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Report

Empty Desks: The Policy Response to Declining Public School Enrollment

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Executive Summary

In many parts of the country, enrollment in traditional public schools has fallen to its lowest point in decades. However, states, cities, and school districts have been slow to respond to the reality of empty desks. This report examines trends in school enrollment, focusing on several of America's most populous cities, as well as the budgetary and staffing responses to those trends. It also examines the states where these large cities are located.

Key findings:

- New York, Illinois, and California experienced the largest declines in enrollment between 2013 and 2022, while Texas and Arizona had the largest increase in enrollment.
- Texas will soon surpass California with the most public school students.
- In California's two biggest cities, Los Angeles and San Diego, enrollments fell between 2013 and 2022.
- Philadelphia experienced a decline in enrollment that mirrored overall statewide trends.
- Although Texas experienced a strong uptick in student enrollment statewide, its four biggest cities—Dallas, San Antonio, Houston, and Austin—all experienced slight declines over the last decade.
- Costs per student rose between 2013 and 2022 in New York City, Houston, San Diego, Dallas, Austin, Philadelphia, Chicago, San Antonio, and Los Angeles.
- Total staff increased in New York, Chicago, Philadelphia, and Dallas over the 2013–22 period.

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Based on these findings, it is evident that school districts have yet to adjust their staffing and budgeting to the reality of fewer students. This development is likely to alter education policy and politics in significant ways. There should be renewed attention to whether lower teacher-to-student ratios raise student performance enough to make it worth the increased costs.

Introduction

The U.S. has experienced a significant decline in student enrollment in traditional public schools since 2013. The Covid-19 pandemic accelerated this trend. Nevertheless, states and school districts have not responded by trimming staff or otherwise making commensurate budget cuts. Instead, school spending has increased on a per-student basis in many districts.

A long-standing demand of teachers' unions (and many parents) has been for reduced class sizes—and over the past 60 years, the student–teacher ratio in public schools has fallen, on average, from 26–1 in 1961 to 16–1 in 2020.[1] In the past, a barrier to rapidly reducing the ratio was the high cost of hiring more teachers. Today, smaller class sizes are occurring "naturally," as the number of students falls and the number of teachers holds steady or even increases. In addition, many school districts have increased support staff in schools.

This report has two objectives. The first is to document the enrollment picture in nine of the country's 10 largest cities by population. (We exclude Phoenix—the country's fifth largest city—because school enrollment and other pertinent data are very difficult to collect).[2] The school districts in the cities we do follow have a combined enrollment of 2.07 million students and educate roughly 4.35% of all pre-K–12 students in the United States.[3] The second objective is to assess how policymakers in these states and large urban school districts have responded to their changing enrollment pictures. We examined budgets, staffing levels, and more.

Between 2013 and 2023, public school enrollment fell nationally by 2% from 49.9 million to 48.8 million.[4] Other studies have documented large declines in K–12 student enrollment in public schools at the state and district levels since the Covid-19 pandemic.[5] However, according to the National Center for Education Statistics (NCES), the number of public school teachers was 11% higher in 2021 (3.8 million) than in 2011 (3.4 million).[6] Furthermore, NCES reports that public schools spent an average of $16,280 per pupil in 2020, an increase of 13% from 2010.[7] Roughly 80% of school spending is on salaries and benefits for staff (teachers, administrators, paraprofessionals, and so on).

Simultaneous enrollment declines and staffing increases have major fiscal and political implications for education policy. Maintaining lower student–teacher ratios and/or higher district staffing generally is and will be expensive. But this is now the "new normal." Teachers' unions and their supporters need only to fend off cuts rather than push for expansion. In that respect, the character of the debate over school spending is likely to change. Politically, it is typically easier to defend the status quo than to enact changes that cost money—and easier to fight cuts than to increase spending. This will put policymakers in a bind, insofar as they will have to make the case that cuts are required—unless they opt to increase taxes or find other ways to pay for schools with more teachers and staff but fewer students.

The causes of the decline in traditional public school enrollment are the subject of considerable debate.[8] One cause seems to be the Covid-19 pandemic and the extent of remote learning.[9] Another is simply that fewer children are being born.[10] Still another is that more students are enrolling in private schools or the number of charter schools (which are nontraditional public schools), or are homeschooled. NCES reports that the number of charter schoools increased from 4% to 7%

of all students between 2010 and 2022.[11] Another study, by the Brookings Institution, finds that the percentage of American students in "private/homeschooling/out of school" rose from 9.2% of K–12 students in the U.S. in 2015 to 12.8% in 2022. Meanwhile, attendance at charter schools rose from 4.6% to 5.8% of all students.[12] The weight that should be assigned to the various causes of declining enrollment in traditional public schools is beyond this report's scope.

Enrollment and Budgets in the States

One way to assess declining student enrollment in public schools is to observe what is happening at the state level. It is a mixed picture. A number of states experienced declining enrollment in the last decade, while others maintained stable or even increased enrollment. California, New York, Massachusetts, New Hampshire, and a few other states experienced declines of 5% or more between 2010 and 2020. Florida's student enrollment, however, has increased by 3% since 2020. Looking ahead, demographic predictions suggest that nearly every state will face declining enrollment in traditional K–12 public schools.[13]

Before proceeding, we alert the reader to the fact that it is sometimes difficult to separate charter school students from overall enrollment trends. The way states, cities, and school districts report enrollment data is very far from uniform. Some jurisdictions count them as public school enrollments insofar as charter schools are public schools; other jurisdictions separate charter school enrollments. A similar issue arises for pre-K schooling. Some jurisdictions offer it and count those students as enrolled in public schools; some offer it but separate pre-K students from overall enrollments; and still others do not offer pre-K at all. (See the **Appendix** for data sources and methods.)

