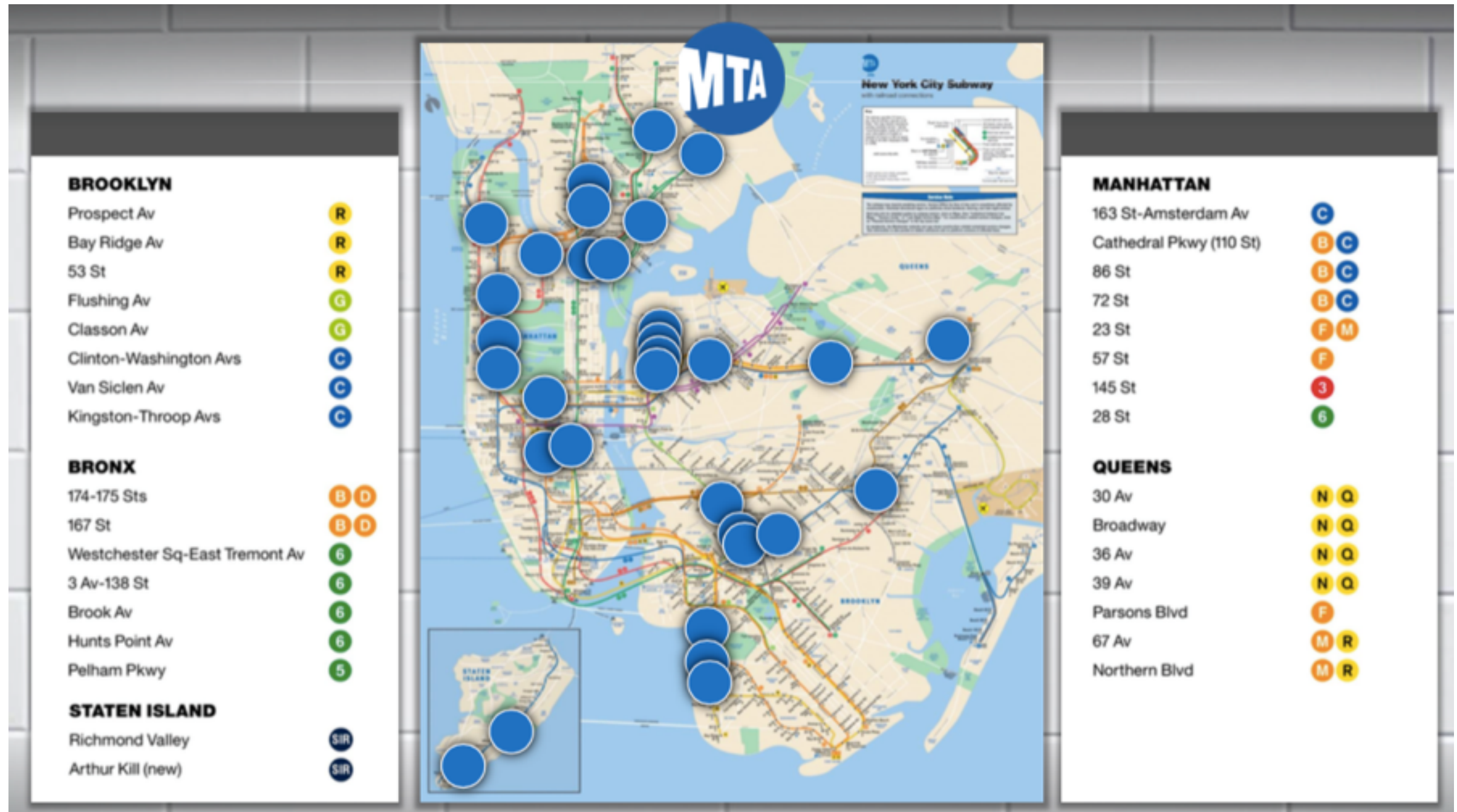


NYC MTA's "Renewal" of 30 Subway Stations by 2020:

