

Coffee Time

Analysis of Foot Traffic at MTA Stations in NYC to identify which Starbucks Locations to open for 'Grab N' Go'

Celia Sagastume, August 2021

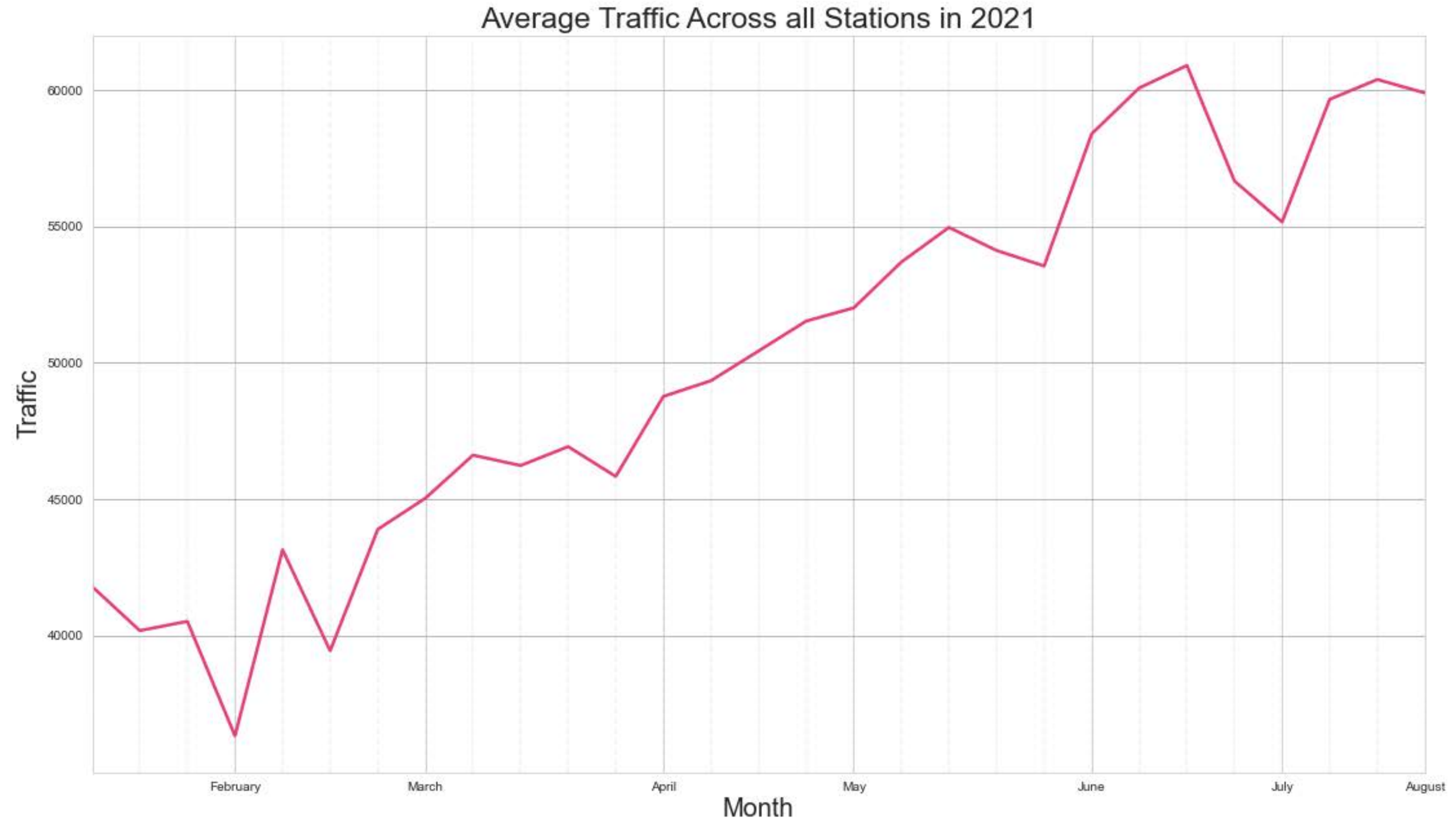
Methodology

- Data:
 - MTA Turnstile Data
 - Station Coordinates
 - Starbucks Locations
- Tools:
 - Numpy and Pandas for data processing
 - Matplotlib and Seaborn for visualization
 - Google Maps API for Station & Starbucks location
- Metrics:
 - Average increase of traffic across all stations in 2021
 - Foot Traffic per Station in 2019 and 2021
 - Percentage of Foot Traffic per station in 2021 compared to 2019



