



Identify New York Public High Schools with the Highest SAT Test Scores

Reason for data study/ data sets used

The purpose of this project is to identify which public high school's within the five boroughs that make up the New York City area have the highest overall SAT scores, while isolating the public high school's that received the highest score for each section (math, reading, and writing). Then locate the closest vendors to the top ten performing SAT test score public high school for insight on the surrounding area. Enabling a quick list of the closest vendor's surrounding each top ten performing SAT test score for relevant places for transportation or afterschool gathering locations.

This report is targeted to people who are looking to relocate or trying to apply to New York City area public high schools with the highest performing SAT scores.

Data acquisition and cleaning

While there are many different types of data, almost all the data for this study was procured through excel spreadsheets and website scrapping. Considering these data types, pre-processing can be articulated as a set of incremental stages. Beginning with the ingestion of the large data sets into Jupiter Notebooks utilizing the python programming language. The next stage includes cleaning and transforming the data. This is completed by removing invalid records, columns, and translating all the columns to use a normalized set of values. Once the base set of data had been identified for this problem, data acquisition from a website was added. With the new website data extracted, a combination of two different datasets into a single table was achieved.

Top 10 Average SAT Total Score Table

School ID	School	Borough	Building Code	Street Address	City	State	Zip Code	Latitude	Longitude	Student Enrollment	Average Score (SAT Math)	Average Score (SAT Reading)	Average Score (SAT Writing)	Average Score (SAT Total)
105 02M475	Stuyvesant High School	Manhattan	M477	345 Chambers Street	Manhattan	NY	10282	40.71775	-74.01405	3296.0	754.0	697.0	693.0	2144.0
110 31R605	Staten Island Technical High School	Staten Island	R440	485 Clawson Street	Staten Island	NY	10306	40.56791	-74.11536	1247.0	711.0	660.0	670.0	2041.0
203 10X445	Bronx High School of Science	Bronx	X445	75 West 205th Street	Bronx	NY	10468	40.87706	-73.88978	3015.0	714.0	660.0	667.0	2041.0
208 10X696	High School of American Studies at Lehman College	Bronx	X905	2925 Goulden Avenue	Bronx	NY	10468	40.87126	-73.89752	376.0	669.0	672.0	672.0	2013.0
385 25Q525	Townsend Harris High School	Queens	Q515	149-11 Melbourne Avenue	Flushing	NY	11367	40.73441	-73.82142	1132.0	680.0	640.0	661.0	1981.0
424 28Q687	Queens High School for the Sciences at York Co...	Queens	Q774	94-50 159th Street	Jamaica	NY	11433	40.70100	-73.79815	426.0	701.0	621.0	625.0	1947.0
7 01M696	Bard High School Early College	Manhattan	M097	525 East Houston Street	Manhattan	NY	10002	40.71896	-73.97607	545.0	634.0	641.0	639.0	1914.0
326 13K430	Brooklyn Technical High School	Brooklyn	K430	29 Ft Greene Place	Brooklyn	NY	11217	40.68811	-73.97675	5447.0	682.0	608.0	606.0	1896.0
55 02M416	Eleanor Roosevelt High School	Manhattan	M855	411 East 76th Street	Manhattan	NY	10021	40.77012	-73.95338	541.0	641.0	617.0	631.0	1889.0
80 05M692	High School for Mathematics, Science, and Engi...	Manhattan	M812	240 Convent Avenue	Manhattan	NY	10031	40.82112	-73.94885	470.0	683.0	610.0	596.0	1889.0

Conclusion and future discussion

- The aim of this project is to assist families and students identify public high schools within the New York City, five boroughs area with the highest average SAT test scores.
- SAT test scores are used help colleges interpret students' overall academic performance in relation to the national applicant pool. Through this data families and students are provided with the necessary information to make logical and concise choices when choosing a public high school located within the New York City, five boroughs area.
- For families and students that are planning for college admission after high school, the public high schools with the total highest test scores are of interest. Additionally, if a student is weak in one section of the test, a public high school that has high average test scores within this academic discipline is of interest as well.
- Lastly, identifying the closest local vendors to the highest total average test score public high school assist family with planning for after school activities, transportation, and an overall general idea of what is within walking distance of the school.
- Recognizing that this project was singularly focused on SAT test scores, future projects could use this data as a platform for more in depth analysis of public high schools located within the New York City, five boroughs area.