We also note that our data are different from those of previous studies, as we largely looked at what school districts reported in their own Annual Comprehensive Financial Reports (ACFR) and other official documents. Other studies have typically inferred enrollment figures from broader U.S. census reports.[14]

To look in more depth at some of these trends, we examined the six states with the 10 largest cities in the country: New York, California, Pennsylvania, Arizona, Texas, and Illinois (**Tables 1** and **2**). The reason for doing so is that large urban districts have experienced the largest declines in traditional public school enrollment.[15] Only Texas and Arizona experienced increases in student enrollment between 2013 and 2023. Each of the other states experienced declines in enrollment of 100,000–250,000 students. This amounted to total percentage changes within a range of 3%–14%.

Table 1

State School Enrollment (2013–23)

Year	New York	California	Pennsylvania	Arizona	Texas	Illinois
2023	2,403,277	5,852,348	1,686,844	1,125,887	5,518,432	1,761,187
2022	2,418,631	5,892,074	1,689,532	1,132,997	5,427,370	1,777,306
2021	2,455,261	6,002,393	1,696,022	1,112,598	5,371,586	1,804,768
2020	2,561,821	6,163,001	1,724,454	1,150,987	5,493,940	1,878,995
2019	2,577,890	6,186,278	1,722,461	1,141,648	5,431,910	1,900,519
2018	2,607,282	6,220,413	1,719,336	1,108,583	5,399,682	2,007,848
2017	2,623,867	6,228,235	1,722,619	1,128,188	5,359,127	2,026,750
2016	2,642,186	6,226,737	1,731,588	1,124,715	5,299,728	2,044,358
2015	2,655,264	6,235,520	1,739,559	1,116,143	5,232,065	2,061,480
2014	2,661,609	6,236,672	1,750,059	1,102,319	5,151,925	2,072,991
2013	2,680,170	6,226,989	1,757,678	1,096,040	5,075,840	2,081,731

Source: New York State Education Department, Information and Reporting Services, Public School Enrollment, 2023–24; California Department of Education, Annual Enrollment Downloadable Files, Census Day Enrollment by School; Pennsylvania Department of Education, Public School Enrollment Reports; Arizona Department of Education, Accountability and Research Data, Enrollment Reports; Texas Education Agency, Enrollment Trends; Illinois State Board of Education, Fall Enrollment Counts

Table 2

City School Enrollment (2013–22)

Year	Dallas	Philadelphia	Austin	San Antonio	Houston	Los Angeles	Chicago	San Diego	New York
2022	143,558	117,652	80,362	44,739	194,607	549,685	280,003	93,841	1,116,762
2021	145,113	122,417	75,072	49,027	196,943	562,905	289,294	94,664	1,175,768
2020	153,861	127,391	79,729	49,284	210,061	571,395	303,184	98,611	1,220,721
2019	155,119	130,848	79,985	47,090	209,722	587,961	304,257	102,266	1,235,430
2018	156,832	132,115	81,346	50,562	214,175	598,744	313,981	102,883	1,248,125
2017	157,886	132,240	82,766	51,666	216,106	613,274	323,349	104,912	1,256,197
2016	158,604	134,227	83,270	52,123	215,627	625,523	333,695	106,145	1,250,471
2015	160,253	133,399	84,191	52,912	215,225	635,207	339,737	108,809	1,242,579
2014	159,713	135,107	85,014	53,434	219,716	643,493	345,973	107,717	1,227,340
2013	158,932	141,094	86,233	53,853	202,586	651,496	353,261	108,151	1,261,448

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; School District of Philadelphia, Annual Comprehensive Financial Report of the School District of Philadelphia, Year Ended June 30, 2022; Austin Independent School District, 2021–22 Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022; San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; Houston Independent School District (HISD), 2022 Annual Comprehensive

Financial Report for the Fiscal Year Ended June 30, 2022; Los Angeles Unified School District (LAUSD), Final 2021–22 Budget; Chicago Public Schools, Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022; Comprehensive Annual Financial Report for the Year Ended June 30, 2017; California Department of Education, San Diego Unified School District, District; New York City, The City of New York Annual Comprehensive Financial Report of the Comptroller, 2022 (As mentioned earlier, school enrollment data for Phoenix was excluded for methodological reasons.)

The biggest declines occurred in New York, Illinois, and California. While New York and Illinois suffered Covid-19 pandemic shocks like those of other states, they have also experienced a general downward trend in enrollment since at least 2013. The loss of students in California, on the other hand, appears to have occurred with the onset of the Covid-19 pandemic. Texas experienced the biggest growth over the last decade, followed by Arizona. If current trends hold, Texas will soon pass California in the total number of K–12 students.

