



Providing Cellular Coverage Underground

Introduction

MTA Project with Network Providers:

MTA partnered up with the four largest network providers in the nation in order to provide cellular coverage underground.

- ✓ AT&T
- ✓ Sprint
- ✓ T-Mobile
- ✓ Verizon

Client

T-Mobile is the second largest network provider in the United States

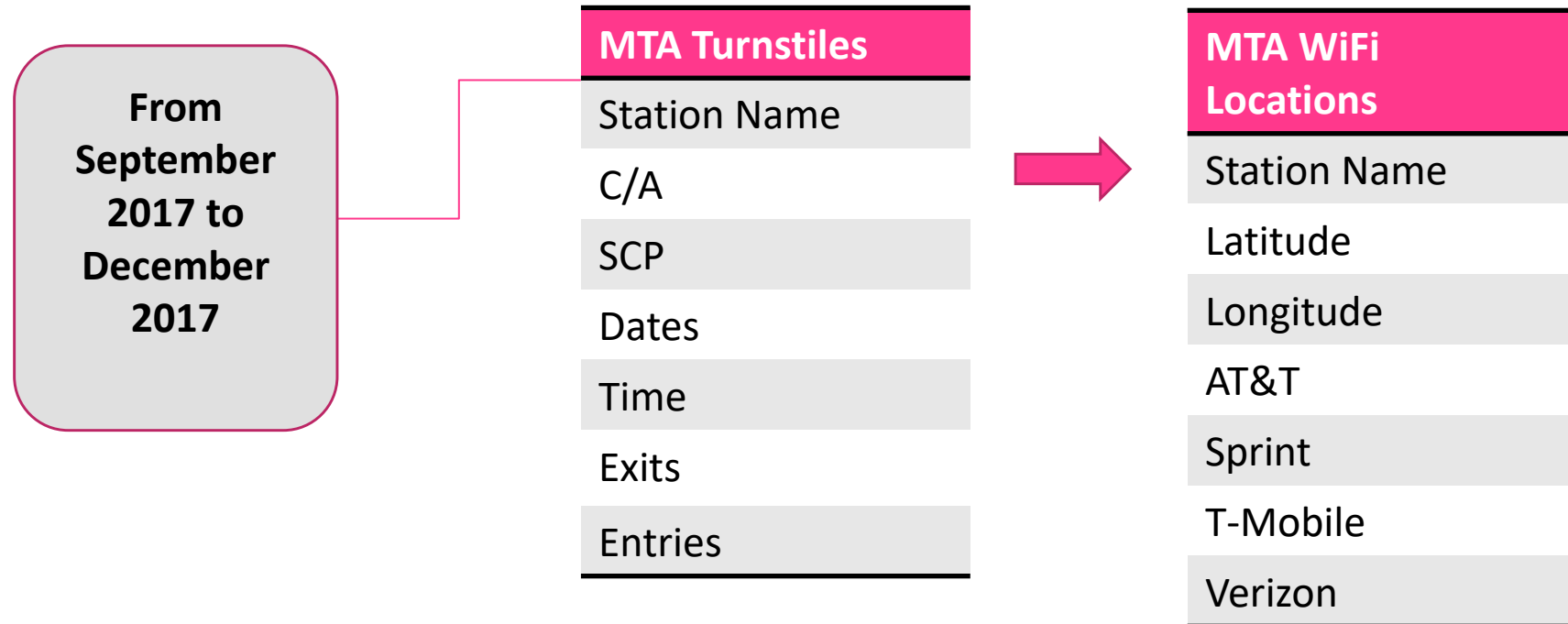
- 60 million subscribers as of 2016
- Voice and Data services



Need

- T-Mobile is working with MTA in the project mentioned in earlier slides. They are working on implementing this project, but They need to determine **which stations should be prioritized** to continue with this project.
- They also want to consider their **competitor's progress**.

