

Exploratory data analysis of 2019 Madison Square Garden events and NYC Subway Stations
Project prepared for the Carnevale Real Estate Applied Thinking Enterprises (CREATE)

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Organization: Metis

Question of Interest: Can we see a correlation between the stations around Madison Square Garden with the highest number of turnstile passes and types of events being held at Madison Square Garden in 2019?

Purpose: Exploring any correlation between the types of events occurring at Madison Square Garden and subway traffic such that locations in the vicinity of MSG can be evaluated in comparison to one another.

Dataset(s): Primary dataset used will be the NYC turnstile data. The NYC turnstile data will be obtained from the publicly accessible mta.info website.

MTA data source: <http://web.mta.info/developers/turnstile.html>

Tools: Tools used for this project include:

1. Pandas (python)
2. SQL + DB browser
3. matplotlib
4. possibly others

MVP Goal: A minimum viable product for this project could be a map of the greater Madison Square Garden area with areas of higher value denoted coupled with data on the events that drove the most traffic.

Back Story:

Hello Will,

It was a pleasure speaking to you at the networking event last week. As you know from our discussion, CREATE (Carnevale Real Estate Applied Thinking Enterprises) is interested in an acquisition of location(s) around the Madison Square Garden area. We see COVID as an opportunity to make such an acquisition as the urban real estate market depressed during the pandemic, but we expect the market to normalize back to 2019 levels eventually. We'd love to utilize your data analysis expertise, using the publicly available MTA transit data, to discern actionable information on which subway locations around the Garden garner the most traffic, and what particular events have the greatest effect on drawing MTA traffic. Our goal is to develop and lease our acquired location(s) geared toward a complementary business to the

biggest draws for MTA traffic. Please contact us at your earliest convenience so that we might begin taking next steps toward utilizing your services.

Sincerely,
Steve

CREATE