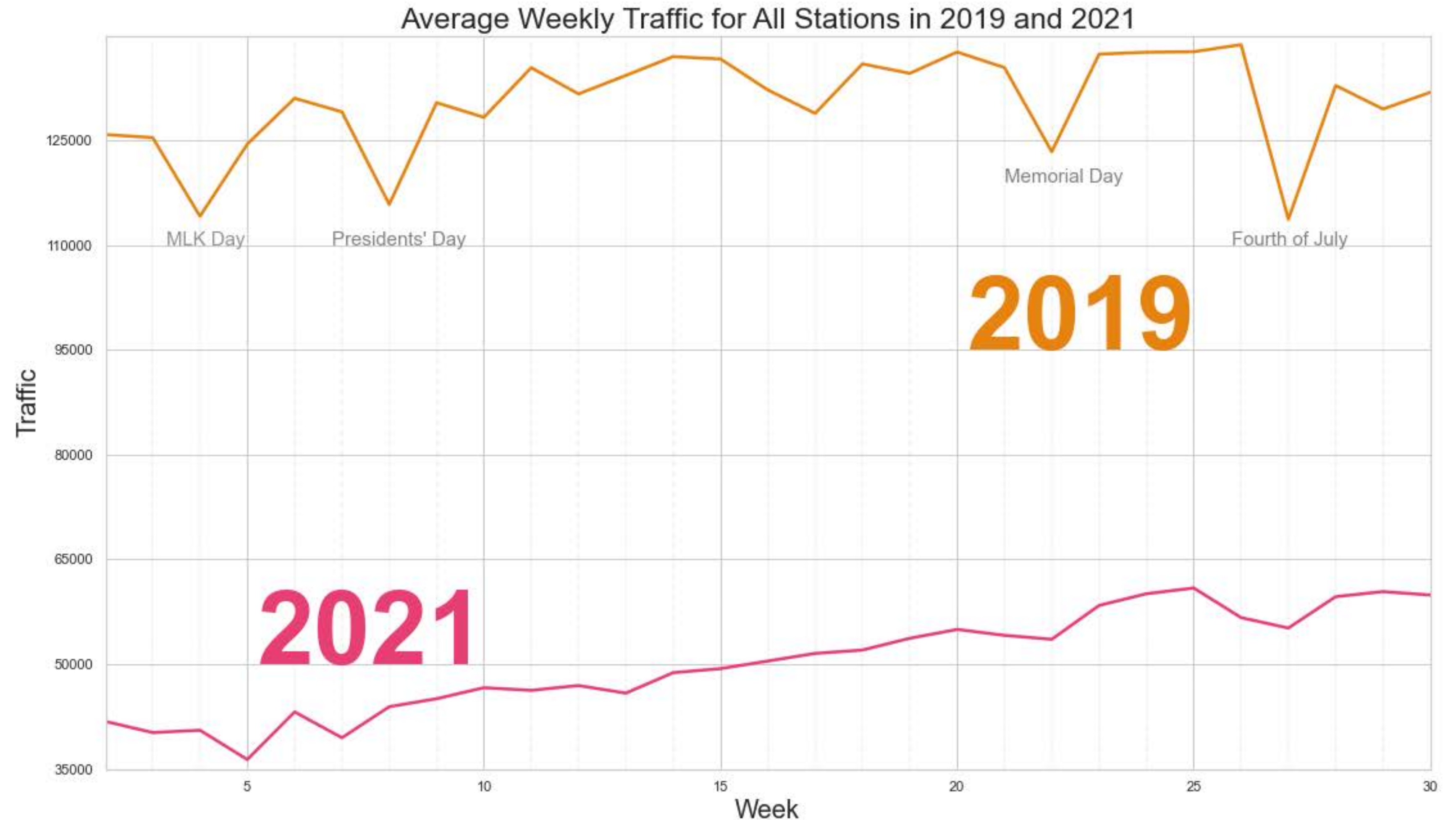
Traffic in 2021

- Linear Growth Trend
 - Where is this growth happening the fastest?
 - Fully Staff ideal locations
 - Open for Grab And Go
 - Increase revenue by up to 300% in the first week



