



Falling Students, Rising Spending: N.H. Public School Funding, 2001-2019



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Executive Summary

New Hampshire taxpayers are constantly told that their local public schools are underfunded because, year after year, public education spending is cut, not increased. Using official government spending and enrollment data from 2001-2019, this report demonstrates that far from cutting school funding, New Hampshire taxpayers have lavished funding on district public schools at rates that far exceed spending increases on other government services.

From the 2000-2001 school year to the 2018-2019 school year, New Hampshire public school district spending increased by more than \$1.5 billion in nominal dollars, or \$937 million when adjusted for inflation.

This massive spending increase—40% when adjusted for inflation—occurred as public school enrollment was cratering. From 2001-2019, New Hampshire district public school enrollments fell by more than 29,946 students, or 14%.

The increase in spending is even more dramatic when capital and debt spending are removed. Current spending (operational spending that excludes capital projects and debt service) increased by 74% from 2001-2019.

A large portion of that spending went to hire new staff, even as enrollment fell. While the number of students in New Hampshire district public schools fell by 14%, staffing increased by 15%. (Teacher pay rose by 12%, indicating that the emphasis was on hiring, not raising pay.)

Parents might assume that nearly \$1 billion in additional spending above the rate of inflation bought improvements in performance on national metrics. That did not happen. As current spending rose by 74% and staffing levels rose by 15%, New Hampshire's National Assessment of Educational Progress Reading and Math scores fell by 4 points. Nationally, scores rose by 15 points, which means that New Hampshire fell behind relative to other states despite a massive increase in spending.

On a per-pupil basis, New Hampshire public school spending increased by 66.8%, adjusted for inflation. In nominal dollars, New Hampshire spent \$8,245 per student in 2001. That figure reached \$18,905 in 2019, representing a 129% increase before accounting for cost of living increases. Adjusting for inflation, the increase was a stunning 66.8%. The increase was so large that New Hampshire went from being 4% below the national average in per-pupil expenditures in 2001 to 25.7% above the national average in 2019.

The big picture is that during the first two decades of this century New Hampshire spent 40% more to educate 14% fewer students, and those students wound up doing slightly worse in reading and math.

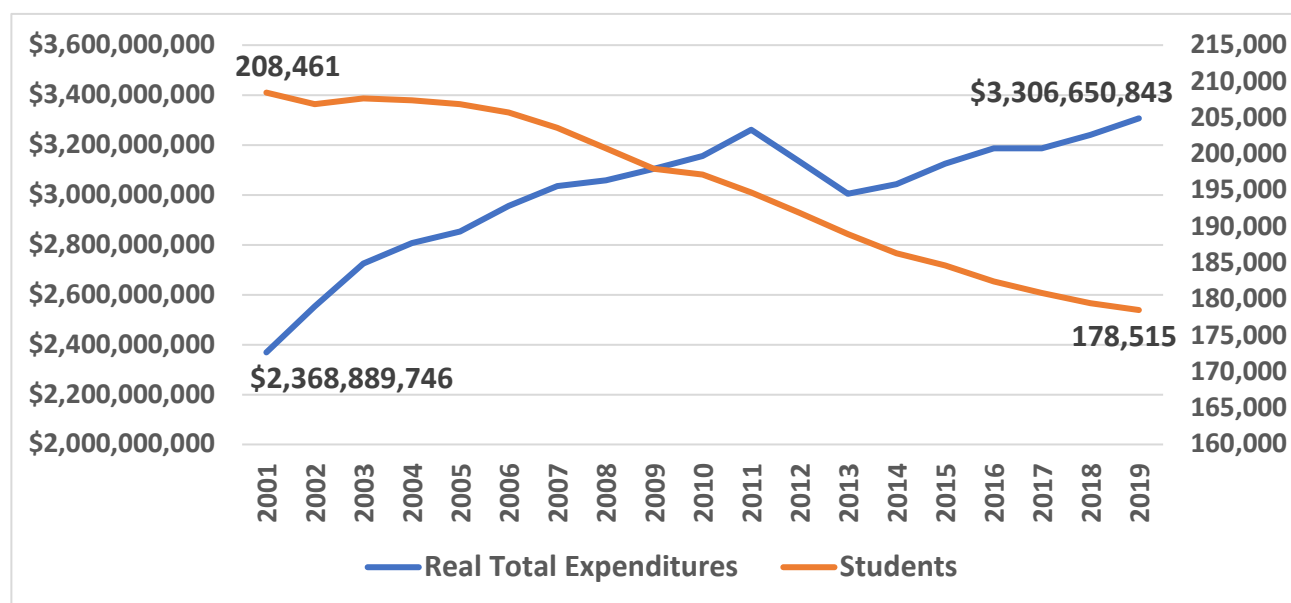
This report uses official State of New Hampshire data reported to the U.S. Department of Education. Because the COVID-19 pandemic produced serious disruptions in public schooling in 2020, this report ends its review in 2019. All inflation adjustments were made using the Personal Consumption Expenditures Price Index (PCE), a more accurate gauge of inflation than the

Consumer Price Index (CPI). Since charter schools did not exist in New Hampshire in 2001, this report considers changes in enrollments and spending in district public schools only.