The relation of each state's enrollment patterns to its big cities is also noteworthy. California experienced an overall enrollment fall between 2013 and 2022 in its two biggest cities—San Diego and Los Angeles (**Table 3**). Meanwhile, Pennsylvania's largest city, Philadelphia, experienced a sharp decline that mirrored that of the state overall (**Table 4**). In Illinois, enrollment fell more sharply in Chicago than in the state overall (**Table 5**).

Texas, on the other hand, experienced a strong uptick in student enrollment statewide. However, the four biggest cities—Dallas, San Antonio, Houston, and Austin—all experienced slight declines over the past decade (**Table 6**). Viewed in one light, the experience of Texas's big cities suggests that even while the population grew in some of them, it is not a population that was sending its children to traditional K–12 public schools. This may be due to the rapid expansion of charter schools in those cities.

Table 3

California State and City Enrollment (2013–22)

Year	California	Los Angeles	San Diego
2022	5,892,074	549,685	95,237
2021	6,002,393	562,905	98,019
2020	6,163,001	571,395	102,266
2019	6,186,278	587,961	103,255
2018	6,220,413	598,744	104,786
2017	6,228,235	613,274	106,273
2016	6,226,737	625,523	107,256
2015	6,235,520	635,207	109,144
2014	6,236,672	643,493	108,151
2013	6,226,989	651,496	108,124

Source: California Department of Education, Annual Enrollment Downloadable Files, Census Day Enrollment by School; LAUSD, Final 2021–22 Budget; California Department of Education, San Diego Unified School District, District Enrollment by Ethnicity and Grade (several years), California Department of Education, San Diego Unified School District, District Enrollment by Ethnicity and Grade

Table 4

Pennsylvania State and City Enrollment (2013–22)

Year	Pennsylvania	Philadelphia
2022	1,689,532	117,652
2021	1,696,022	122,417
2020	1,724,454	127,391
2019	1,722,461	130,848
2018	1,719,336	132,115
2017	1,722,619	132,240
2016	1,731,588	134,227
2015	1,739,559	133,399
2014	1,750,059	135,107
2013	1,757,678	141,094

Source: Pennsylvania Department of Education, Public School Enrollment Reports; Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia, Year Ended June 30, 2022

Table 5

Illinois State and City Enrollment (2013–22)

Year	Illinois	Chicago
2022	1,833,221	280,003
2021	1,853,499	289,294
2020	1,942,899	303,184
2019	1,996,296	304,257
2018	2,009,540	313,981
2017	2,118,441	323,349
2016	2,040,885	333,695
2015	2,053,910	339,737
2014	2,072,438	345,973
2013	2,065,307	353,261

Source: Illinois State Board of Education, Fall Enrollment Counts; Chicago Public Schools, Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022; Comprehensive Annual Financial Report for the Year Ended June 30, 2017

Table 6

Texas State and City Enrollment (2013–22)

Year	Texas	Dallas	Austin	San Antonio	Houston
2022	5,427,370	143,558	80,362	44,739	194,607
2021	5,371,586	145,113	75,072	49,027	196,943
2020	5,493,940	153,861	79,729	49,284	210,061
2019	5,431,910	155,119	79,985	47,090	209,722
2018	5,399,682	156,832	81,346	50,562	214,175
2017	5,359,127	157,886	82,766	51,666	216,106
2016	5,299,728	158,604	83,270	52,123	215,627
2015	5,232,065	160,253	84,191	52,912	215,225
2014	5,151,925	159,713	85,014	53,434	219,716
2013	5,075,840	158,932	86,233	53,853	202,586

Source: Texas Education Agency, Enrollment Trends; Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

According to the U.S. Census Bureau, however, states with declining enrollment have seen little change in their school budgets.[16] Some of this is due to the large influx of Covid-related relief money, which is currently being spent down. As a result, the picture may change within the next few years.

For instance, from the school years 2011–12 to 2023–24, enrollment in New York State's public school districts decreased by more than 300,000 students, or 11.9%.[17] Over the same period, the state enacted an $11 billion (55%) increase in annual state education aid.[18] Most of New York's decline in enrollment from 2011–12 to this year was concentrated in New York City.[19]

Enrollments and Budgets in America's Biggest Cities

Another way to examine the relationship between declining student enrollment and policy responses is to look at big urban school districts of America's largest cities. Of those cities, all nine experienced declines in enrollment over the last decade. Some of the declines were larger than others. Houston and Austin lost some students but largely held steady in total enrollment. Meanwhile, New York City and Los Angeles had the largest declines in total students, while Chicago, Philadelphia, and San Antonio had greater declines in terms of percentage than New York. Los Angeles lost approximately 101,000 students, for example, falling from 651,496 to 549,685 between 2013 and 2022.

In the big cities that experienced declining enrollment, we observe that across a series of metrics, the policy response has been minimal. In terms of staffing, those districts have not reduced the number of teachers and have seen the teacher–student ratio fall.

Costs per student rose between 2013 and 2022 in the big cities in this report for which we have public data (**Table 7**). Total staff increased in New York City, Chicago, Philadelphia, and Dallas over 2013–22. Houston, on the other hand, cut staff over the decade to adjust to falling enrollment (**Table 8**). In terms of total teachers, only Houston's teacher rolls held steady, while the number of teachers in Dallas increased by 7% and in Chicago by 5%. Meanwhile, Philadelphia's teacher headcount decreased by 8%, and San Antonio's headcount by 7% (**Table 9**). As a result, the student-to-teacher ratio fell in Chicago, Dallas, Philadelphia, Houston, and San Antonio (**Table 10**) because of declining enrollment.