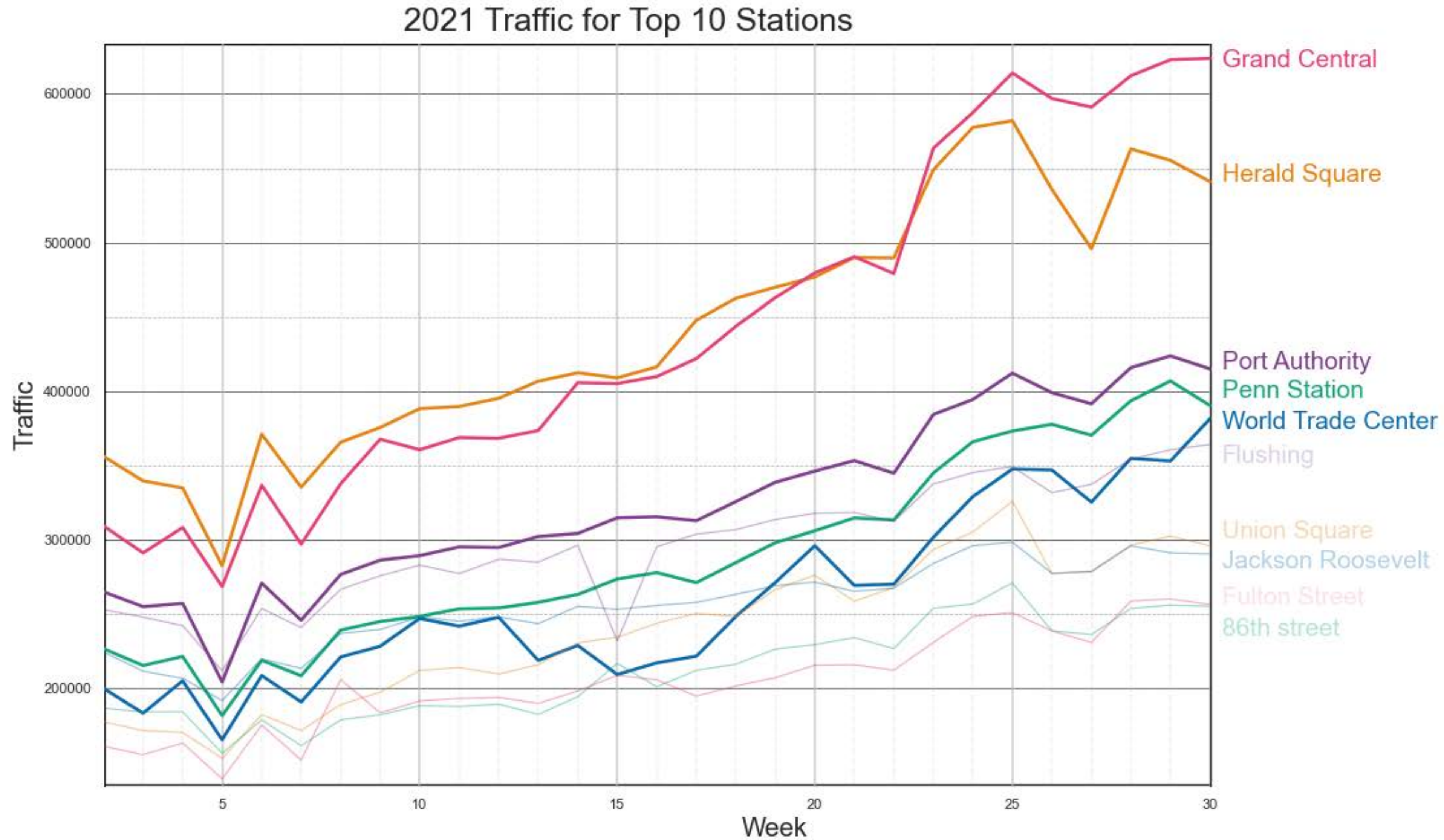
2021 Compared to 2019

- Traffic pattern is similar to 2019
- Foot Traffic is considerably lower in 2021 compared to 2019
 - Certain Starbucks locations are currently closed
 - Investment
 - Difficult to staff food service locations
 - Capitalize on investment as quickly as possible