Data



Process

Data cleaning

- Reformatting station names
- Missing values
- Duplication

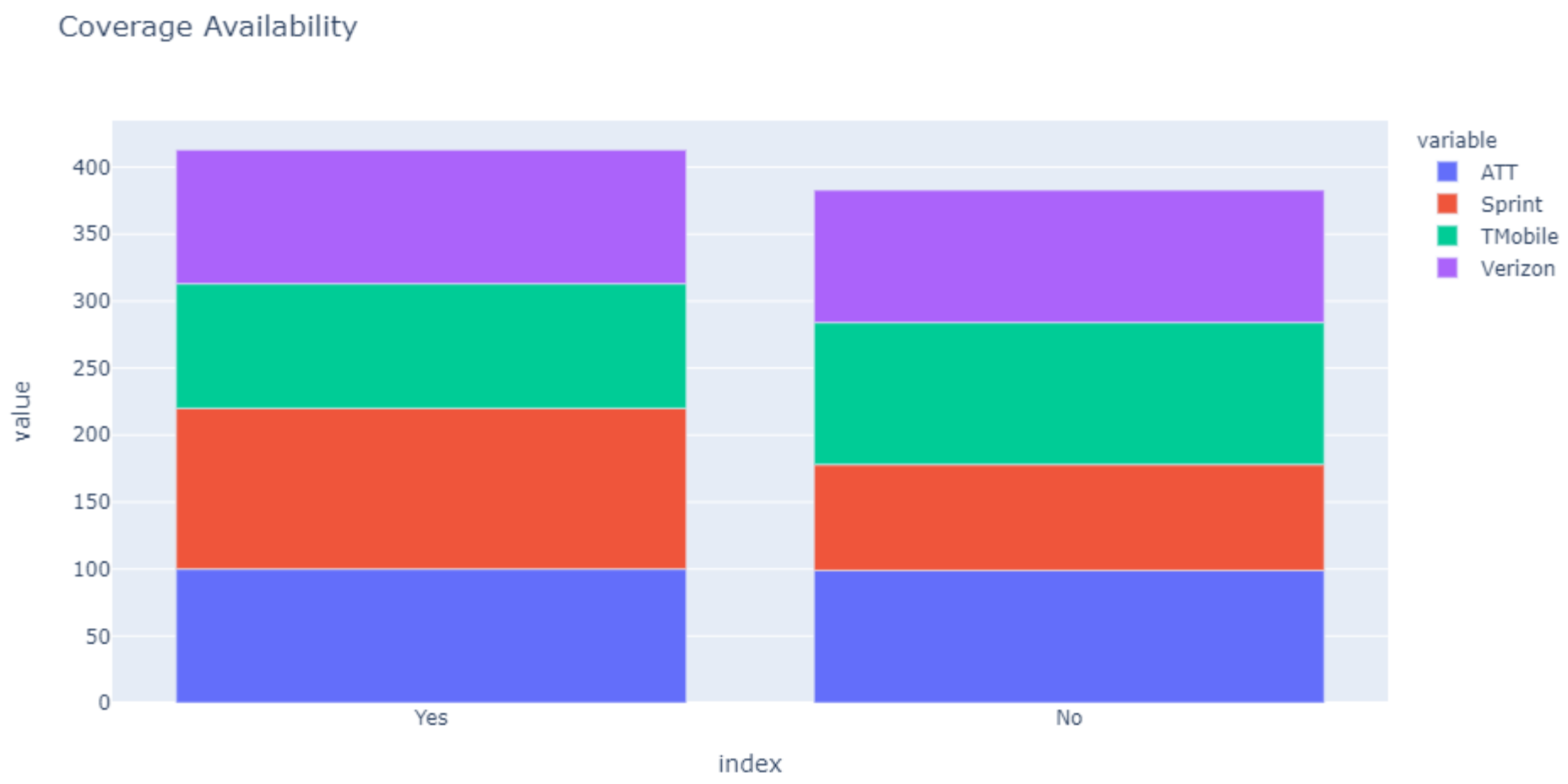
Aggregation

- Daily Entries count
- Daily Exits Counts
- Sum of entries and exits
- Join of two datasets