A dozen discreet data points show how New Hampshire spent more money on fewer students, with no gain in national reading and math scores, between the 2000-2001 and 2018-19 school years:

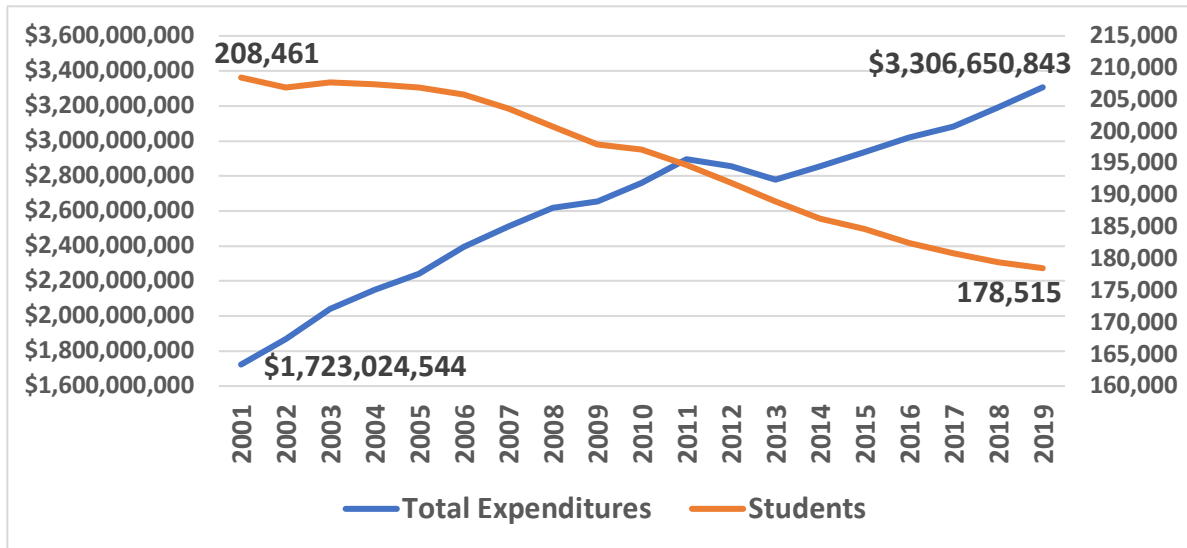
- 1) Between 2001-2019, the number of students in New Hampshire public schools declined every year except one. Meanwhile, total public school spending, adjusted for cost of living, increased in all years except two (2012, 2013) at the end of the Great Recession.

Figure ES.1. N.H. Public School Enrollment and Total Expenditures, Adjusted for Inflation, 2001-2019



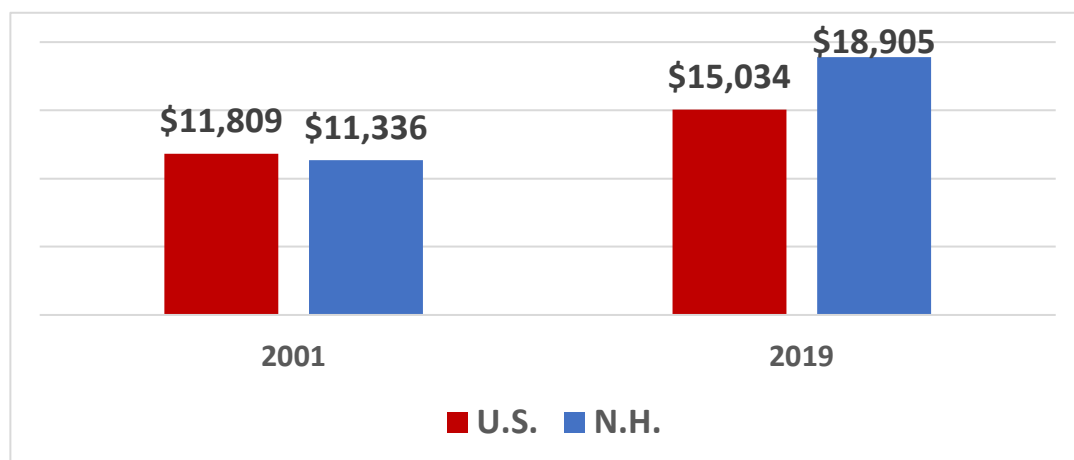
As shown in figure ES.1 above, the number of public school students fell from 208,461 in 2001 to 178,515 by 2019, a decline of 29,946. Despite this drop in students served, total expenditures in New Hampshire public schools, adjusted for inflation, increased from \$2.37 billion in 2001 to \$3.31 billion by 2019. Figure ES.2 below shows that in nominal terms, not adjusting for inflation, total spending increased by \$1,583,626,299, above the \$1,723,024,544 spent in 2001. By 2019, New Hampshire public school districts were spending a total of \$3,306,650,843.

Figure ES.2. N.H. Public School Enrollment and Total Expenditures, Nominal (Actual) Dollars, 2001-2019



- 2) Spending per pupil, adjusted for inflation, rose by 66.8 percent, from \$11,336 in 2001 to \$18,905 in 2019 (figure ES.3 below).¹ That means that New Hampshire public school students in 2019 had 66.8 percent more in real taxpayer funding devoted to their education relative to New Hampshire public school students in 2001. This huge increase vaulted New Hampshire from 4% below the national average in per-pupil spending in 2001 to 25.7% above the national average in 2019.