Getting the Work Done Using a Data-Driven Approach

Team 1: Chris Buie, Nils Hansen,
Catherine Henderson, Rebecca Hyde

Current Plan: Shut Down Entire Stations for an Average of 6-12 months



NYC MTA's “Renewal” of 30 Subway Stations

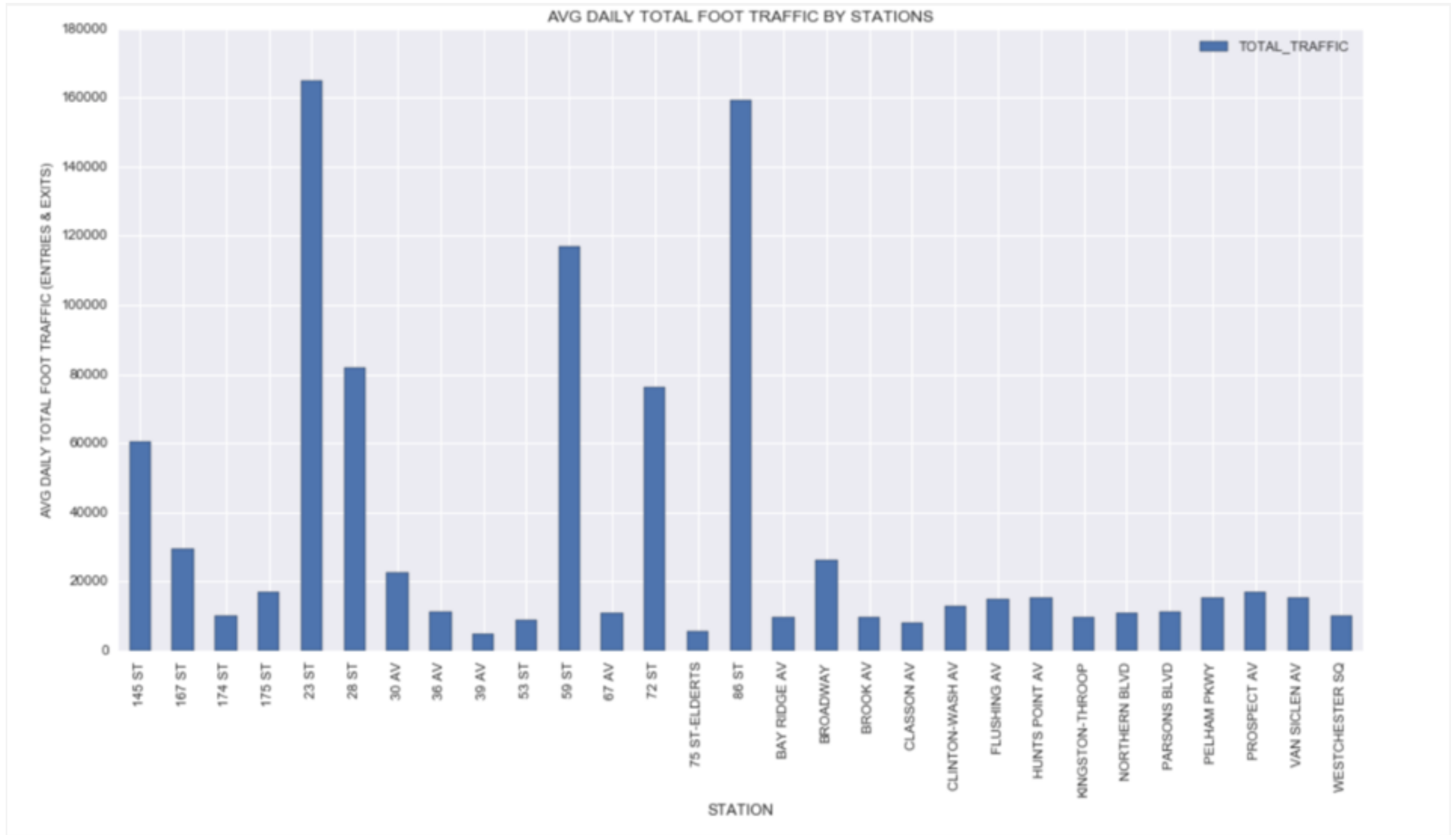
Plans to “renew” the stations with the following:

- Put in “On The Go” touch screens
- New signage
- New lighting



(http://gothamist.com/2016/01/08/subway_facelift_shutdown.php)

All 30 Stations: Average Daily Foot Traffic



Ridership impact from closing down a station...

You will likely lose at least 10% of
the ridership of that station*

*See story about Chicago Transit Authority: <https://www.washingtonpost.com/news/dr-gridlock/wp/2016/04/06/heres-what-metro-could-learn-from-chicagos-experience-in-shutting-down-part-of-its-subway/>

Revenue impact of closing down a station: Example 28th St.



Lost revenue (based on total foot traffic - entries & exits):

