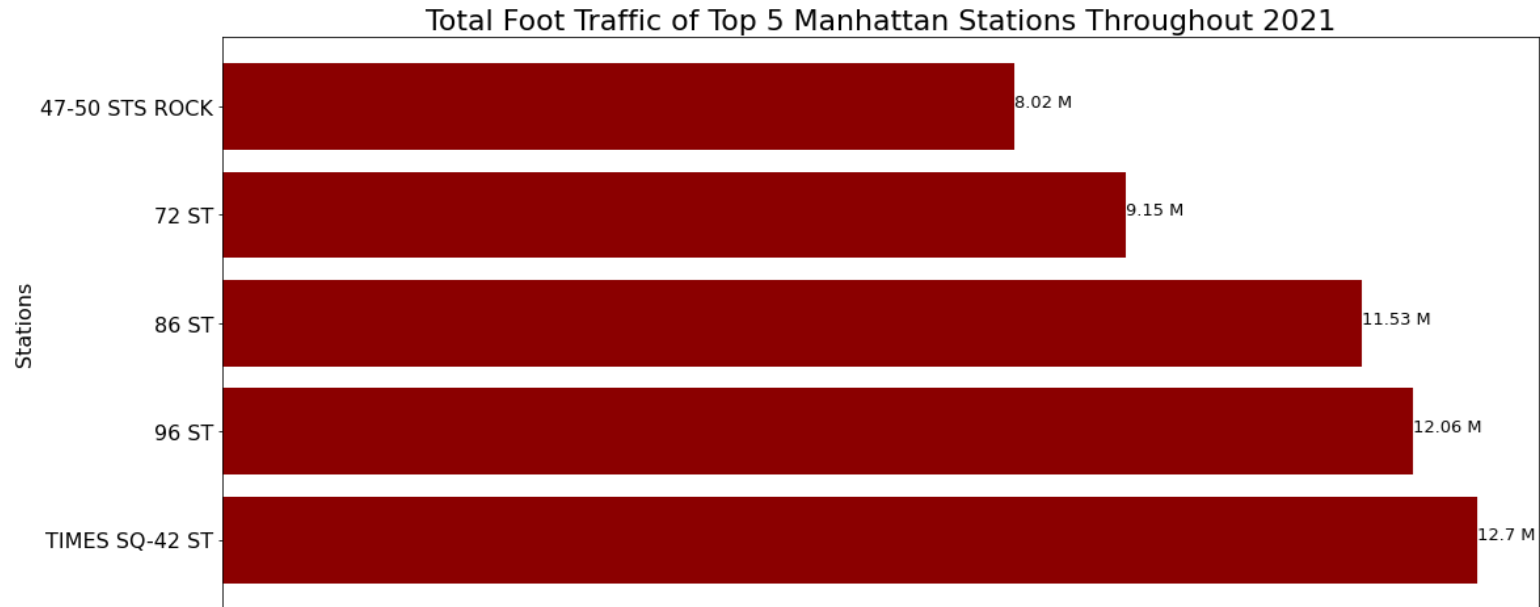
Find and Drop  
Anomalies and  
Outliers

Get Day of  
The Week  
From each Date

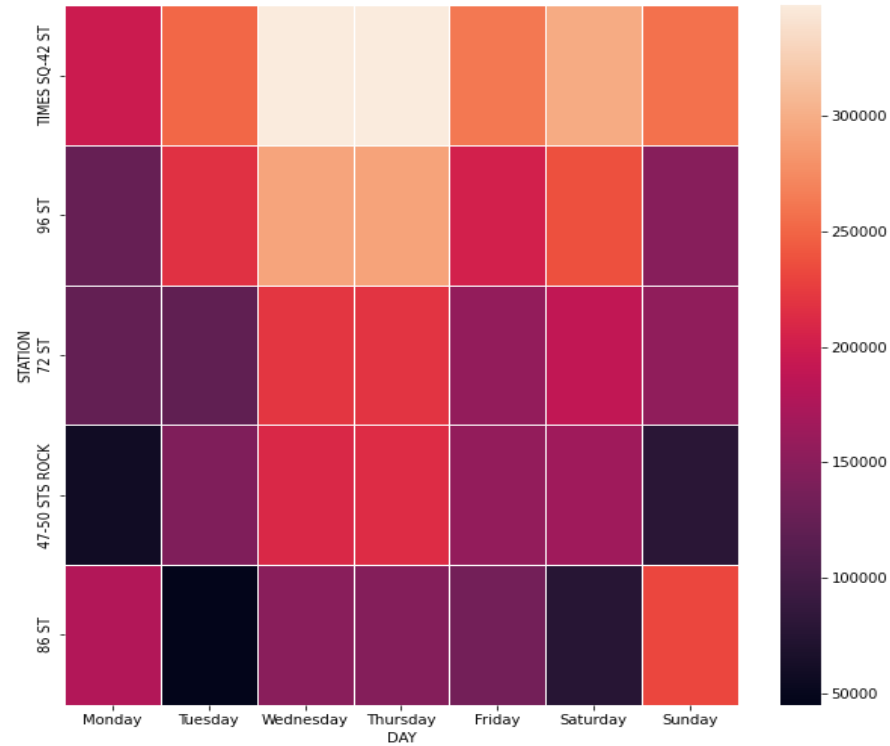
# Graphs



# Graphs



# Graphs





# Conclusion

- Top 5 stations in-order:
  1. Times Square - 42<sup>nd</sup> Street
  2. 96<sup>th</sup> Street
  3. 86<sup>th</sup> Street
  4. 72<sup>nd</sup> Street
  5. 47<sup>th</sup> – 50<sup>th</sup> Streets Rockefeller

# Conclusion

- Days with highest foot traffic:
  1. Wednesday
  2. Thursday

Thanks for Listening