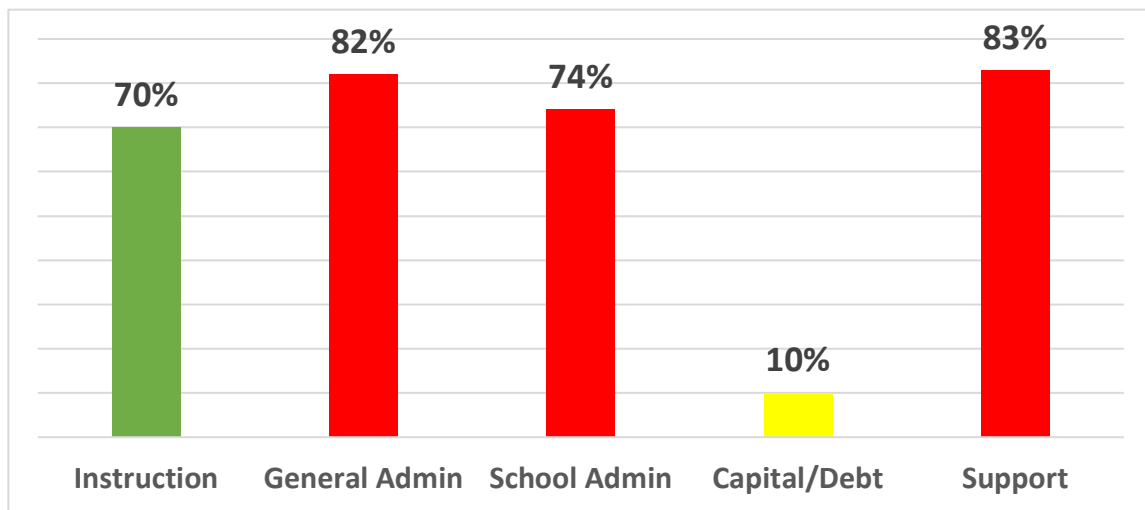
Figure ES.3. Real (inflation-adjusted) Expenditures Per Student in Public Schools



¹ Actual spending in New Hampshire public schools in academic year 2001 was \$8,245 per student—below the \$11,336 dollar amount reported in figure ES.3 above. Adjusted for the rise in the cost of living between 2001-2019, \$8,245 in 2001 was equal to the purchasing power of \$11,336 in 2019.

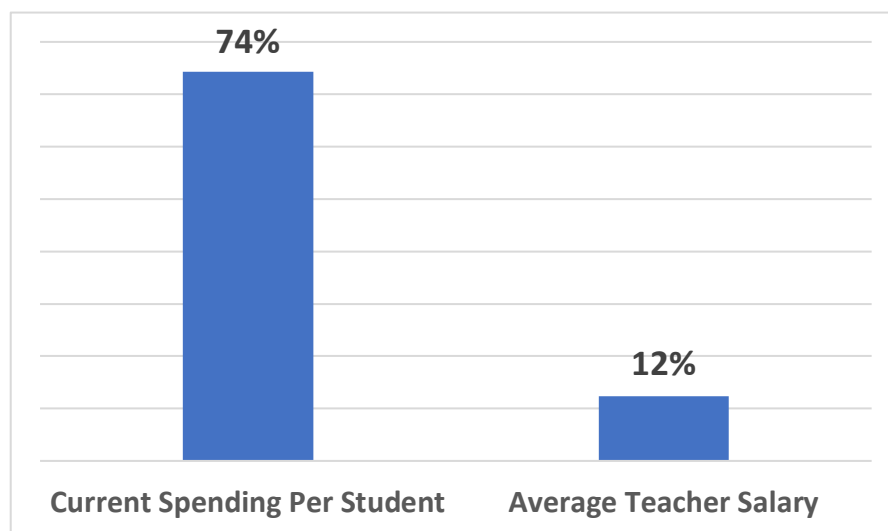
- 3) Adjusted for inflation, per-pupil spending increased 83 percent for support services, 82 percent for general administration, 74 percent for school administration, 70 percent for instruction, and 10 percent for capital & debt service.

Figure ES.4. Real (inflation-adjusted) Percent Increases in Spending Per Student



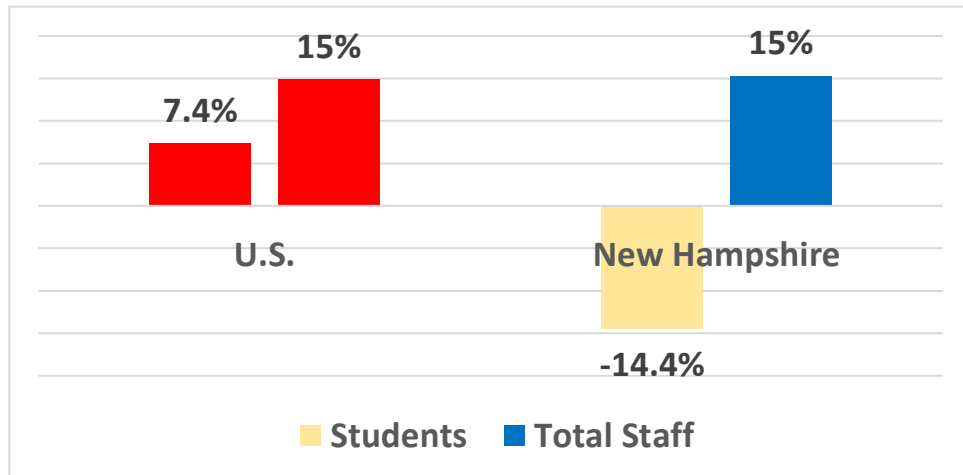
- 4) Current spending (which excludes capital and debt service) rose by 74 percent. Average teacher salaries increased by only 12 percent. (Both are adjusted for inflation.)

Figure ES.5. Change in N.H. Public School Current Spending Per Student and Average Teacher Salaries, 2001-2019, inflation-adjusted



- 5) While the number of students served in New Hampshire public schools decreased by 14.4 percent between 2001-2019, the number full-time equivalent (FTE) total staff increased by 15 percent. Public schools nationally also increased their staffing by 15 percent during this period. But unlike New Hampshire, which experienced a large enrollment decline, the number of students served nationwide increased by 7.4 percent.

Figure ES.6. Staffing Surge in Public Schools, U.S. and New Hampshire, 2001-2019



The number of New Hampshire public school staff increased in every year except three between 2001-2019, while the number of students served declined in 18 of those 19 years, as shown in Figure ES.7. Thus, the trend of adding more staff than are needed to accommodate student enrollment growth was much more pronounced in New Hampshire.