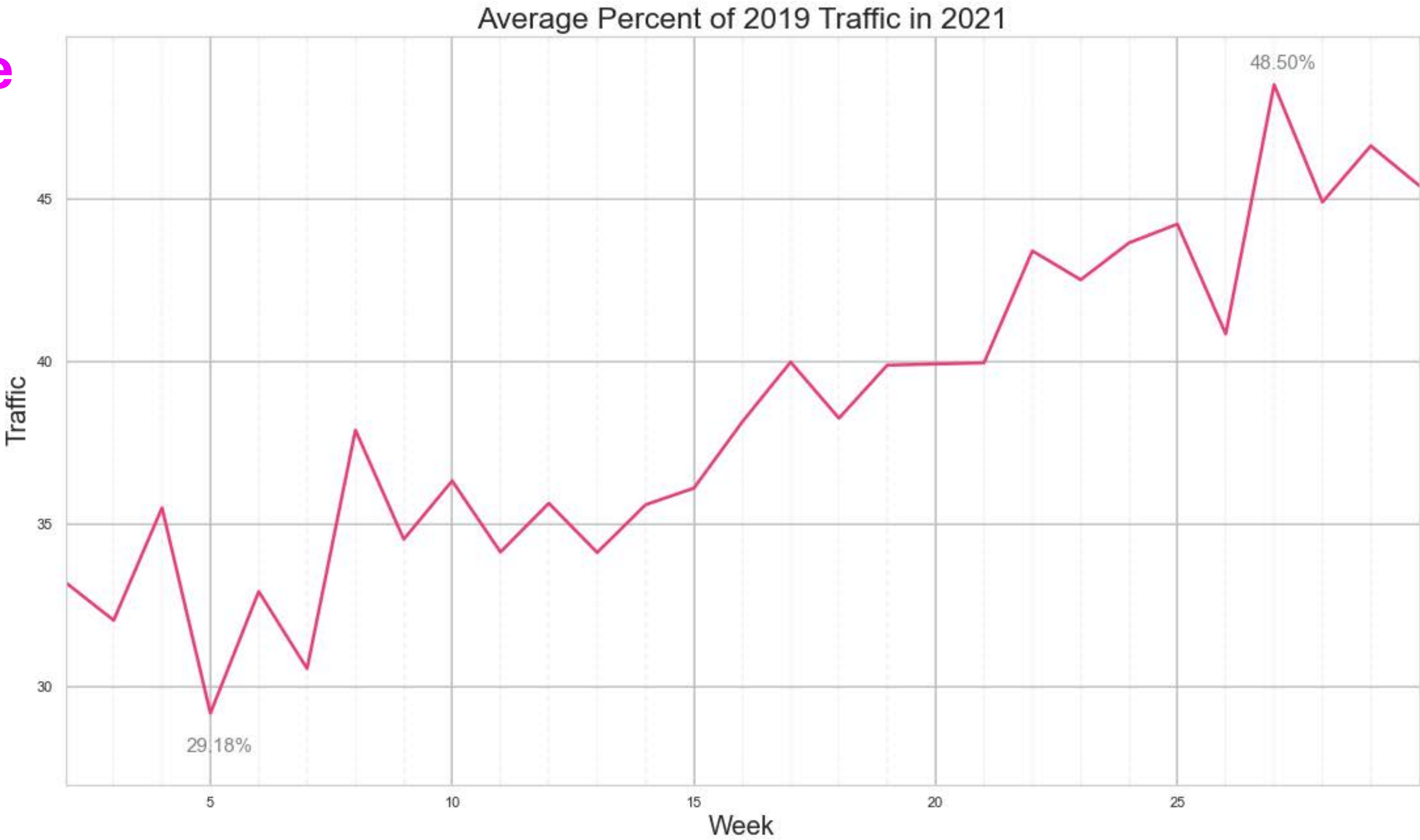
Most Traffic

- Biggest Share of Traffic:
 - Grand Central
 - Herald Square
 - Port Authority
(42nd Street)
 - Penn Station
(34th Street, Line A C E)
 - World Trade Center



