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PROJECT 1:
WTWY STREET TEAMS DEPLOYMENT PROPOSAL

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GOAL

WTWY street teams wants obtain the most email signups for their annual OMGYN Gala in NYDC
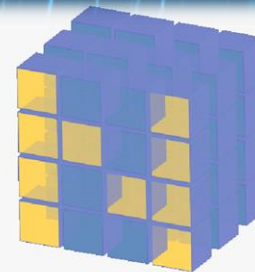
TARGET: Adult Commuters

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OUR APPROACH

Find out the which Stations and Days in a week to deploy WTWY's resources

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PYTHON TOOLS

```python
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
import datetime
from functools import partial, reduce
```

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DATA INFORMATION

Retrieved from MTA web online

Period: 4 Weeks

WE OBSERVE THAT ...

1. **Turnstile count is recorded in a cumulative manner, indicating that data recorded increases constantly over time**
2. **Dataset does not include day of the week**
3. **No fixed time is recorded**

... SO LET'S CREATE THEM!

LET'S FILTER…

1. **Drop unnecessary columns**
2. **Remove any duplicate/null/outliers (based on threshold of total seconds/day on the assumption that each sec cannot have more than 1 person doing turnstile)**

LIMITATIONS

**Lack of Data on the Demographics of commuters (Age, Sex) to determine the match for our target group**

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|	STATION	DATETIME	DOW	TIME	ENTRIES	EXITS	entry_diff	exit_diff	TRAFFIC
0	59 ST	2020-07-24 20:00:00	Friday	00:00:00	7436571	2527896	44.0	29.0	73.0
1	59 ST	2020-07-25 00:00:00	Saturday	04:00:00	7436572	2527900	9.0	2.0	11.0
2	59 ST	2020-07-25 08:00:00	Saturday	12:00:00	7436611	2527942	90.0	15.0	105.0
3	59 ST	2020-07-25 12:00:00	Saturday	16:00:00	7436681	2527962	35.0	16.0	51.0
4	59 ST	2020-07-25 16:00:00	Saturday	20:00:00	7436825	2527978	39.0	24.0	63.0
...	...	...	...	...	...	...	...	...	...
585861	RIT-ROOSEVELT	2020-08-28 00:00:00	Friday	05:00:00	5554	540	22.0	67.0	89.0
585862	RIT-ROOSEVELT	2020-08-28 04:00:00	Friday	09:00:00	5554	540	1.0	13.0	14.0
585863	RIT-ROOSEVELT	2020-08-28 08:00:00	Friday	13:00:00	5554	540	97.0	36.0	133.0
585864	RIT-ROOSEVELT	2020-08-28 12:00:00	Friday	17:00:00	5554	540	110.0	56.0	166.0
585865	RIT-ROOSEVELT	2020-08-28 16:00:00	Friday	21:00:00	5554	540	107.0	88.0	195.0

