MTA PIT CREW

PROBLEM

Picture:
Passengers waiting for train

Subway is Delayed 40% of the time

PROBLEM

The NYT reports:
Between 2012 and 2018 train **delays increased from 18%** to **40% of the time.**

PROBLEM

Planned Service Changes

J WEEKEND

8 AM to 6 PM, Saturday Nov 7

26% Planned!

MTA's SOLUTION

FAST FORWARD

Improved Coordination

- Fewer crews
- Larger crews
- Multidisciplinary

PICTURE:
MTA CREW
MEMBER

MTA's SOLUTION

Shutdown

- Nights
- Weekends
- 2.5 years
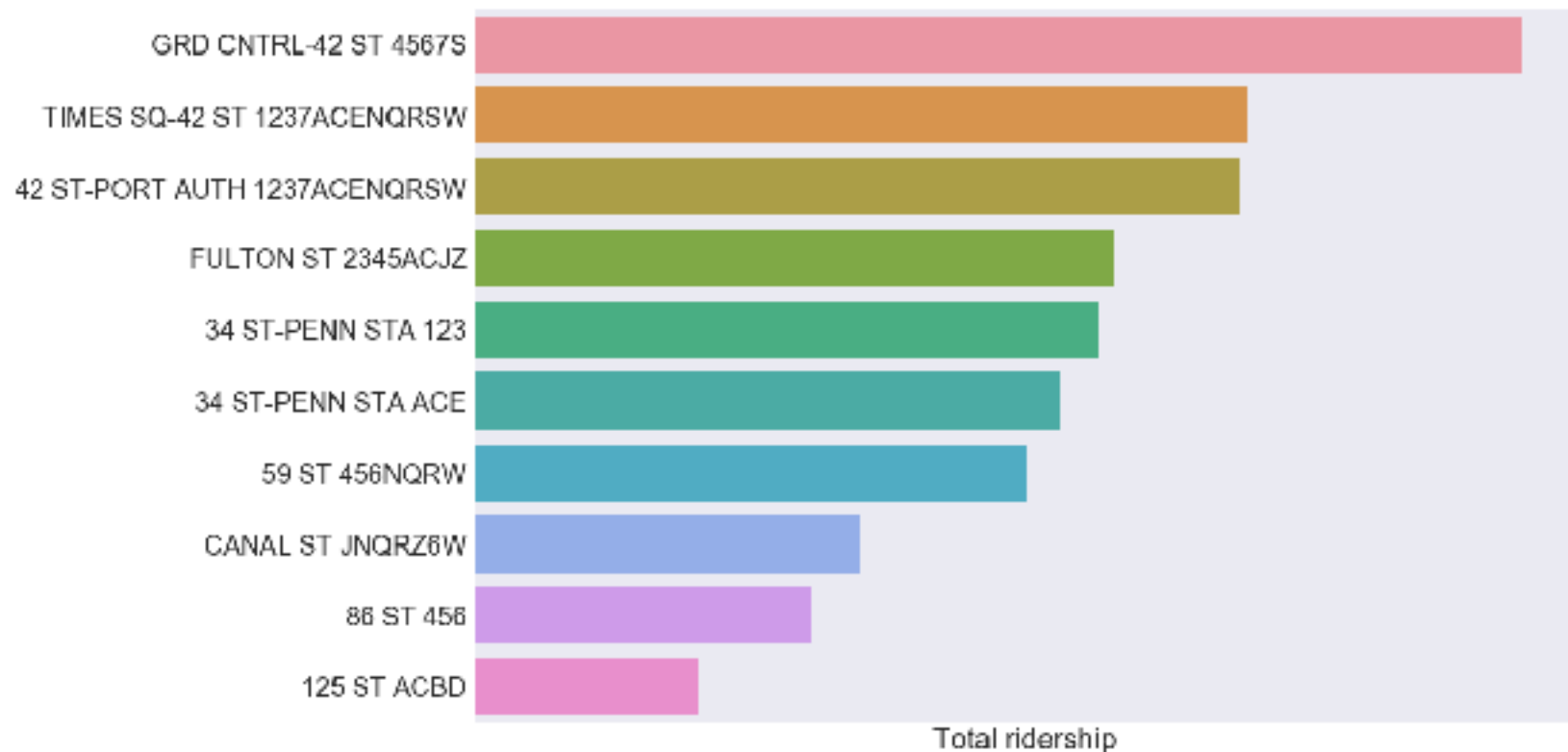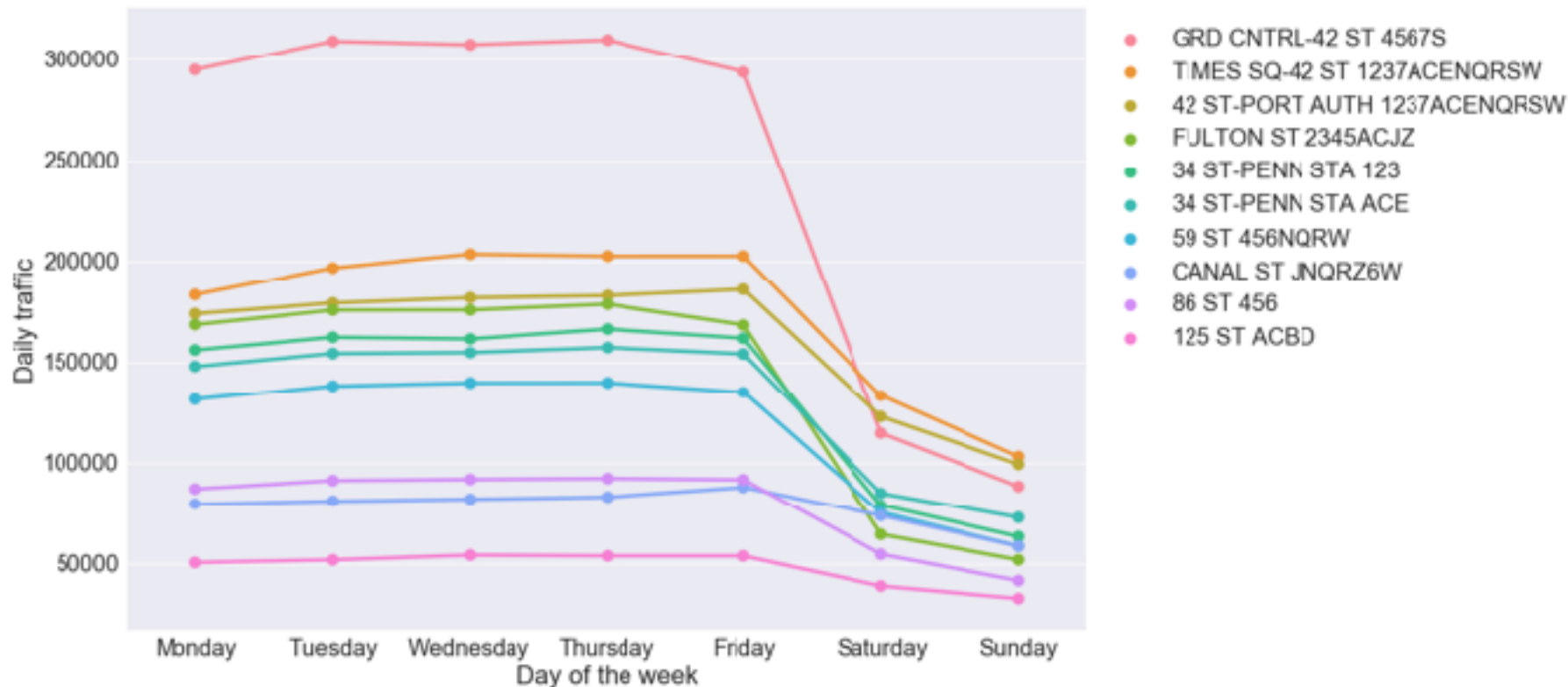
FAST FORWARD