Table 7

Cost per Student (2013–22)

Year	Dallas	Philadelphia	Austin	San Antonio	Houston	Los Angeles	Chicago	San Diego
2022	$13,380	$23,742	$32,122	$18,772	$14,183	$32,309	NA	$25,345
2021	$12,849	$20,013	$30,522	$17,720	$12,738	$18,981	$20,465	$21,781
2020	$11,242	$ 19,382	$25,677	$17,069	$11,580	$17,119	$17,779	$20,823
2019	$10,849	$17,885	$25,365	$15,684	$11,024	$15,537	$16,923	$18,059
2018	$10,496	$17,210	$23,120	$11,215	$10,978	$14,513	$15,878	$16,575
2017	$10,799	$16,100	$22,520	$13,382	$9,225	$13,736	$15,419	$15,670
2016	$10,810	$14,652	$18,035	$12,999	$8,855	$14,547	$14,973	$13,375
2015	$9,946	$13,981	$19,693	$11,897	$8,339	$12,257	$15,130	$14,573
2014	$8,901	$13,760	$17,745	$11,501	$8,432	$10,969	$15,120	$12,208
2013	$8,637	$15,219	$15,546	$11,107	$8,011	$14,102	$13,791	$10,763

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia Year Ended June 30, 2022; Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022; San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; LAUSD, Final 2021–22 Budget, Audited Annual Financial Report for Fiscal Year Ended June 30, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013; Chicago Public Schools, Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022, Comprehensive Annual Financial Report for the year ended June 30, 2017; San Diego Unified School District, Audited Financial Statements for Prior Fiscal Years; Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022 (There were not adequate expenditure data for New York to allow us to include it in this table. Among the existing figures, there were methodological discrepancies with audited financial statements.)

Table 8

Total Staff (2013–22)

Year	Dallas	Philadelphia	San Antonio	Houston	Los Angeles	Chicago	San Diego	New York
2022	12,478	11,674	4,178	10,889	NA	15,596	NA	12,717
2021	12,148	11,296	4,294	10,496	NA	12,490	NA	13,173
2020	12,246	11,340	4,303	11,266	NA	12,393	NA	13,607
2019	11,869	10,780	4,202	11,017	6,397	11,945	1,325	13,218
2018	10,713	10,081	4,342	10,847	6,038	11,838	1,347	12,799
2017	10,239	9,579	4,149	12,662	6,223	12,301	1,428	12,528
2016	10,615	8,797	4,044	12,992	5,887	12,306	1,386	12,248
2015	10,612	8,629	4,095	12,820	6,679	13,132	1,223	11,693
2014	10,421	8,985	4,095	11,588	5,930	13,291	1,168	11,411
2013	9,726	10,348	4,155	11,716	5,711	14,918	1,147	11,202

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia Year Ended June 30, 2022; San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; LAUSD, California Department of Education, Certificated Staff by Ethnicity; Chicago Public Schools, Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022, Comprehensive Annual Financial Report for the Year Ended June 30, 2017; San Diego Unified School District, California Department of Education, Certificated Staff by Ethnicity; New York City, The City of New York Annual Comprehensive Financial Report of the Comptroller, 2022 (Staff data for Austin are not available.)

Table 9

Total Teachers (2013–22)

Year	Dallas	Philadelphia	San Antonio	Houston	Chicago	New York	Los Angeles	San Diego
2022	10,793	8,735	3,137	11,192	28,232	117,004	NA	NA
2021	10,473	8,765	3,210	11,866	25,943	119,210	NA	NA
2020	10,428	8,712	3,148	11,856	24,853	121,077	NA	NA
2019	10,353	8,391	3,156	11,569	24,509	120,398	32,152	6,435
2018	10,549	8,283	3,360	12,368	24,010	119,900	32,405	6,450
2017	10,518	8,242	3,226	12,062	25,044	118,671	32,817	6,742
2016	11,099	8,194	3,290	12,010	25,615	115,799	32,433	6,724
2015	11,103	8,204	3,288	11,679	26,261	112,272	31,901	6,637
2014	10,372	8,347	3,329	11,739	26,123	109,901	31,542	6,665
2013	10,112	9,498	3,367	11,267	26,909	108,416	31,580	6,825

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia Year Ended June 30, 2022; San Antonio Independent School District, Annual

Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; LAUSD; Chicago Public Schools, Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022, Comprehensive Annual Financial Report for the Year Ended June 30, 2017; San Diego Unified School District, California Department of Education, Certificated Staff by Ethnicity, Audited Financial Statements for Prior Fiscal Years; New York, The City of New York Annual Comprehensive Financial Report of the Comptroller, 2022 (Austin does not have teacher data available.)