Visualization

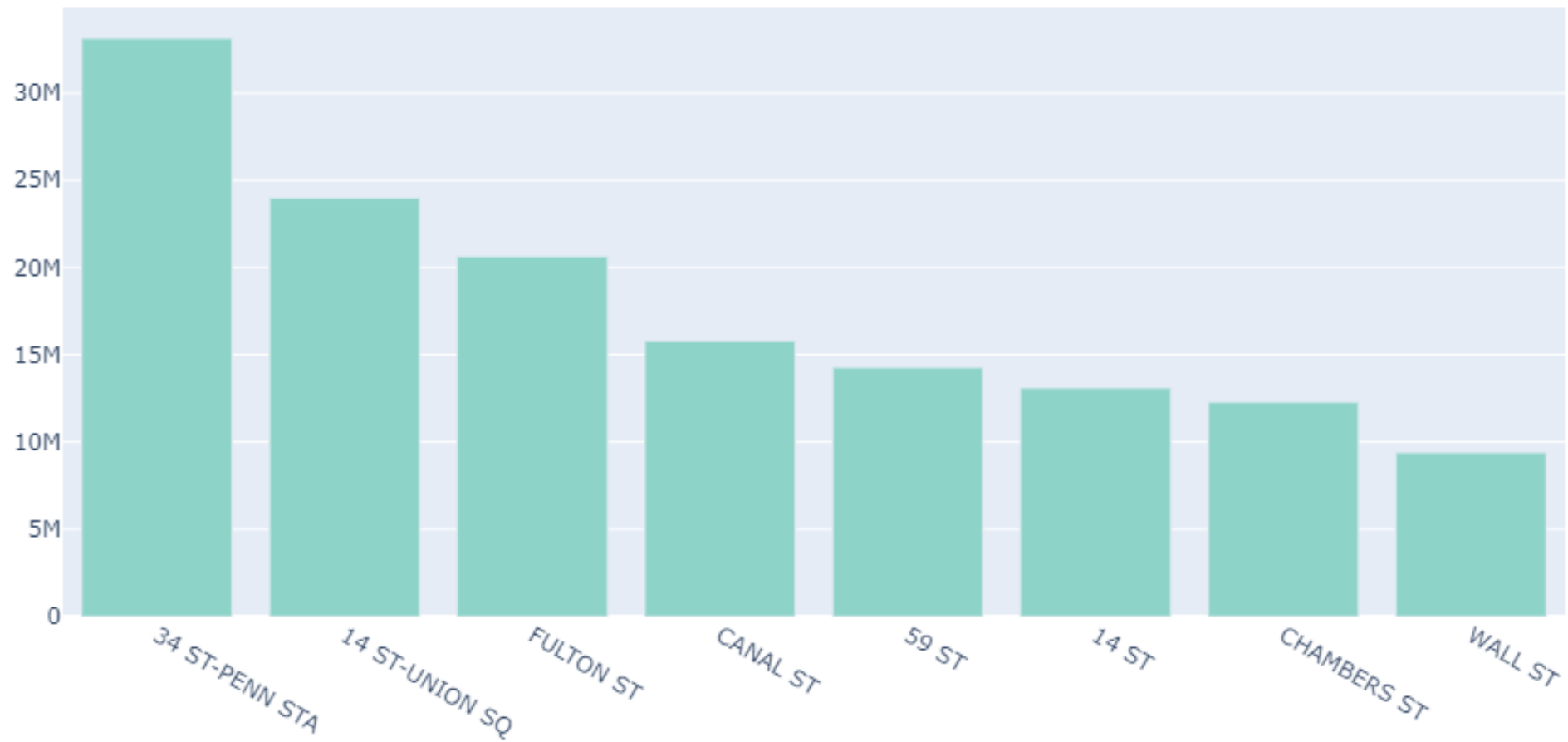
- Using Plotly, matplotlib

Findings



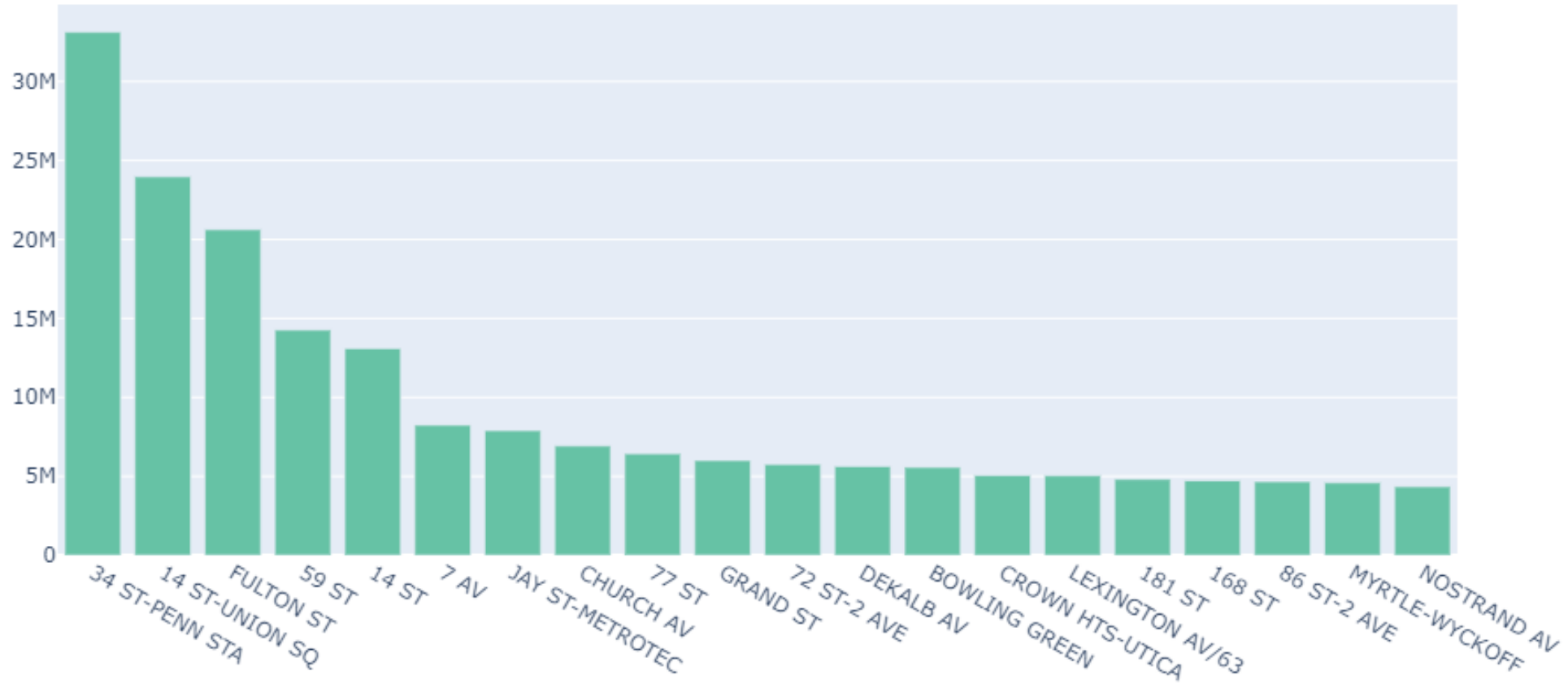
Findings

Top Stations Not Covered by T-Mobile



Findings

Top 20 Stations Without Cellular Coverage



Recommendation

Prioritize Stations with no coverage at all

Starting with Pennsylvania station.

Expose them to potential subscribers.