

PyCity School District Analysis

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District Summary

The PyCity School District comprises 15 schools serving 39,170 students, with a total budget of \$24,649,428.00. The district-wide average math score is 79.0 and while the average reading score is 81.9. In the district, 75.0% of students have passed math while 85.8% of students have passed their reading tests. When it comes to passing both tests, only 65.2% of students have been able to pass both exams.

	Total Schools	Student Population	Total Budget	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
0	15	39,170	\$24,649,428.00	79.0	81.9	75.0%	85.8%	65.2%

School Summary

	School Type	Student Population	Budget	Budget Per Capita	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
Bailey High School	District	4,976	\$3,124,928.00	\$628.00	77.0	81.0	66.7%	81.9%	54.6%
Cabrera High School	Charter	1,858	\$1,081,356.00	\$582.00	83.1	84.0	94.1%	97.0%	91.3%
Figueroa High School	District	2,949	\$1,884,411.00	\$639.00	76.7	81.2	66.0%	80.7%	53.2%
Ford High School	District	2,739	\$1,763,916.00	\$644.00	77.1	80.7	68.3%	79.3%	54.3%
Griffin High School	Charter	1,468	\$917,500.00	\$625.00	83.4	83.8	93.4%	97.1%	90.6%
Hernandez High School	District	4,635	\$3,022,020.00	\$652.00	77.3	80.9	66.8%	80.9%	53.5%
Holden High School	Charter	427	\$248,087.00	\$581.00	83.8	83.8	92.5%	96.3%	89.2%
Huang High School	District	2,917	\$1,910,635.00	\$655.00	76.6	81.2	65.7%	81.3%	53.5%
Johnson High School	District	4,761	\$3,094,650.00	\$650.00	77.1	81.0	66.1%	81.2%	53.5%
Pena High School	Charter	962	\$585,858.00	\$609.00	83.8	84.0	94.6%	95.9%	90.5%
Rodriguez High School	District	3,999	\$2,547,363.00	\$637.00	76.8	80.7	66.4%	80.2%	53.0%
Shelton High School	Charter	1,761	\$1,056,600.00	\$600.00	83.4	83.7	93.9%	95.9%	89.9%
Thomas High School	Charter	1,635	\$1,043,130.00	\$638.00	83.4	83.8	93.3%	97.3%	90.9%
Wilson High School	Charter	2,283	\$1,319,574.00	\$578.00	83.3	84.0	93.9%	96.5%	90.6%
Wright High School	Charter	1,800	\$1,049,400.00	\$583.00	83.7	84.0	93.3%	96.6%	90.3%

(Table listing school type, student population, budget, budget per capita (per student), average test scores, and test pass rates for students, for each of the 15 schools in the district.)

Top-Performing (and Under-Performing) Schools by Overall Pass Rate

The top five schools with regards to overall exam pass rates are Cabrera High, Thomas High, Griffin High, Wilson High, and Pena High, while the bottom five schools are Rodriguez High, Figueroa High, Huang High, Hernandez High, and Johnson High. At first glance, all top schools are charter schools, while the underperforming schools are public schools.

	School Type	Student Population	Budget	Budget Per Capita	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
Cabrera High School	Charter	1858	1081356.0	582.0	83.061895	83.975780	0.941335	0.970398	0.913348
Thomas High School	Charter	1635	1043130.0	638.0	83.418349	83.848930	0.932722	0.973089	0.909480
Griffin High School	Charter	1468	917500.0	625.0	83.351499	83.816757	0.933924	0.971390	0.905995
Wilson High School	Charter	2283	1319574.0	578.0	83.274201	83.989488	0.938677	0.965396	0.905826
Pena High School	Charter	962	585858.0	609.0	83.839917	84.044699	0.945946	0.959459	0.905405

	School Type	Student Population	Budget	Budget Per Capita	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
Rodriguez High School	District	3999	2547363.0	637.0	76.842711	80.744686	0.663666	0.802201	0.529882
Figueroa High School	District	2949	1884411.0	639.0	76.711767	81.158020	0.659885	0.807392	0.532045
Huang High School	District	2917	1910635.0	655.0	76.629414	81.182722	0.656839	0.813164	0.535139
Hernandez High School	District	4635	3022020.0	652.0	77.289752	80.934412	0.667530	0.808630	0.535275
Johnson High School	District	4761	3094650.0	650.0	77.072464	80.966394	0.660576	0.812224	0.535392

Average Subject Scores by Grade

Looking at each grade level's average test scores, there does not appear to be any significant increases or decreases in performance grade by grade. Additionally, most of the schools are all within the mid-70s or mid-80s when it comes to their average test scores by grade.

	Grade 9 Reading Average	Grade 10 Reading Average	Grade 11 Reading Average	Grade 12 Reading Average
school_name				
Bailey High School	81.303155	80.907183	80.945643	80.912451
Cabrera High School	83.676136	84.253219	83.788382	84.287958
Figueroa High School	81.198598	81.408912	80.640339	81.384863
Ford High School	80.632653	81.262712	80.403642	80.662338
Griffin High School	83.369193	83.706897	84.288089	84.013699
Hernandez High School	80.866860	80.660147	81.396140	80.857143
Holden High School	83.677165	83.324561	83.815534	84.698795
Huang High School	81.290284	81.512386	81.417476	80.305983
Johnson High School	81.260714	80.773431	80.616027	81.227564
Pena High School	83.807273	83.612000	84.335938	84.591160
Rodriguez High School	80.993127	80.629808	80.864811	80.376426
Shelton High School	84.122642	83.441964	84.373786	82.781671
Thomas High School	83.728850	84.254157	83.585542	83.831361
Wilson High School	83.939778	84.021452	83.764608	84.317673
Wright High School	83.833333	83.812757	84.156322	84.073171