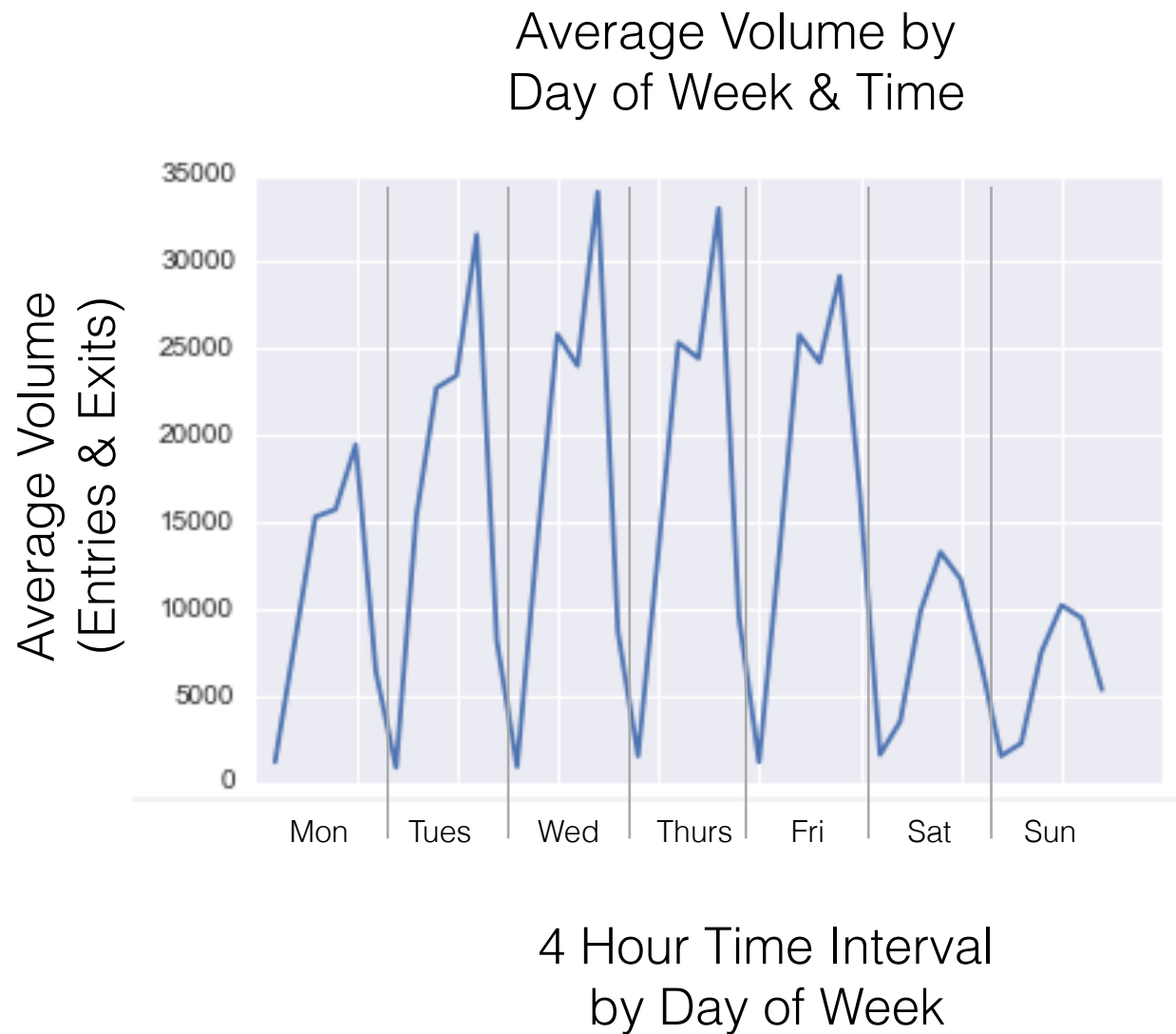
Per day - \$22,471

Per week - \$157,303

Per month - \$629,213

6 month - \$3,775,279

Our Proposed Solution: Deep Dive 28th Street



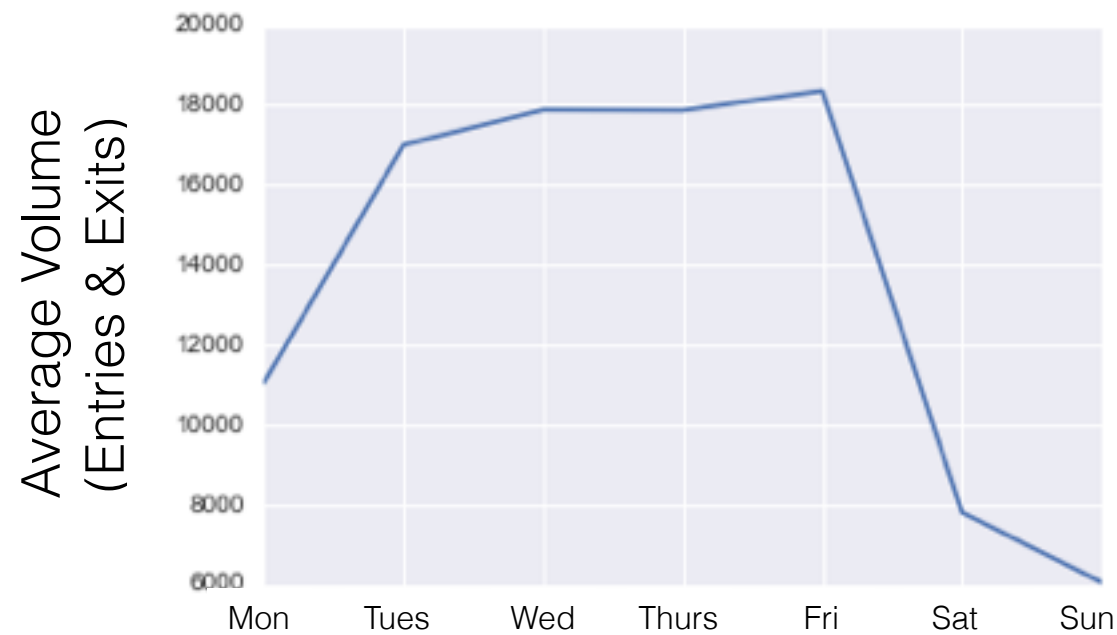
Don't shut any stations down.
Work during low volume times
instead!

