PyCitySchools Report

This report provides insights to help the school board and mayor make informed decisions about future school budgets and priorities.

Overview

In this analysis, we examined 15 schools, evaluating factors such as budget, school size, type, and both math and reading scores. Together, these schools serve a total of 39,170 students. The reading pass rate is 85.81%, while the math pass rate is 74.98%, resulting in an overall passing rate of 65.17%. The average reading score is 81.88, compared to 78.99 for math. We see that students are much better in reading than math.

	Total Schools	Total Students	Total Budget	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
0	15	39,170	\$82,932,329,558.00	78.985371	81.87784	74.980853	85.805463	65.172326

Analysis Results

We conducted a comprehensive analysis across all 15 schools, comparing overall passing rates, average reading and math scores, and budgets per student based on school sizes.

Our initial analysis identifies the highest and lowest-performing schools, focusing on the relationship between per-student spending and academic outcomes.

Below are the top 5 high-performing schools based on overall passing rate, along with their relevant statistics:

	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
school_name									
Cabrera High School	Charter	1858	\$1,081,356.00	\$582.00	83.06	83.98	94.13%	97.04%	91.33%
Thomas High School	Charter	1635	\$1,043,130.00	\$638.00	83.42	83.85	93.27%	97.31%	90.95%
Griffin High School	Charter	1468	\$917,500.00	\$625.00	83.35	83.82	93.39%	97.14%	90.60%
Wilson High School	Charter	2283	\$1,319,574.00	\$578.00	83.27	83.99	93.87%	96.54%	90.58%
Pena High School	Charter	962	\$585,858.00	\$609.00	83.84	84.04	94.59%	95.95%	90.54%

Below are the bottom 5 low-performing schools based on overall passing rate, along with their relevant statistics:

	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
school_name									
Rodriguez High School	District	3999	\$2,547,363.00	\$637.00	76.84	80.74	66.37%	80.22%	52.99%
Figueroa High School	District	2949	\$1,884,411.00	\$639.00	76.71	81.16	65.99%	80.74%	53.20%
Huang High School	District	2917	\$1,910,635.00	\$655.00	76.63	81.18	65.68%	81.32%	53.51%
Hernandez High School	District	4635	\$3,022,020.00	\$652.00	77.29	80.93	66.75%	80.86%	53.53%
Johnson High School	District	4761	\$3,094,650.00	\$650.00	77.07	80.97	66.06%	81.22%	53.54%

Scores by School Spending Per Student:

	School Type	Total Students	Total School Budget	Per Student Budget	Average Math Score	Reading Score	% Passing Math	% Passing Reading	% Overall Passing	Spending Ranges (Per Student)
school_name										
Bailey High School	District	4976	\$3,124,928.00	\$628.00	77.05	81.03	66.68%	81.93%	54.64%	\$585-630
Cabrera High School	Charter	1858	\$1,081,356.00	\$582.00	83.06	83.98	94.13%	97.04%	91.33%	<\$585
Figueroa High School	District	2949	\$1,884,411.00	\$639.00	76.71	81.16	65.99%	80.74%	53.20%	\$630-645
Ford High School	District	2739	\$1,763,916.00	\$644.00	77.10	80.75	68.31%	79.30%	54.29%	\$630-645
Griffin High School	Charter	1468	\$917,500.00	\$625.00	83.35	83.82	93.39%	97.14%	90.60%	\$585-630
Hernandez High School	District	4635	\$3,022,020.00	\$652.00	77.29	80.93	66.75%	80.86%	53.53%	\$645-680
Holden High School	Charter	427	\$248,087.00	\$581.00	83.80	83.81	92.51%	96.25%	89.23%	<\$585
Huang High School	District	2917	\$1,910,635.00	\$655.00	76.63	81.18	65.68%	81.32%	53.51%	\$645-680
Johnson High School	District	4761	\$3,094,650.00	\$650.00	77.07	80.97	66.06%	81.22%	53.54%	\$645-680
Pena High School	Charter	962	\$585,858.00	\$609.00	83.84	84.04	94.59%	95.95%	90.54%	\$585-630
Rodriguez High School	District	3999	\$2,547,363.00	\$637.00	76.84	80.74	66.37%	80.22%	52.99%	\$630-645
Shelton High School	Charter	1761	\$1,056,600.00	\$600.00	83.36	83.73	93.87%	95.85%	89.89%	\$585-630
Thomas High School	Charter	1635	\$1,043,130.00	\$638.00	83.42	83.85	93.27%	97.31%	90.95%	\$630-645
Wilson High School	Charter	2283	\$1,319,574.00	\$578.00	83.27	83.99	93.87%	96.54%	90.58%	<\$585
Wright High School	Charter	1800	\$1,049,400.00	\$583.00	83.68	83.95	93.33%	96.61%	90.33%	<\$585

Spending Per Student: There is no positive correlation between per-student spending and success rates. For instance, Cabrera High School, the top-performing school based on overall passing percentage, had a budget allocation of less than \$585 per student, while Johnson High School, the lowest-performing school, had a per-student spending range of \$645–\$680.

This suggests that budget allocation should be reconsidered, potentially rewarding schools with higher passing rates.

Our second analysis identifies spending ranges per student and shows the academic outcomes.

The table below highlights that per-student spending does not align with school success rates.

	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
Spending Ranges (Per Student)					
\$585-630	81.900000	83.155000	87.132500	92.717500	81.417500
\$630-645	78.517500	81.625000	73.485000	84.392500	62.857500
\$645-680	76.996667	81.026667	66.163333	81.133333	53.526667
<\$585	83.452500	83.932500	93.460000	96.610000	90.367500

Our third analysis categorizes schools as Large, Medium, and Small to show the academic outcome for each category:

	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
School Size					
Large (2000-5000)	77.745	81.34375	69.96375	82.76625	58.285
Medium (1000-2000)	83.374	83.86600	93.59800	96.79000	90.620
Small (<1000)	83.820	83.92500	93.55000	96.10000	89.885

School Size: Our analysis of school sizes shows that large schools have the lowest passing rates compared to smaller schools, which demonstrate significantly higher passing rates.

Our last analysis categorizes schools as Charter and District to show the academic outcome for each school type:

	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
School Type					
Charter	83.472500	83.896250	93.620000	96.586250	90.431250
District	76.955714	80.965714	66.548571	80.798571	53.671429

School Type (District vs. Charter): Charter schools show notably higher success rates, with an overall passing rate of 90.43%, compared to 53.67% for District schools.