PICTURE:
MTA CREW
MEMBER

The Data Science

PICTURE:
DATA
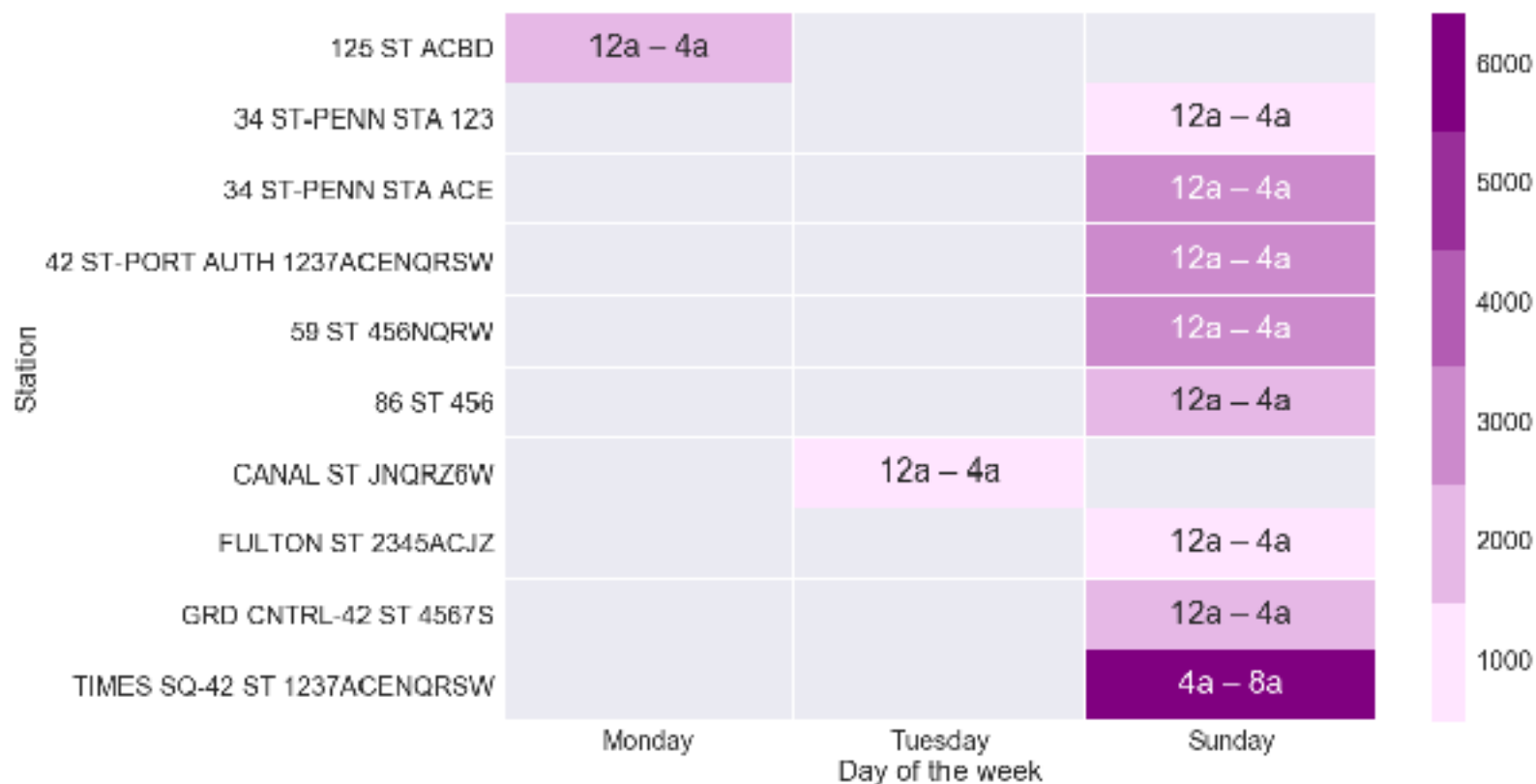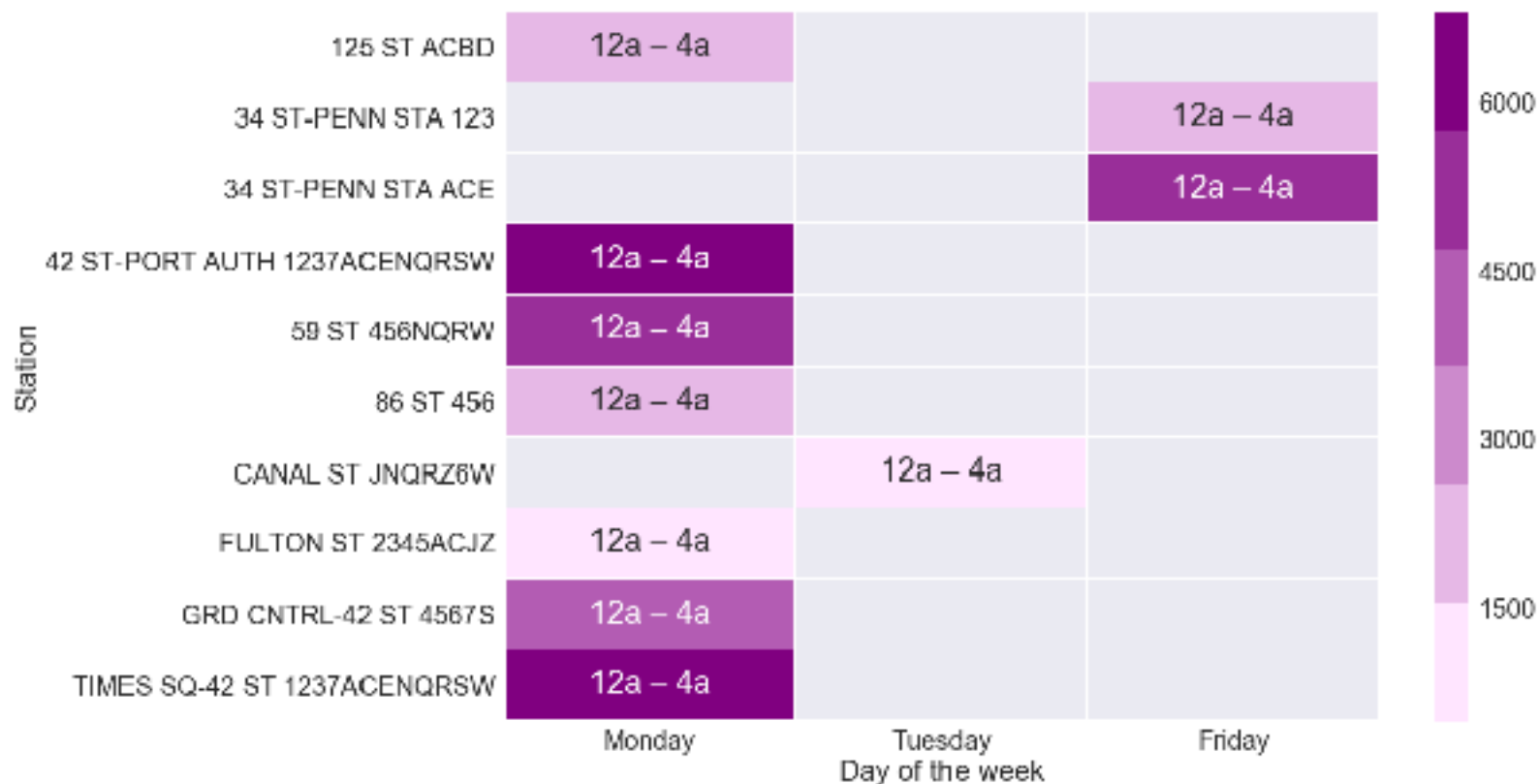SCIENTIST