Table 10

Student-to-Teacher Ratio (2013–22)

Year	Dallas	Philadelphia	San Antonio	Houston	Chicago	New York	Los Angeles	San Diego
2022	13.30	13.50	14.26	17.40	11.70	10.32	NA	NA
2021	13.92	14.00	15.27	16.60	13.13	10.50	NA	NA
2020	14.75	14.60	15.66	18.00	14.29	10.80	NA	NA
2019	14.98	15.60	14.92	18.10	14.74	10.87	18.29	19.29
2018	14.87	16.00	15.05	17.30	15.47	11.00	18.48	19.60
2017	15.01	16.00	16.02	18.70	15.23	11.19	18.69	18.99
2016	14.29	16.40	15.84	18.00	15.31	11.42	19.29	19.24
2015	14.43	16.30	16.09	18.40	15.11	11.66	19.91	19.55
2014	15.40	16.20	16.05	18.00	15.33	11.67	20.40	19.55
2013	15.72	14.90	15.99	18.00	14.99	11.64	20.63	19.09

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia Year Ended June 30, 2022; San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022; LAUSD, California Department of Education, Certificated Staff by Ethnicity, Final 2021–22 Budget Chicago Public Schools, Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022, Comprehensive Annual Financial Report for the Year Ended June 30, 2017; San Diego Unified School District, California Department of Education, Certificated Staff by Ethnicity, Audited Financial Statements for Prior Fiscal Years; New York, The City of New York Annual Comprehensive Financial Report of the Comptroller, 2022 (Austin does not have this data available.)

As the tables demonstrate, many of the nation's biggest urban school districts have yet to make adjustments to the reality of fewer students in the classroom. If anything, with a few exceptions, they have made decisions to increase staff and teachers, adding to their costs.

A deeper dive into a few of the cities we studied provides a richer and more detailed picture of the changes that have occurred in America's largest cities.

Dallas and San Antonio

In Dallas, we can see particular patterns in the school district. While enrollment has fallen by about 9.67%, from 158,932 to 143,558, over the past decade, the number of total district employees increased by about 17.31%, from 19,838 to 23,271.[20] The number of teachers increased about 6.73%, from 10,112 to 10,793 (**Table 11**). Meanwhile, total student costs and the average teacher salary increased (**Tables 12 and 13**). In San Antonio, enrollment has fallen, but the number of teachers has also decreased by about 6.73%.[21]

Table 11

Dallas Total Teachers (2013–22)

Year	Number of Teachers
2022	10,793
2021	10,473
2020	10,428
2019	10,353
2018	10,549
2017	10,518
2016	11,099
2015	11,103
2014	10,372
2013	10,112

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022, 135

Table 12

Dallas Student Expenditures and Cost per Student (2013–22)

Year	Expenditure	Cost/Student
2022	$1,920,843,620	$13,380
2021	$1,864,568,021	$12,849
2020	$1,729,708,819	$11,242
2019	$1,682,827,169	$10,849
2018	$1,646,121,341	$10,496
2017	$1,704,969,209	$10,799
2016	$1,714,566,319	$10,810
2015	$1,593,910,048	$9,946
2014	$1,421,678,331	$8,901
2013	$1,372,716,096	$8,637

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

Table 13

Dallas Average Teacher Salary (2013–22)

Year	Average Salary
2022	$63,900
2021	$63,200
2020	$60,000
2019	$57,630
2018	$56,072
2017	$56,072
2016	$54,903
2015	$53,135
2014	$52,254
2013	$51,485

Source: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

Houston and Austin

These two Texas cities present an intriguing demographic phenomenon. The populations of both are fast-growing (**Table 14**). However, both cities experienced an overall decline in student enrollment in public schools (**Table 15**).

The total number of teachers in Houston decreased by 1%, with a large decrease occurring from 2021 to 2022 (**Table 16**). But overall district employment decreased by 4% over the same period. Meanwhile, Austin's district employment decreased by 5% as student enrollment fell.

Table 14

Austin and Houston Population (2013–22)

Year	Austin	Houston
2022	1,356,211	1,579,113
2021	1,372,063	1,570,773
2020	1,334,310	1,565,856
2019	1,304,311	1,550,689
2018	1,273,741	1,529,513
2017	1,242,674	1,512,221
2016	1,209,415	1,480,107
2015	1,173,051	1,445,277
2014	1,141,655	1,418,820
2013	1,120,954	1,329,030

Source: Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

Table 15

Austin and Houston Enrollment (2013–22)

Year	Austin	Houston
2022	80,362	194,607
2021	75,072	196,943
2020	79,729	210,061
2019	79,985	209,722
2018	81,346	214,175
2017	82,766	216,106
2016	83,270	215,627
2015	84,191	215,225
2014	85,014	219,716
2013	86,233	202,586

Source: Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

Table 16

Austin and Houston District Employment, Houston Total Teachers (2013–22)

Year	Austin District Employment	Houston District Employment	Houston Total Teachers
2022	9,809	22,081	11,192
2021	10,940	22,362	11,866
2020	11,006	23,122	11,856
2019	11,101	22,586	11,569
2018	11,381	23,215	12,368
2017	11,447	24,724	12,062
2016	11,568	25,002	12,010
2015	11,478	24,498	11,679
2014	11,538	23,327	11,739
2013	11,465	22,983	11,267

Source: Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022; HISD, 2022 Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

The Houston School District has been the subject of considerable controversy. In March 2023, Texas governor Greg Abbott announced that the state was taking over the district, which serves some 200,000 students in 274 schools, for poor performance. The district fought the move all the way to the Texas Supreme Court, where it ultimately lost. Some see the move as a means of expanding charter schools and other forms of school choice in the district.[22] The state education commissioner, Mike Morath, dismissed Houston's school board, which had a record of misconduct.[23] Morath also has a record of supporting charters and other forms of school choice. A move toward more charters would theoretically empower the state to more easily change or reduce the teaching staff in the district as enrollment shifts to the charter schools. Whatever the case, debate persists over whether a state takeover will ultimately improve student performance in the district.