	Grade 9 Math Average	Grade 10 Math Average	Grade 11 Math Average	Grade 12 Math Average
school_name				
Bailey High School	77.083676	76.996772	77.515588	76.492218
Cabrera High School	83.094697	83.154506	82.765560	83.277487
Figueroa High School	76.403037	76.539974	76.884344	77.151369
Ford High School	77.361345	77.672316	76.918058	76.179963
Griffin High School	82.044010	84.229064	83.842105	83.356164
Hernandez High School	77.438495	77.337408	77.136029	77.186567
Holden High School	83.787402	83.429825	85.000000	82.855422
Huang High School	77.027251	75.908735	76.446602	77.225641
Johnson High School	77.187857	76.691117	77.491653	76.863248
Pena High School	83.625455	83.372000	84.328125	84.121547
Rodriguez High School	76.859966	76.612500	76.395626	77.690748
Shelton High School	83.420755	82.917411	83.383495	83.778976
Thomas High School	83.590022	83.087886	83.498795	83.497041
Wilson High School	83.085578	83.724422	83.195326	83.035794
Wright High School	83.264706	84.010288	83.836782	83.644986

Scores by Budget and Spending per Capita

Based on a school's budget per capita, or spending range per student, schools that have a greater budget per capita are showing lesser average test scores and especially lesser pass rates compared to schools that have a smaller budget per capita.

Spending Ranges (Per Student)	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
<\$585	83.5	83.9	93.5%	96.6%	90.4%
\$585-630	81.9	83.2	87.1%	92.7%	81.4%
\$630-645	78.5	81.6	73.5%	84.4%	62.9%
\$645-680	77.0	81.0	66.2%	81.1%	53.5%

Scores by School Size

When it comes to the size of a school's student population, schools with large student populations (2000-5000) students tend to yield lower average exam scores and passing rates, while schools with smaller populations (1000 or less students) tend to have much higher average scores and passing rates.

School Size	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
Small (<1000)	83.8	83.9	93.6%	96.1%	89.9%
Medium (1000-2000)	83.4	83.9	93.6%	96.8%	90.6%
Large (2000-5000)	77.7	81.3	70.0%	82.8%	58.3%

Scores by School Type

Additionally, charter schools seem to yield higher average exam scores and passing rates, while district-run schools yielded lower average scores and passing rates.

School Type	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
Charter	83.473852	83.896421	0.936208	0.965865	0.904322
District	76.956733	80.966636	0.665485	0.807991	0.536722

Further Analysis

Each of the aforementioned factors such as student population size, school governance, and budget per capita may be influential on students' performance in their exams. However, further analysis that sees the correlations between those factors may better illuminate how they can affect student performance.

	School Type	Student Population	Budget	Budget Per Capita	Spending Ranges (Per Student)	Average Math Score	Average Reading Score	Math Pass Rate	Reading Pass Rate	Overall Pass Rate
Holden High School	Charter	427	248087.0	581.0	<\$585	83.803279	83.814988	0.925059	0.962529	0.892272
Pena High School	Charter	962	585858.0	609.0	\$585-630	83.839917	84.044699	0.945946	0.959459	0.905405
Griffin High School	Charter	1468	917500.0	625.0	\$585-630	83.351499	83.816757	0.933924	0.971390	0.905995
Thomas High School	Charter	1635	1043130.0	638.0	\$630-645	83.418349	83.848930	0.932722	0.973089	0.909480
Shelton High School	Charter	1761	1056600.0	600.0	\$585-630	83.359455	83.725724	0.938671	0.958546	0.898921
Wright High School	Charter	1800	1049400.0	583.0	<\$585	83.682222	83.955000	0.933333	0.966111	0.903333
Cabrera High School	Charter	1858	1081356.0	582.0	<\$585	83.061895	83.975780	0.941335	0.970398	0.913348
Wilson High School	Charter	2283	1319574.0	578.0	<\$585	83.274201	83.989488	0.938677	0.965396	0.905826
Ford High School	District	2739	1763916.0	644.0	\$630-645	77.102592	80.746258	0.683096	0.792990	0.542899
Huang High School	District	2917	1910635.0	655.0	\$645-680	76.629414	81.182722	0.656839	0.813164	0.535139
Figueroa High School	District	2949	1884411.0	639.0	\$630-645	76.711767	81.158020	0.659885	0.807392	0.532045
Rodriguez High School	District	3999	2547363.0	637.0	\$630-645	76.842711	80.744686	0.663666	0.802201	0.529882
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Johnson High School	District	4761	3094650.0	650.0	\$645-680	77.072464	80.966394	0.660576	0.812224	0.535392
Bailey High School	District	4976	3124928.0	628.0	\$585-630	77.048432	81.033963	0.666801	0.819333	0.546423

The summary table above lists all 15 district schools, their school type, student population, budget and budget per capita, spending ranges, and the schoolwide average exam scores and exam passing rates.

All of the charter schools boast smaller student populations and smaller budgets (overall and per capita), while all of the district schools have larger student populations and larger budgets. Charter schools also boast not only higher exam scores, but also more consistent passing rates between reading and math. District schools have a discrepancy where passing rates for math

are lower than those of reading. The low passing rates for math in district schools calls for a reevaluation of current teaching practices for math and additional research and development of better practices to ensure improvements.

Further analysis will be required to parse out the cause of charter schools' successes, whether due to their more independent educational practices or their smaller student populations (which can not only affect quality of instruction but also creates a smaller population size where outliers with lower scores are not as numerous).