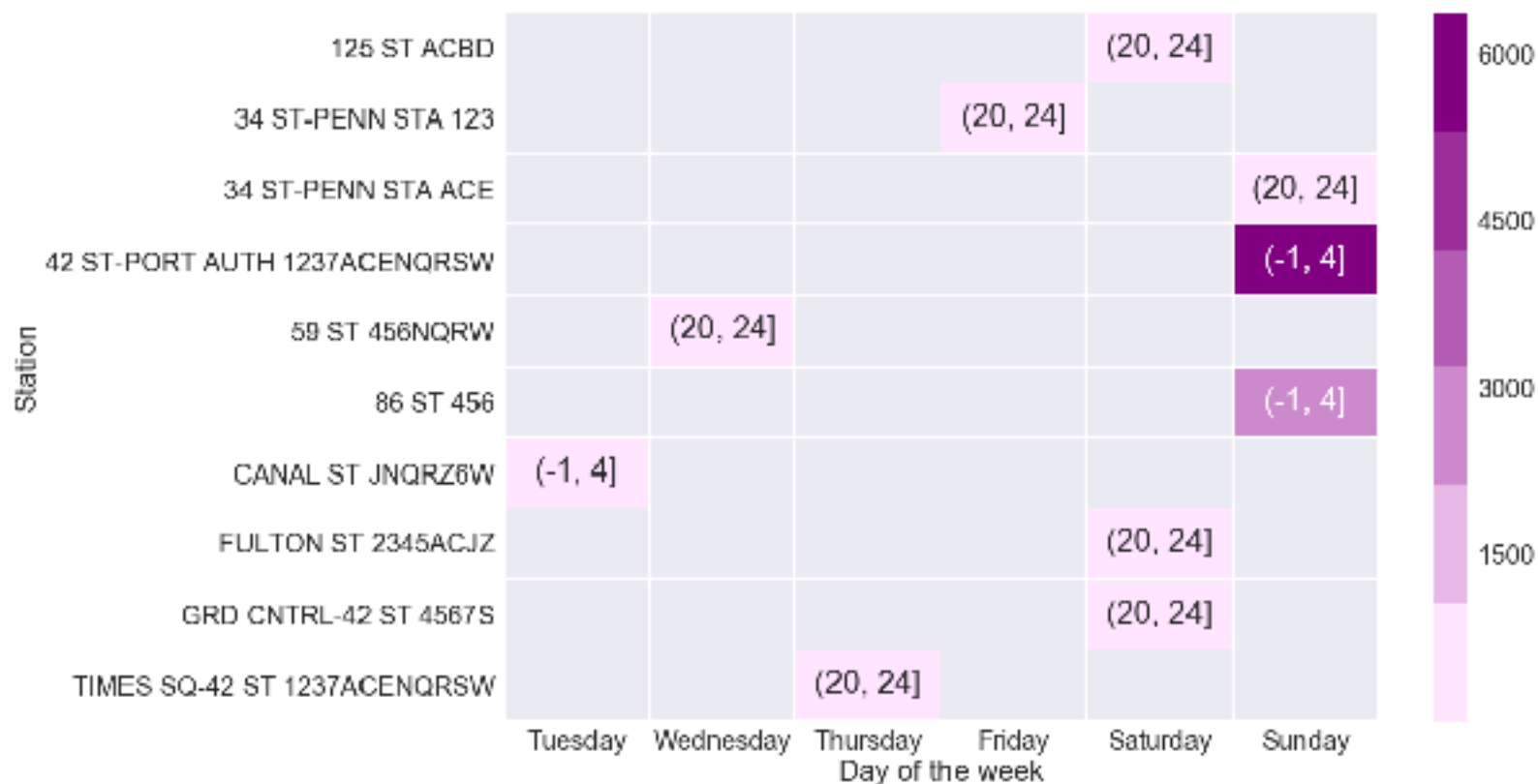# THE TOP TEN STATIONS

Daily Traffic

STATION PRIORITY

STATION PRIORITY

STATION PRIORITY

Next Steps

Multiple Response Optimization with desirability functions

Apply client-specific preferences and constraints

PICTURE:
Optimization
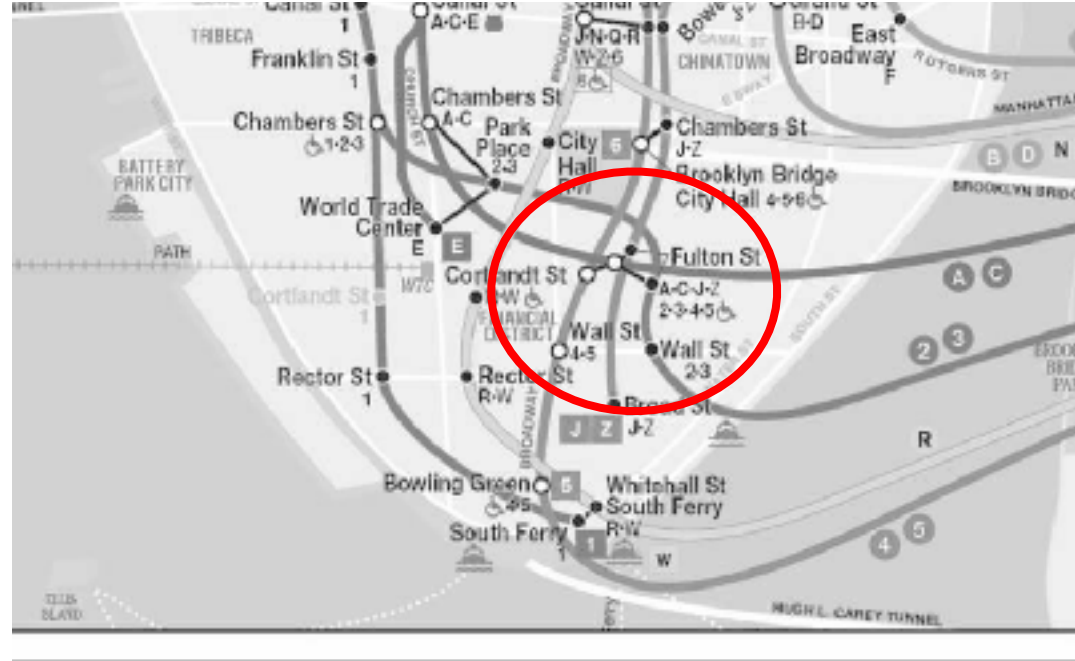Curve

MTA Constraints

Lost revenue

PICTURE:
Bag of Cash

Labor Costs

PICTURE:
Crew Members

Proximity to other stations

Use DOE
to evaluate
Differences in
Total volume
based on
specific
closures.

References

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https://www.nytimes.com/interactive/2018/05/09/nyregion/subway-crisis-mta-decisions-signals-rules.html?smid=fb-share