585866 rows × 9 columns

FINDINGS – TOP STATIONS

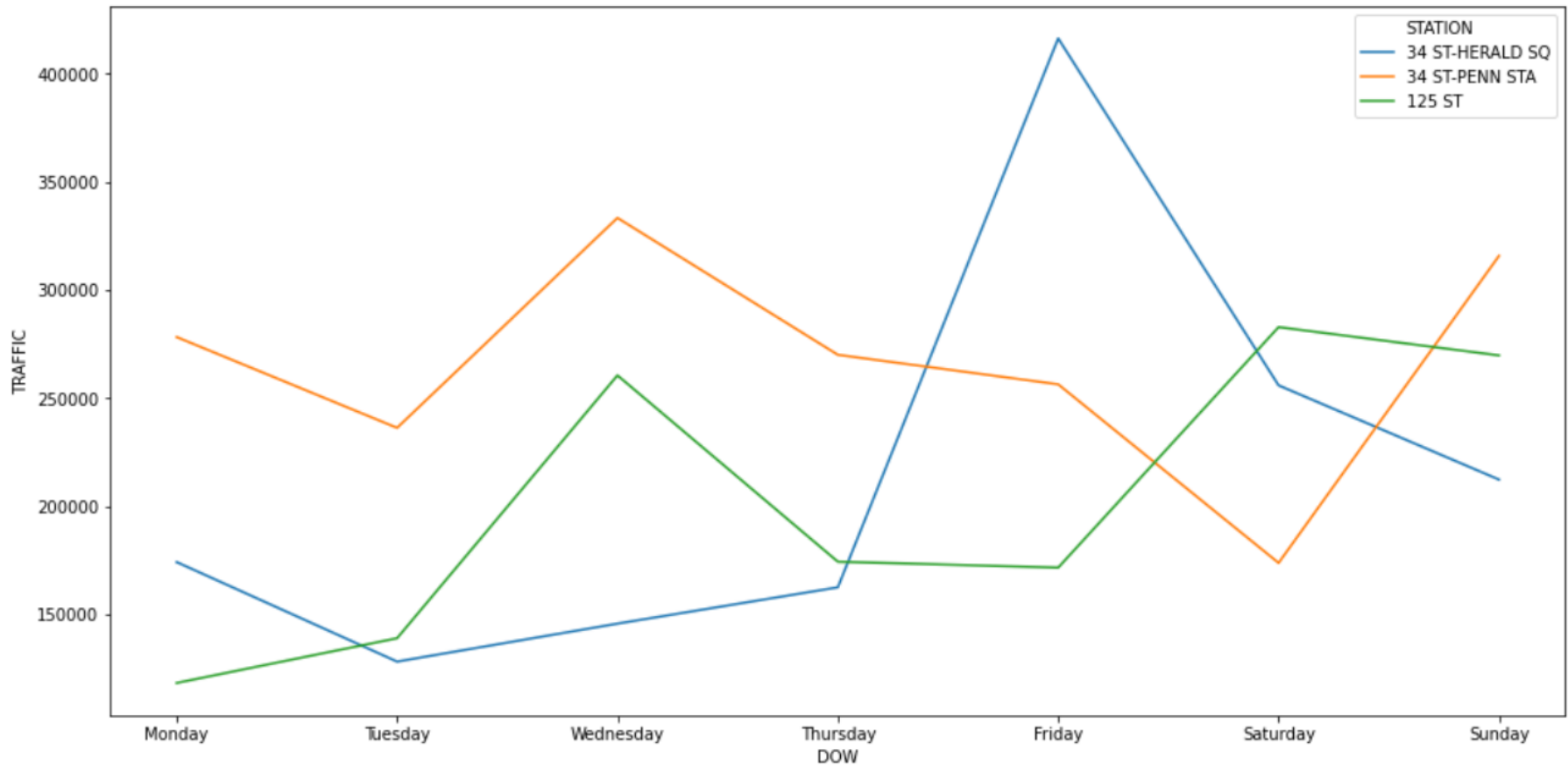TOP 10 STATIONS BASED ON MONTHLY RIDERSHIP - AUGUST 2020

FINDINGS – WEEKLY TRAFFIC

WEEKLY RIDERSHIP FOR AUGUST 2020
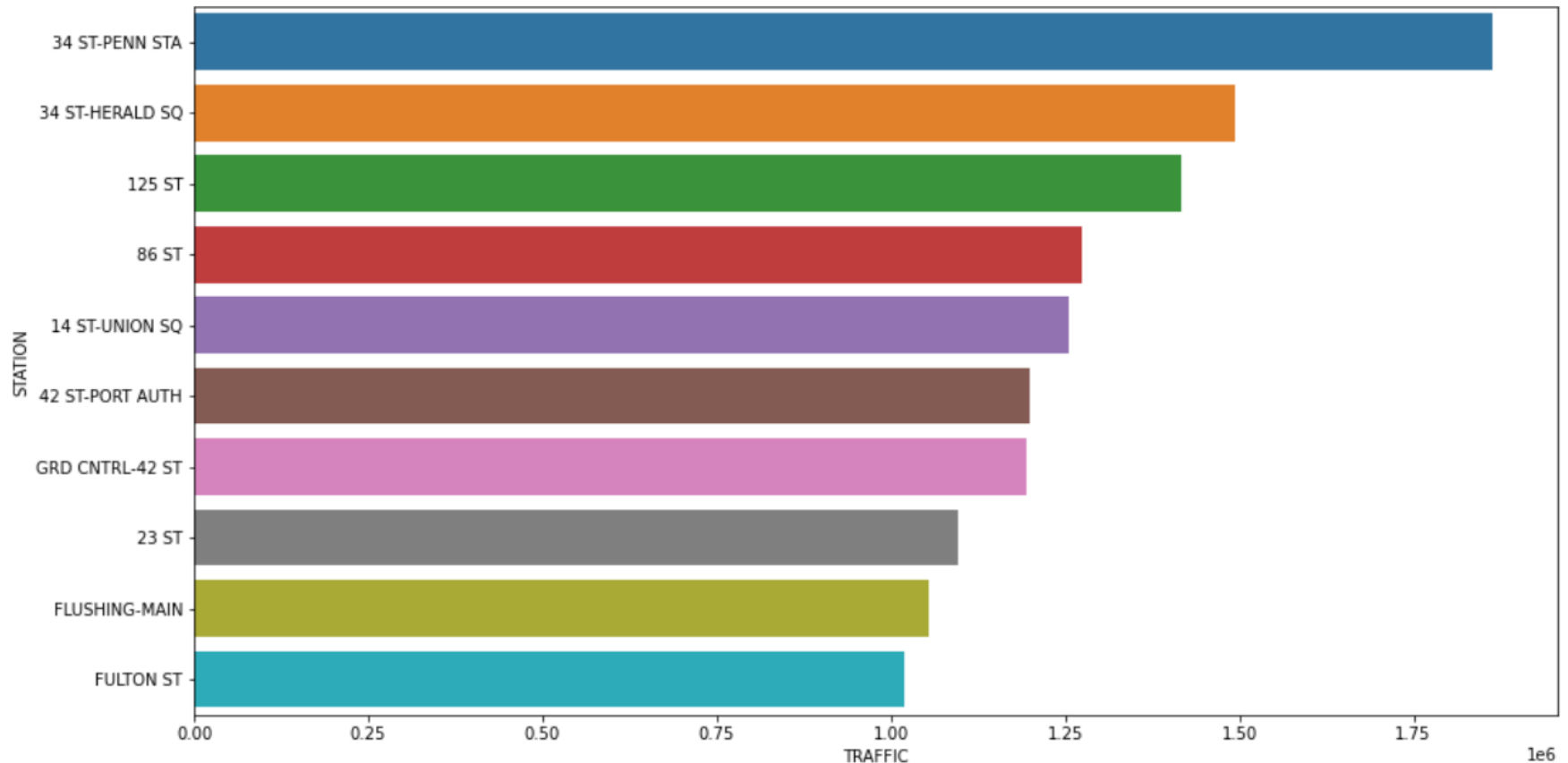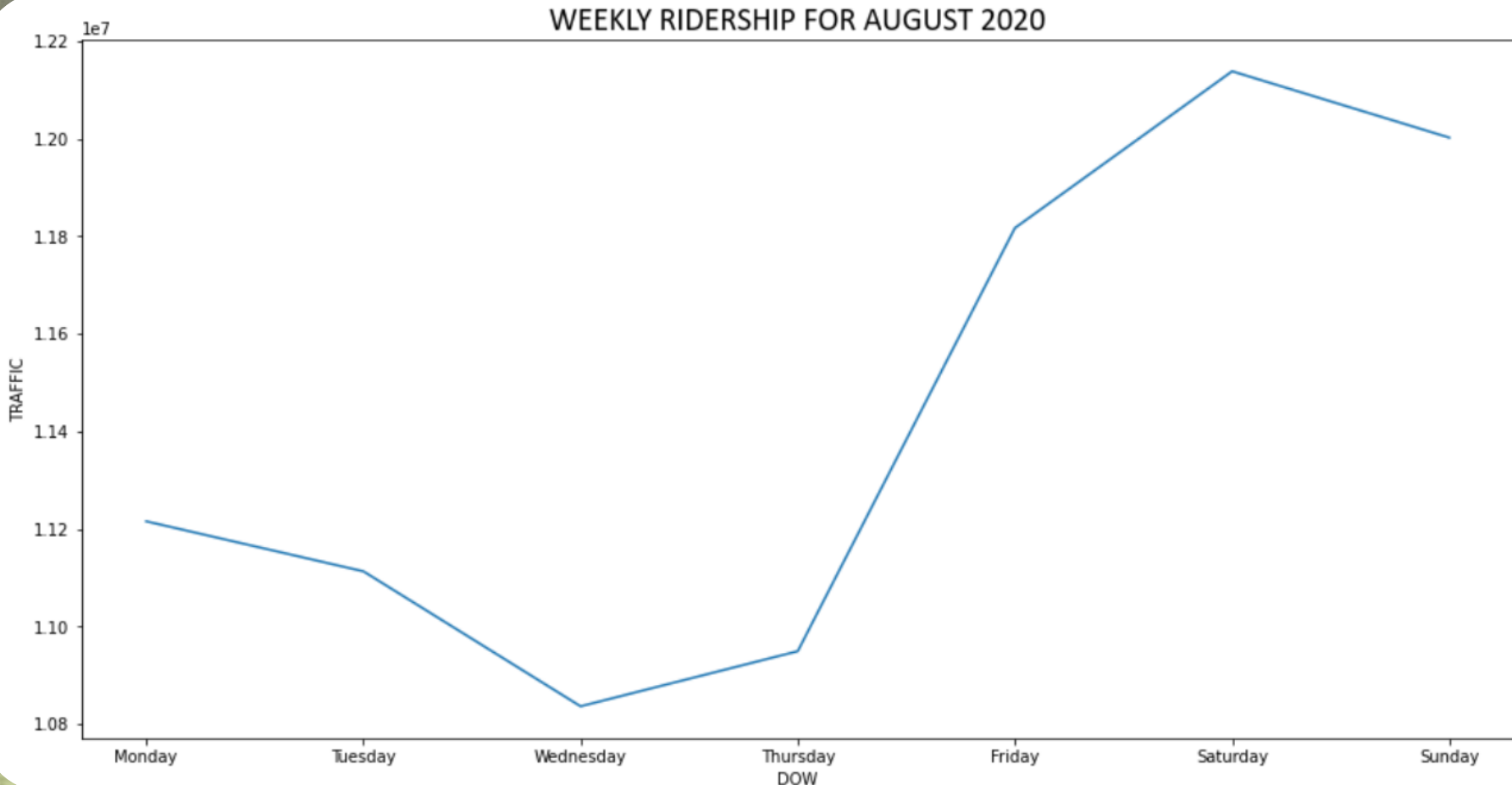
FINDINGS – WEEKLY TRAFFIC

MONTHLY TRAFFIC FOR TOP 3 STATIONS

OUR PROPOSAL...

Due to current COVID situation, daily ridership is affected, to recommend to postpone until situation gets better.

Focus on top 3 Stations (Manhattan Area):
34 ST-PENN STATION
34 ST-HERALD SQUARE
125th Street station (IRT Lexington Avenue Line)

Focus on Weekend over Weekdays

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IF WE HAVE MORE TIME...

1. Analyze bigger dataset which covers a longer period of time to increase the accuracy and reliability of result derived
2. Incorporate demographic and geographical data to determine suitability of the commuters as the target for client
3. Find out the peak hours so that WTWY would know when are the best times to place their teams

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Questions?
No?
Okay thanks bye… ☺