Philadelphia

Philadelphia's district public schools exhibit a similar pattern to that of Dallas. Enrollment has fallen (**Table 17**). The total number of teachers in the district decreased, seemingly significantly, by about 8% overall since 2013, but the total staff of the district rose about 12.81%, from 10,348 to 11,674 (**Table 18**). Meanwhile, per-student costs have nearly doubled, from just above $15,000 per year in 2013 to nearly $24,000—partly driven by a sharp and steep rise in average teacher salaries, from $71,459 in 2013 to $78,336 in 2022, a 9.6% increase (**Table 19**).

Table 17

Philadelphia District Public School Enrollment (2013–22)

Year	Philadelphia
2022	117,652
2021	122,417
2020	127,391
2019	130,848
2018	132,115
2017	132,240
2016	134,227
2015	133,399
2014	135,107
2013	141,094

Source: Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia, Year Ended June 30, 2022

Table 18

Philadelphia Total Staff and Teachers (2013–22)

Year	Total Teachers	Total Staff
2022	8,735	11,674
2021	8,765	11,296
2020	8,712	11,340
2019	8,391	10,780
2018	8,283	10,081
2017	8,242	9,579
2016	8,194	8,797
2015	8,204	8,629
2014	8,347	8,985
2013	9,498	10,348

Source: Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia, Year Ended June 30, 2022

Table 19

Philadelphia Student Costs and Average Teacher Salaries (2013–22)

Year	Cost per Student	Average Teacher Salary
2022	$23,742	$78,336
2021	$20,013	$74,346
2020	$19,382	$73,636
2019	$17,885	$71,077
2018	$17,210	$70,200
2017	$16,100	$67,331
2016	$14,652	$68,525
2015	$13,981	$69,652
2014	$13,760	$70,653
2013	$15,219	$71,459

Source: Philadelphia Independent School District, Annual Comprehensive Financial Report of the School District of Philadelphia, Year Ended June 30, 2022

Chicago

Chicago presents the spectacle of declining student enrollment but rising costs, average teacher salaries, and total employment (**Tables 2**, **5**, **7**, **8**, and **9**). This is particularly striking, as the evidence for improved performance of Chicago's public schools is rather limited. In an annual assessment of public school districts by the state Board of Education for 2021, 97% of Chicago teachers were deemed "excellent or proficient by an administrator or other evaluator."[24] However, parental evaluations of teacher performance appear to be going in the opposite direction, as more students withdraw from the district schools.[25] This has been especially the case among black parents. According to the district, black enrollment has fallen by half over the last two decades.[26]

In Chicago, a worrying sign for the future is that the largest decreases in enrollment occurred at the elementary school level, which fell by 24.36% from 2013 to 2022.[27] Meanwhile, high school enrollment rose by 0.5%.[28] A big part of the decline in traditional schools could be the huge increase in charter school enrollment, which has grown massively over the last three decades—a 1,477% increase since 1998.[29]

New York City

The big changes in the nation's largest city (by population) in 2014–23 are at the grade level. Over that period, pre-K enrollment increased markedly, by 75.58%, from 55,734 to 97,859, while elementary school enrollment fell by 20.45%, from 660,398 to 525,365.[30] High school enrollment decreased by 10.33%, from 316,442 to 283,753.[31]

The state legislature recently mandated lower class sizes in New York City over the next five years. It also slightly modified mayoral control of the school district, creating a 23-member board that the mayor and the school chancellor must deal with while seeking renewal of mayoral control in 2024. These changes are likely to have unintended consequences.[32]

For instance, the public schools with the largest class sizes in New York City tend to be those in the most affluent sections of the city—the Upper East Side and Upper West Side of Manhattan, and parts of Brooklyn. The sections with the smallest class sizes tend to be in the poorest parts of the city. Those parts of the city have also seen the sharpest drop in enrollment. For instance, public school enrollment in the Bronx is down 21.2%, while Brooklyn and Queens are down 11.5% and 10.6%, respectively.[33]

Conclusion

For more than a decade, many states and cities have adopted policies protecting school districts from the fiscal consequences of fewer students, routinely divorcing funding decisions from enrollment trends. Sensible budgeting would dictate that school resources be tightly tied to student enrollment. But special interests are at play. Powerful teachers' unions have long called for higher salaries for teachers instructing fewer students—and appear to have gotten what they've asked for.

If higher spending and lower student–teacher ratios automatically contributed to higher-quality education, there would be a strong case for retaining the current teacher "surplus" in many large urban school districts. Unfortunately, the existence of such a causal connection is weak and contested.[34] Although class sizes have been falling for decades, student performance has not been rising in commensurable measure. Some rigorous studies show that reducing class sizes can benefit student performance some of the time—for some students in some grades in some schools in some states. However, the academic literature suggests that the impact of class size is tenuous. Some high-quality studies find no impact at all on student performance.[35]

Furthermore, the cost of reducing the student–teacher ratio is very high, which raises the question of whether the benefits for students are worth the cost. In 2011, the Brookings Institution estimated that "increasing the pupil/teacher ratio in the U.S. by one student would save at least $12 billion per year in teacher salary costs alone."[36] Such a large savings could, in theory, be used to increase teacher pay—and perhaps thereby attract more talented potential teachers to the profession. Perhaps such an approach would yield better student outcomes at a lower cost.[37] Ultimately, hiring more teachers and increasing teacher salaries are at odds with each other, given the budget constraints.