The best times to complete the
work:

1. Tuesday: Midnight - 4am
2. Wednesday: Midnight - 4am
3. Friday: Midnight - 4am

Our Proposed Solution: Deep Dive 28th Street

Average Volume by Day of Week

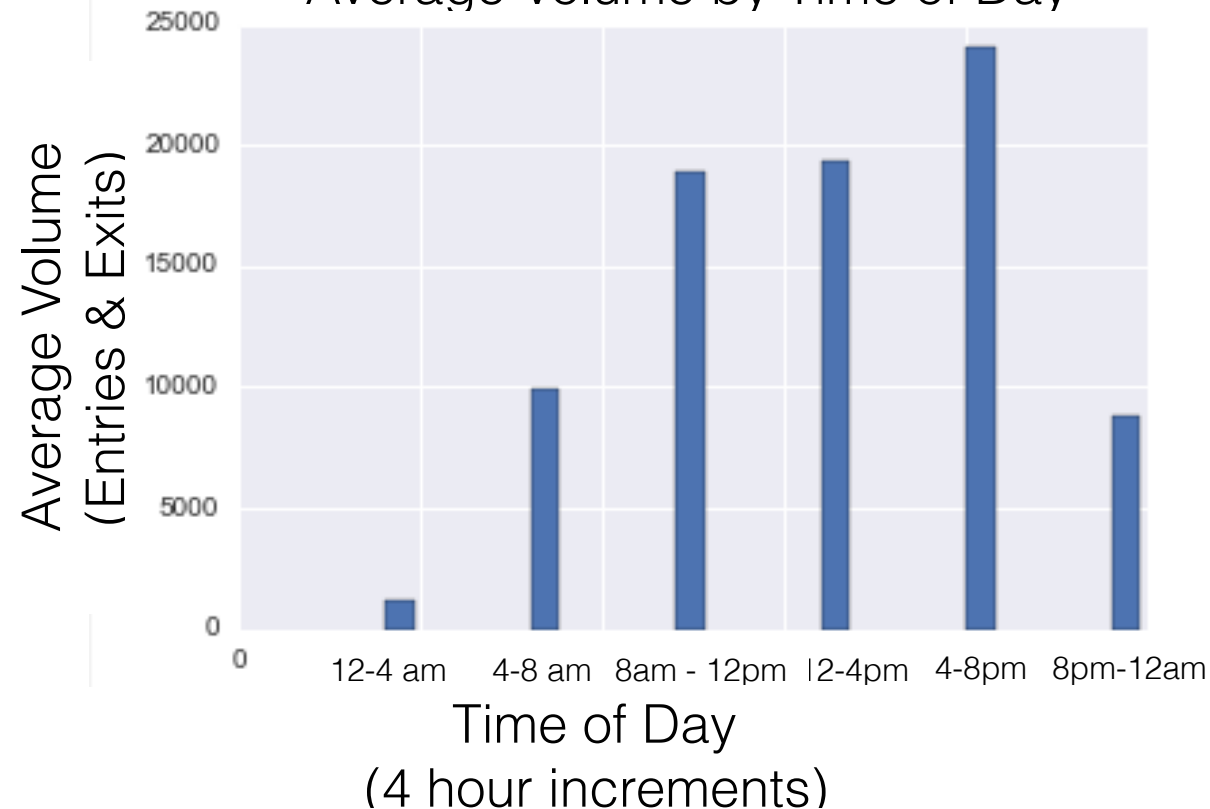


The best days to complete the work:

1. Sunday
2. Saturday
3. Monday

Day of Week

Average Volume by Time of Day



The best times to complete the work:

1. Midnight - 4am
2. 8pm - Midnight
3. 4 - 8am

Getting the Work Done: Next Steps

- Data analysis on all 30 stations
- Collect additional data
 - Tasks to be done at each of the 30 subway stations
 - Estimated time to complete each task
 - Number of workers & pay
- Develop a detailed reconstruction plan covering all 30 stations

Thank you!

We look forward to hearing from
you.