Figure ES.7. New Hampshire Public School Enrollment and Total Staff, 2001-2019

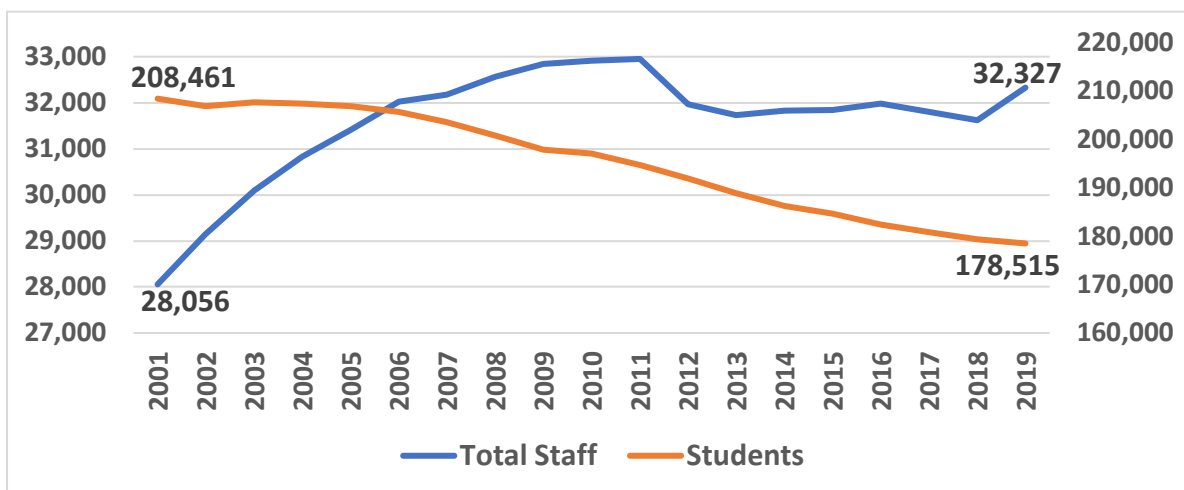
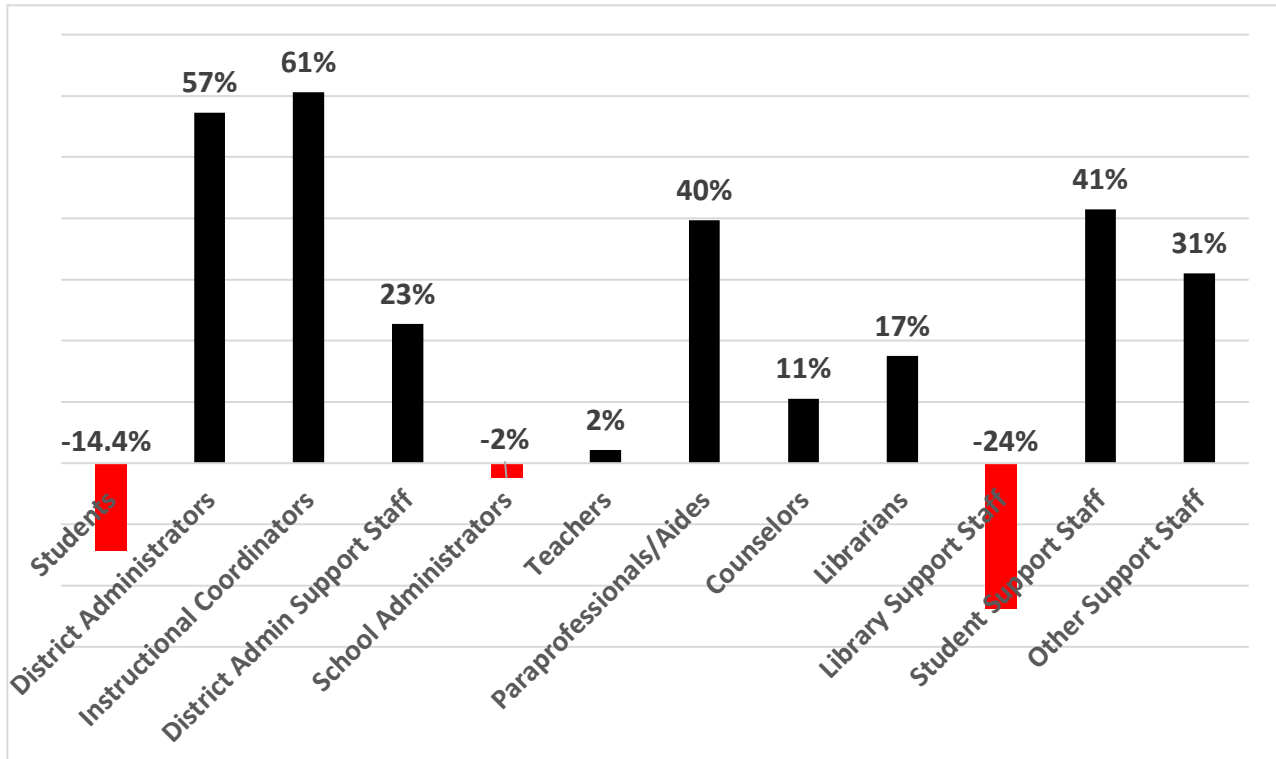


Figure ES.8. New Hampshire Public School Staffing Surge by Employee Category, 2001-2019