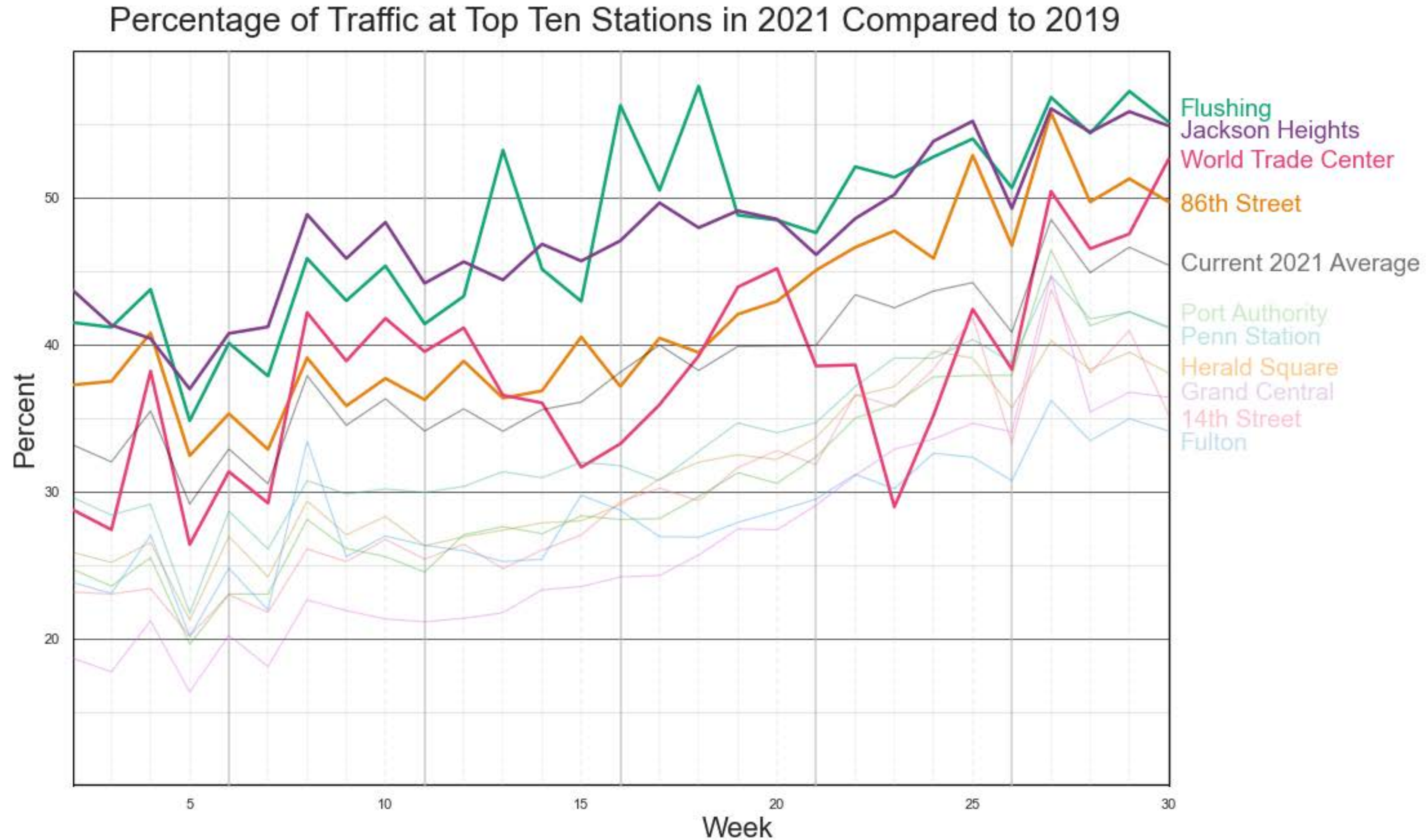
Current Share

Foot Traffic in 2021
compared to 2019



Faster Recovery

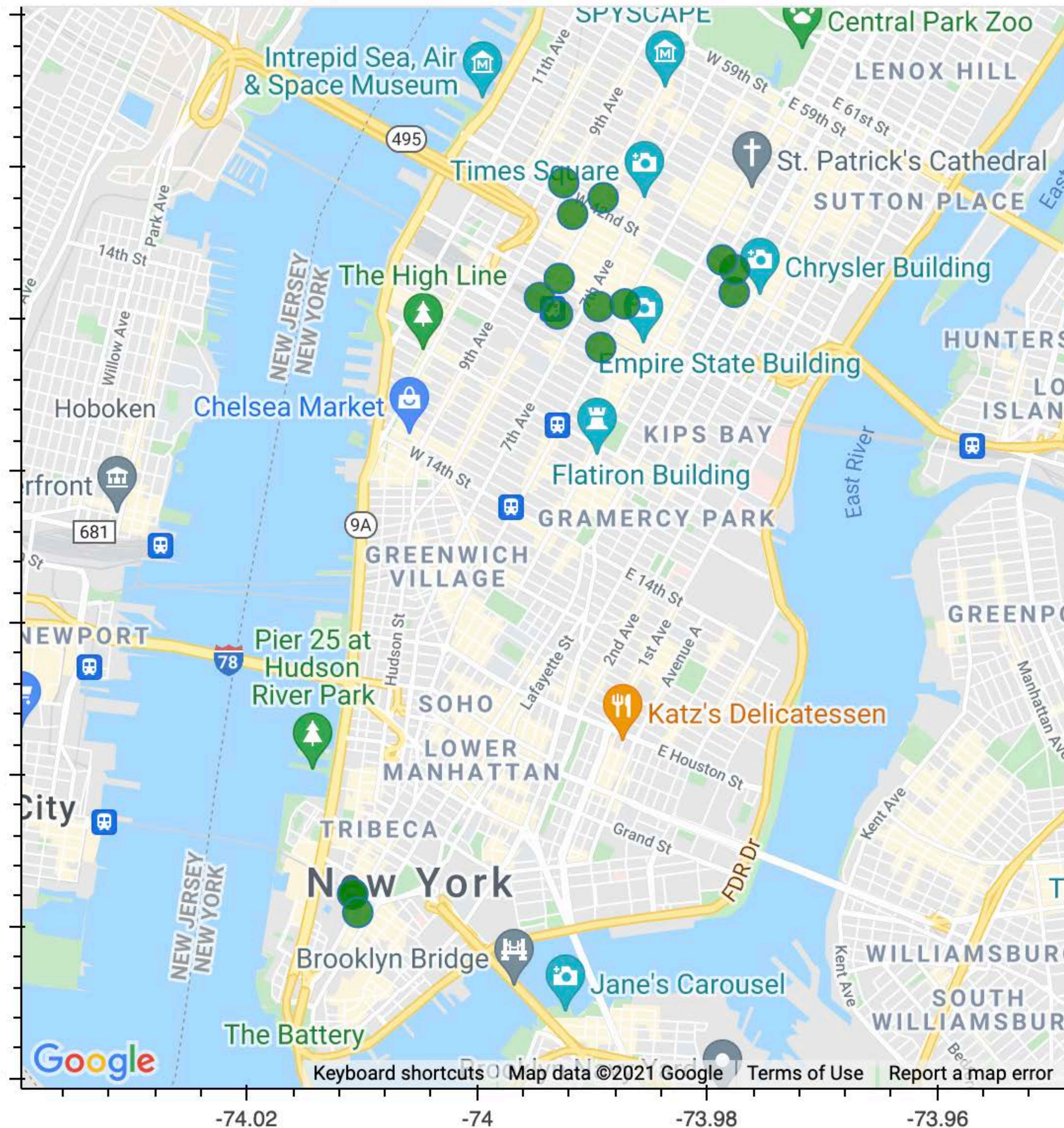
- Above average recovery of traffic at locations:
 - Flushing
(Main Street Line 7)
 - Jackson Heights
(Roosevelt Station)
 - World Trade Center
 - 86th Street
(& Lexington 456 Line)
- Only Station currently showing upward trend:
 - World Trade Center
 - Anniversary
 - Tourism
 - Commercial Enterprise



Current Recommendations

- Short Term:
 - Re-open locations adjacent to World Trade Center Station & open for “Grab And Go” (September 2021)
 - Currently closed: 195 Broadway Street
- Long Term:
 - Re-Open for “Grab And Go” at locations adjacent to Grand Central, Herald Square, Port Authority, and Penn Station (January 2022)
 - Currently closed: 360 Lexington Ave, 242 W 34th Street, 350 W 42nd Street, 1535 Broadway

Starbucks Locations to Open for in-store Orders in Manhattan





Questions