Given the tenuous link between reduced class sizes and improved student performance, it is clear that many of the states and cities studied in this report are making major investments with very uncertain returns. This will provide another test of whether reducing class sizes yields benefits in terms of student performance. If performance does not increase, and enrollment continues to decline (or level off) at a lower level in the future, the issue of whether schools would be better off letting the student–teacher ratio rise should be seriously considered. Such a move would free up resources for other, perhaps more productive, strategies for K–12 education spending.

Such a debate will need to be actively manufactured because spending more on fewer students does not appear to have been a policy decision that was extensively debated on school boards, in city halls, or in state legislatures over the last decade or so. Rather, it has been a slow, under-the-radar accretion, spurred along by the pandemic. Taking stock of this change should force policymakers to confront whether they are getting desirable results in terms of student performance.

Looking ahead, the problem is that the political deck would appear to be stacked in favor of spending more on fewer students. Teachers like smaller classes—and their unions push for them.[38] Parents and much of the public support the idea of smaller classes.[39] Efforts to depart from the "new normal" will therefore face a strong organized opposition from teachers' unions and an uphill battle in the court of public opinion.

Furthermore, the policy options are limited. Cuts will have to be made (most likely in the number of teachers or staff, as the budgets of most school districts largely consist of labor costs) or new revenues will need to be generated to pay for a new equilibrium wherein traditional public schools enjoy lower student–teacher ratios and/or greater staff support than they did previously. Given that cutting teachers or other budget items is politically controversial, and that it is easier to block cuts than to secure more spending, teachers' unions and other advocates of the present status quo will be in an advantageous position.

At the same time, individual schools with sharply decreasing enrollment might even have to shut down completely. Such high-profile decisions are inherently politically fraught—and feed the narrative that public schools are under some harsh regime of austerity, even if the data suggest otherwise.

Instead of simply adopting the "new normal," declining school enrollment and the budget pressures to keep schools heavily staffed should occasion a fundamental rethinking of states' and cities' approach to education. A central question should be: Do students do better in schools with smaller classes or with better teachers who are paid more?[40]

We suggest revisiting the debate about how best to allocate resources in the nation's public schools. Perhaps smaller classes are best in the earliest grades, but dynamic teachers are more important at the high school level. Charter schools have made strides in finding more effective ways to allocate scarce resources—and such experience should continue. For traditional public schools, however, the idea of different salaries for different teachers or different class sizes for different grades has been fiercely opposed by teachers' unions.

Nonetheless, as more resources chase fewer students, there is an opportunity to improve the quality of urban schools. At least one cause of the enrollment decline, among others, is that parents have been voting with their feet and leaving traditional public schools for private schools, charter schools, or homeschooling. So there is an audience for the argument that current school spending is ineffective at improving schools for students rather than teachers and staff. For that reason, former New York City mayor Michael Bloomberg has called this moment a "wake-up call for public education."[41]

The problem for public education policy is that it must seek to earn and sustain parental trust. Otherwise, a growing percentage of parents will seek out alternatives to traditional public schools. The formula for success is not a mystery. States and cities should curtail spending, expand school choice (especially charter schools), and encourage accountability by seeking reforms that encourage the best teachers to stay in the classroom.

Appendix

National, State, and City Data Sources

National School Statistics: Enrollment

- National Center for Education Statistics (NCES), Public School Enrollment, updated May 2023

State School Statistics: Enrollment

New York

- New York State Education Department, Information and Reporting Services, Public School Enrollment, 2023–24

California

- California Department of Education, Annual Enrollment Downloadable Files, Census Day Enrollment by School

Pennsylvania

- Pennsylvania Department of Education, Public School Enrollment Reports

Arizona

- Arizona Department of Education, Accountability and Research Data, Graduation Rate, Dropout Rate, and Enrollment Reports

Texas

- Texas Education Agency, Reports and Data, School Performance, Accountability Research, Enrollment Trends

Illinois

- Illinois State Board of Education, Data & Accountability, Fall Enrollment Counts

City School Statistics

New York

- Enrollment: The City of New York, Annual Comprehensive Financial Report of the Comptroller, 2022

- Teacher Counts: The City of New York, Annual Comprehensive Financial Report of the Comptroller, 2022

Los Angeles

- Enrollment: Los Angeles Unified School District (LAUSD), Final 2021–22 Budget

- Total Staff: LAUSD, California Department of Education, Certificated Staff by Ethnicity
- OpEx and Cost per Pupil, LAUSD, Final 2021–22 Budget, Audited Annual Financial Report for Fiscal Year Ended June 30, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, 2014, 2013

Chicago

- All Data: Chicago Public Schools, Annual Comprehensive Financial Reports (ACFR), Annual Comprehensive Report for the Fiscal Year Ended June 30, 2022, Comprehensive Annual Financial Report for the Year Ended June 30, 2017

Houston

- All Data: Houston Independent School District (HISD), 2022 Annual Comprehensive Financial Report

Philadelphia

- All Data: Annual Comprehensive Financial Report of the School District of Philadelphia, Year Ended June 30, 2022

San Antonio

- All Data: San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

San Diego

- Enrollment: California Department of Education, San Diego Unified School District, Enrollment by Ethnicity for 2012–13
- Staff: San Diego Unified School District, California Department of Education, Certificated Staff by Ethnicity
- OpEx and/or Cost per Pupil: San Diego Unified School District, Audited Financial Statements for Prior Fiscal Years

Dallas

- All Data: Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022

Austin

- All Data: Austin Independent School District, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2022

Data Sources and Methods

This report faced various data and methodological challenges that need to be explained. In particular, we want to highlight the barriers that governments place on routine data collection.