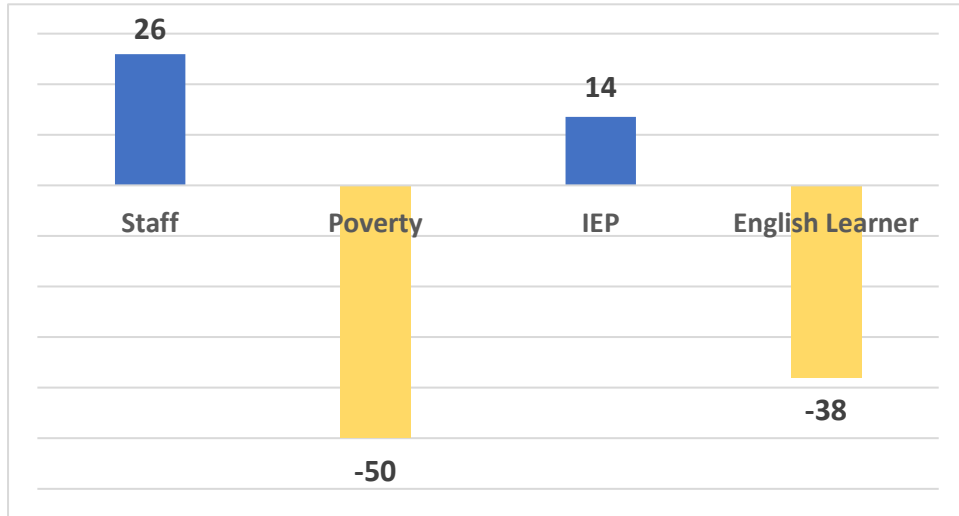


The largest percentage increase in staff in New Hampshire public schools between 2001-2019 occurred in district administration. Instructional coordinators, who are considered district administrators by the U.S. Department of Education, increased by 61 percent, while the number of other district administrators increased by 57 percent. Student support staff increased by 41 percent, while the number of paraprofessionals/aides increased by 40 percent. These increases are in stark contrast to the decrease of 14.4 percent in the number of students served—a decline of almost 30,000 students.

The number of teachers increased by 2 percent, which means that New Hampshire public schools should have been able to reduce class sizes significantly, given the enrollment drop. The number of school administrators declined by 2 percent from 2001-2019. The number of library support staff declined by 24 percent. (Long experience with public school staffing data suggests to me that it is extremely likely that at least some library support staff were coded as student support or other support staff. Thus, there may not have been much of a decline or even any decline in library support staff.)

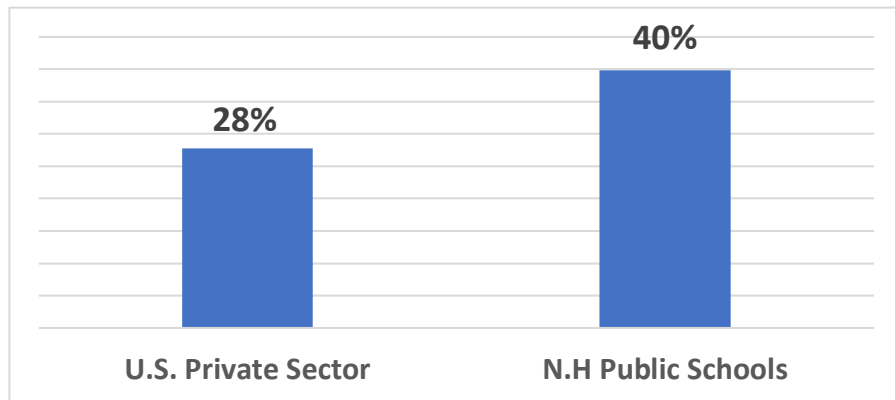
- 6) A 500-student public school in New Hampshire would have 14 more special needs (IEP) students than the national average, 50 fewer students living in families who are in poverty, and 38 fewer English Language Learner (EL) students. However, that representative New Hampshire public school would also have 26 more FTE staff relative to the national average.

Figure ES.9. For a 500-Student Public School in 2019, Average Differences in the Number of Total Staff and the Number of Students Between New Hampshire and the National Average



- 7) New Hampshire public school staff (teachers, administrators, support personnel) experienced, on average, a 40 percent real increase in their compensation (pay plus benefits) above the increase in the cost of living (figure ES.10 below). This increase was 12 percentage points above the national average for private-sector workers. Before adjusting for inflation, in 2001 the average employee in New Hampshire public schools received \$41,208 per year in total compensation (including all salaries, wages, and benefits). By 2021, average compensation per public school employee had increased to \$74,725.

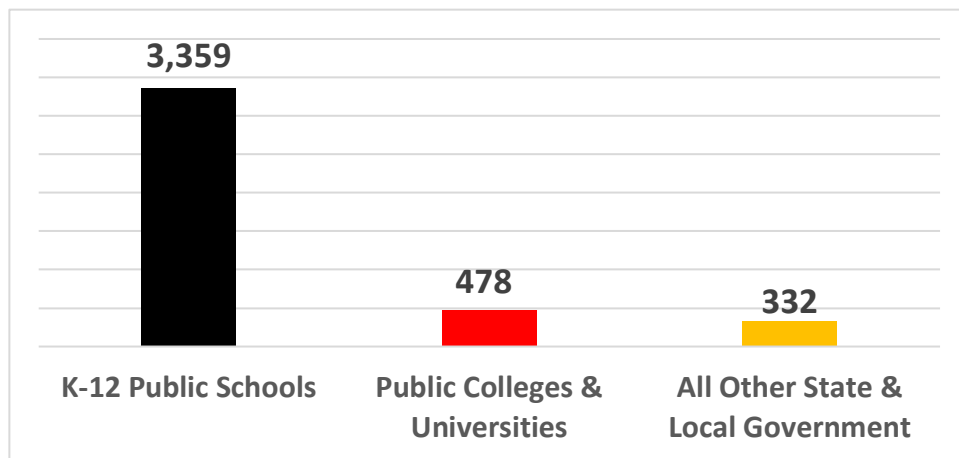
Figure ES.10. Increase in Real (inflation-adjusted) Compensation 2001-2019



- 8) K-12 public education has been the top priority of state and local governments in New Hampshire this century, even as enrollment fell. From 2001-2019, employment in New Hampshire public schools increased by 3,359 FTE (Full Time Equivalent) employees.

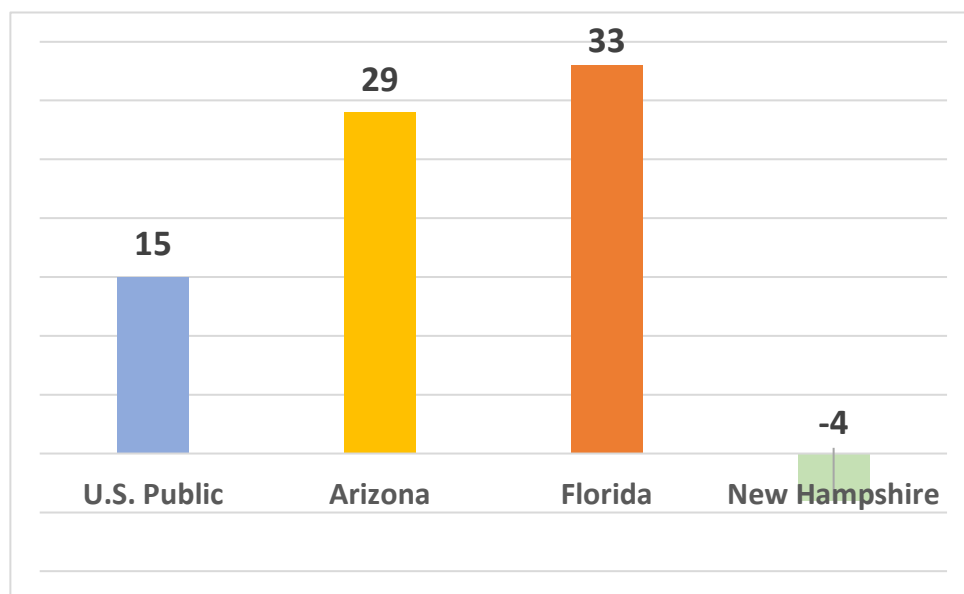
Employment in public colleges and universities increased by 478 FTE employees. All other state and local government added just 332 FTE employees (figure ES.11).

Figure ES.11. Change in Total FTE State and Local Government Employment in New Hampshire, 2001-2019



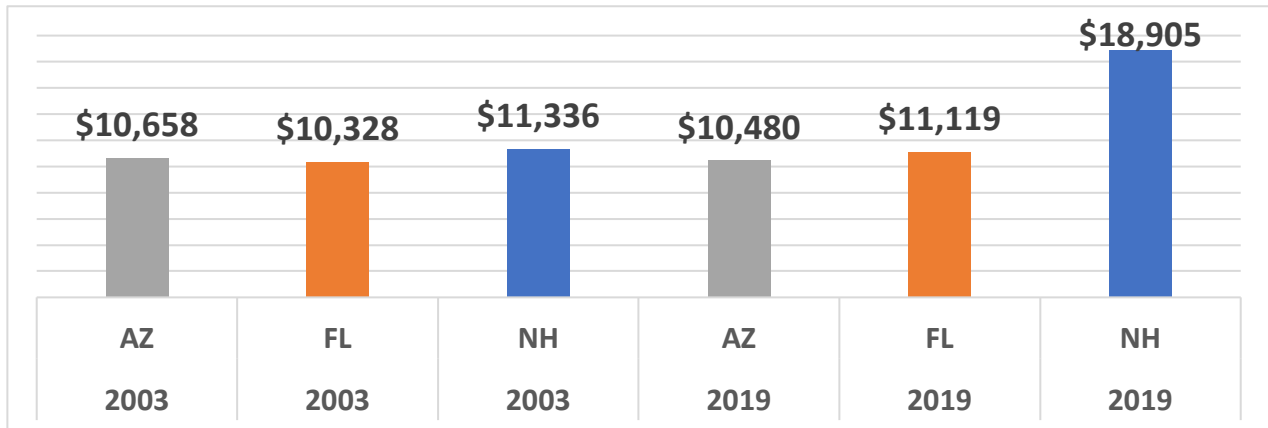
- 9) On the National Assessment of Educational Progress (NAEP) grade 4 and grade 8 reading and mathematics exams, the national average increased 15 points between 2003-2019. In New Hampshire, these NAEP scores fell by 4 points (figure ES.12). By contrast, Arizona and Florida posted gains roughly double the national average.

Figure ES.12. Change in NAEP 4th and 8th Grade Reading and Math Scores Between 2003-2019



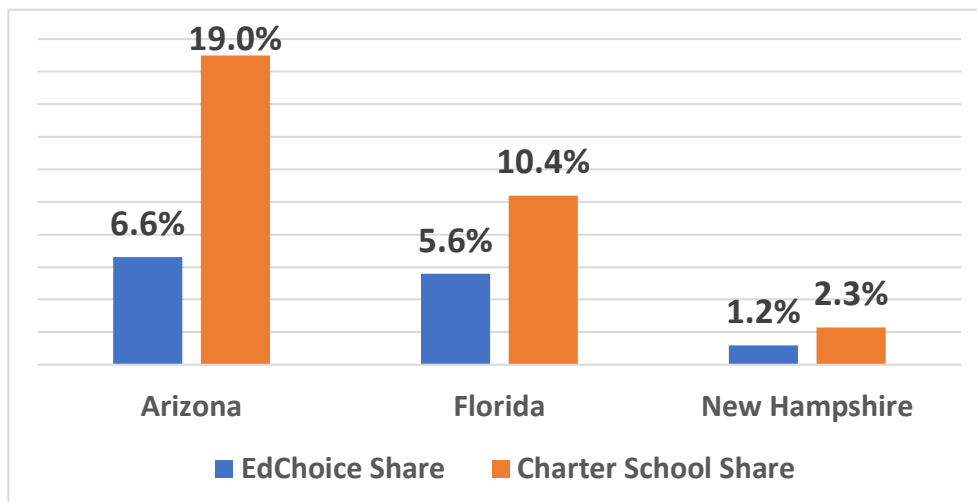
10) In 2019, New Hampshire public schools spent 80 percent more per student than Arizona public schools and 70 percent more than Florida public schools.