Accessibility was a major hurdle across all the variables analyzed in this report. For most cities, data were deeply buried in PDF documents. Without knowledge of a relevant programming language, the use of a PDF-to-text converter, or AI assistance, tabulating these data manually would have been an arduous process. Data available in database form often required a manual download, an understanding of the databases' complex methodological processes, and analysis in Excel. This was particularly true for data sourced from the California Department of Education (CDoE) or the New York Information and Reporting Services (NYIRS). Data challenges forced us to exclude Phoenix, despite it being America's fifth-largest city, because it does not have a single independent school district. Instead, it has a high school district and an elementary school district, with separate reporting for each. Combining them creates complex methodological discrepancies.

Within difficult-to-access data sources, various methodological discrepancies complicated the analysis and comparison of data. For example, across national, state, and local data, grade levels counted in total enrollment values differed. Some states considered enrollment to be either early education (which can range from age 1 to 3) through grade 12 (Texas), pre-K (ages 3–4) to grade 12 (New York, Pennsylvania), K–12 (California), or some combination of the preceding metrics (Illinois). Certain districts were unclear in defining their enrollment parameters. This is the case with Houston and Dallas, specifically, based on a reading of their Annual Comprehensive Financial Reports (ACFR).

The biggest data discrepancies were evident in data for California cities and New York City. CDoE, for example, had two different databases that provided information on staff and teachers at the district level. The first is the "Certified Staff by Ethnicity" database, which gives teacher numbers and "all certificated staff" numbers from 2011–12 up to 2018–19. The second source is the "Classified Staff by Race/Ethnicity and Gender" database, which provides "classified staff" numbers dating back to 2012. The difference between classified staff and certified staff is not well defined. Categories of "certified staff" are "teachers," "administrators," and "pupil services." The categories of "classified staff" are "paraprofessionals," "office/clerical staff," and "other classified staff." Paraprofessionals, as California appears to define them, refer to teacher/instructional assistance. The difference between classified and certified staff is not well defined, if at all. Only when the authors e-mailed CDoE did they learn that teachers are not included in "classified staff" data. The values of "classified" and "certificated" staff are very similar, suggesting that the two might contain some sort of overlap (this is the case, except for 2014, which recorded an extremely large outlier value for "classified staff"). However, given that they comprise different component groups, they appear to be two different categories. It is thus confusing as to why CDoE does not tally these two measurements for a "total staff" metric.

New York was equally confusing. For enrollment and teacher numbers, New York contains three various sources, all providing different values. The biggest discrepancies were between data from NYIRS and the NYC comptroller's ACFR. Enrollment numbers differed by roughly 200,000 students per year. The differences between teacher numbers were the most stark. The NYIRS data reported values that were nearly twice as high as those provided by the comptroller's ACFR data. For expenditure data, there were methodological discrepancies with audited financial statements sourced from NYC Public Schools. It appears that the calculation methods for General Fund

expenditures were altered in 2022 and 2018. However, little explanation was offered for these methodological changes. Furthermore, past expenditure data are corrected only for the two years preceding the current ACFR year, making analysis complex.

We caution the reader that our analysis was undertaken in good faith—but states, cities, and school districts do not make it easy to track major trends in America's public schools.

Endnotes

1 USAFacts, "Student–Teacher Ratio, Public Schools."

2 All cities in this study have one independent city district (while the metro areas will have more than one). In Phoenix, however, there is no singular independent school district. The entire Phoenix metro has more than 30 school districts. Phoenix instead has a high school district and an elementary school district. Because the elementary and high school data come from separate sources, they are more complex and create methodological discrepancies when one attempts to combine them and compare them with single independent districts in other cities.

3 We emphasize the approximation of our percentage value. National statistics measure enrollment from pre-K–12. The school districts we sampled all had different measurement systems (based on what information was publicly available). Some districts in Texas started measuring education with early childhood education programs (pre-pre-K), which can include children as young as a year old and are voluntary. Whereas pre-K programs usually include children aged 3–5 (usually about 4 years old), early childhood education appears to serve students younger than the traditional pre-K range. While Houston references early childhood education, its distinction between early childhood education and pre-K is unclear. Specifications seem highly localized. Some districts started at pre-K, and others started in kindergarten.

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20 Dallas Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022, 131.

21 San Antonio Independent School District, Annual Comprehensive Financial Report for the Fiscal Year Ended June 30, 2022, 169–70, 175–76.

22 Valerie Strauss, "The Real Story Behind the State Takeover of Houston Public Schools," *Washington Post*, Mar. 27, 2023; Evie Blad, "What's Behind Texas' Takeover of Houston Schools," *Education Week*, Mar. 15, 2023.

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