Figure ES.13. Total Spending Per Student, 2003 and 2019, Real (inflation-adjusted) Dollars



11) Figure ES.14 shows the percentage of school-aged children in each of the three states who participate in a taxpayer-funded private school choice program (EdChoice share) and the percent of children who attend a charter public school (Charter School Share). Arizona and Florida have the most private school choice in the nation, with 6.6 percent of Arizona children and 5.6 percent of Florida children participating in a taxpayer-funded private school choice program. Another 19 percent of Arizona students and 10.4 percent of Florida students attend a public charter school.

Figure ES.14. Share of School Aged Children Participating in a Private School Choice Program (EdChoice Share) or Attending a Charter Public School (Charter School Share), 2021-2022



12) The performance of Arizona and Florida relative to the rest of the nation is compelling, particularly given the success of their school choice programs. A voluminous amount of additional empirical research on the effects of educational choice programs has shown overwhelmingly positive results, which are summarized at the end of this report. Given these successes, and the failure of massive spending increases to produce similar results, policymakers should consider changes that have proven effective in other states, including:

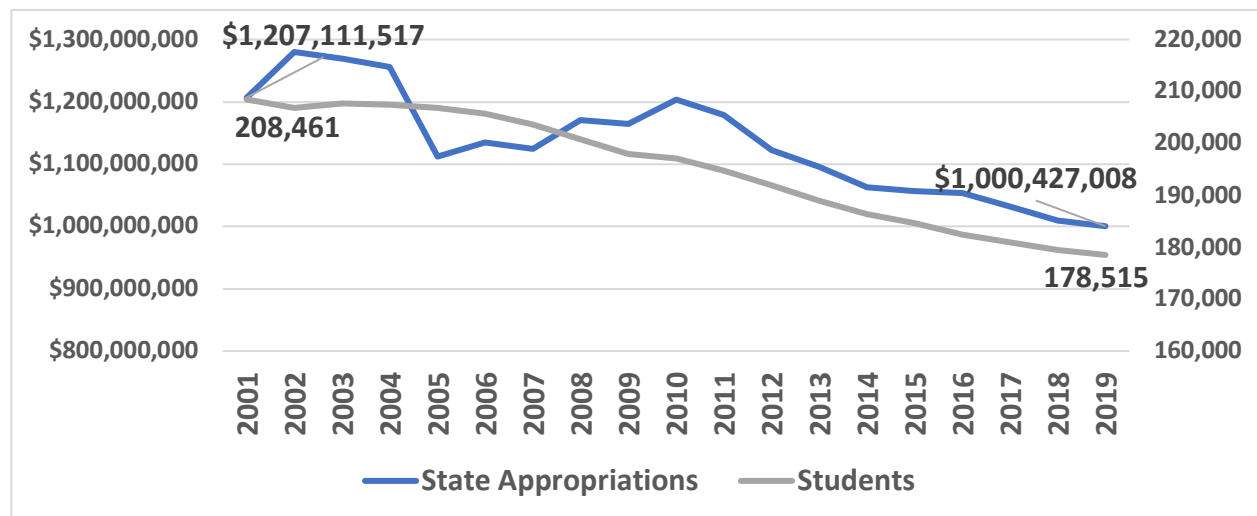
- Universal eligibility for Education Freedom Accounts (EFAs), regardless of family income.
- Higher funding levels for EFA students, especially for students with special needs. At less than \$5,000 per student, EFA awards are roughly a quarter of the amount currently spent on students who attend traditional public schools.
- Expanded access to charter schools, with funding set to 90-95% of other public schools.

School district revenues by level of government

While total spending on district public schools rose by 40% from 2001-2019, the percentages varied by level of government—local, state, and federal. And inflation was an important factor.

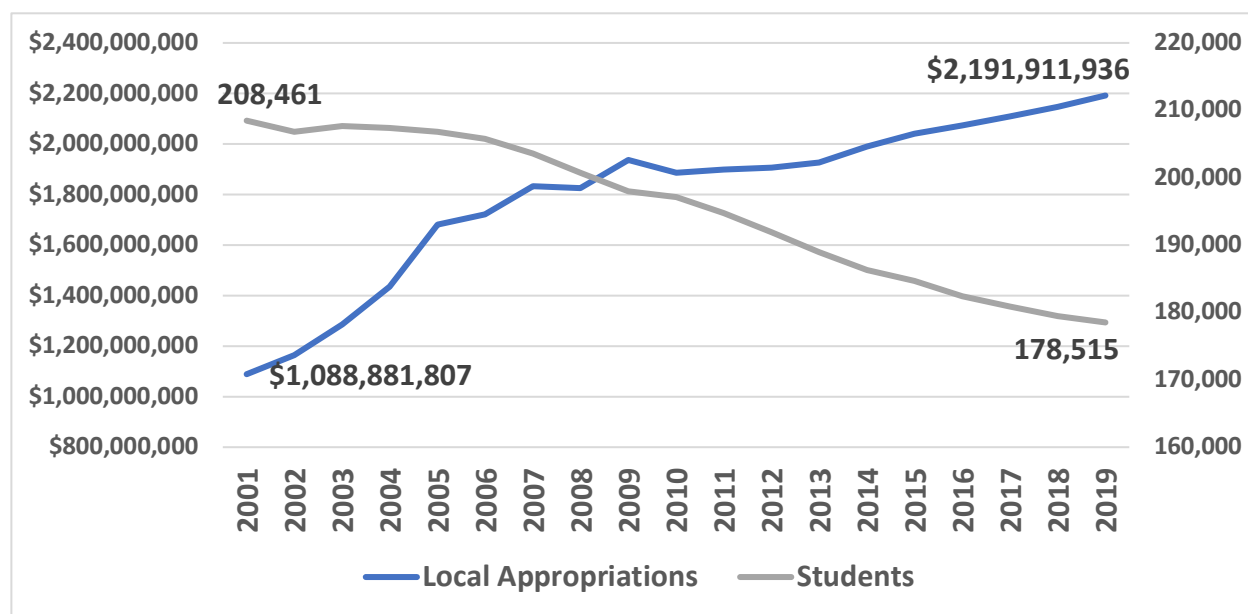
Total state taxpayer funding to district public schools increased in nominal dollars from about \$878 million in 2001 to approximately \$1 billion in 2019. However, much of that increase was consumed by inflation. As shown in Figure ES.16, when adjusted for inflation total state appropriations to district public schools shrank from an inflation-adjusted \$1.2 billion in 2001 to \$1 billion in 2019—a decline of 17 percent. Most of this decline, 83.9%, is due to declining student enrollments. The remaining 16.1 percent was due to actual increases in state appropriations coming close to, but not quite keeping up with, inflation. The number of students in district public schools declined by 14 percent. (This data excludes chartered public schools.)

Figure ES.15. Total State K-12 Spending (Inflation-Adjusted) and Students Served, 2001-2019



As shown in Figure ES.16, adjusted for inflation, total local appropriations doubled, going from \$1.09 billion in 2001 to \$2.19 billion in 2019. That's a 101% increase in spending as the number of students served fell by 14%.

Figure ES.16. Total Local Appropriations (Inflation-Adjusted) and Students Served, 2001-2019



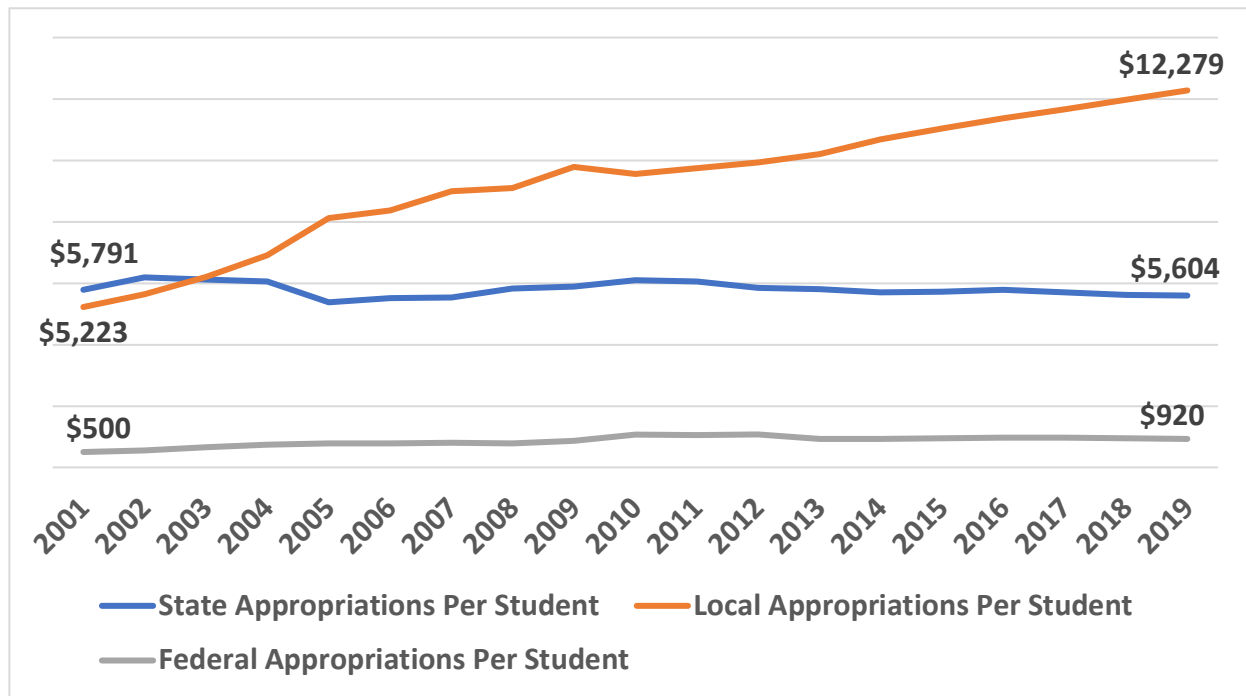
On a per-pupil basis, local, state, and federal spending saw nominal (actual) increases. But after adjusting for inflation, state government spending per pupil experienced a slight decline.

In actual (nominal) dollars, federal spending per student increased by 153 percent between 2001-2019, from \$364 to \$920. State spending per student increased by 33 percent, from \$4,212 to \$5,604. And local spending per student more than tripled, from \$3,799 to \$12,279.

Adjusting for inflation, however, federal spending increased by 84%, going from \$500 in 2001 to \$920 in 2019, and local spending per student increased by 135%, going from \$5,223 in 2001 to \$12,279 in 2019.

State spending per student, however, was fairly flat during this period, when adjusted for inflation. Inflation-adjusted state spending per student was 3 percent lower in 2019 relative to 2001, a decline from \$5,791 to \$5,604 by 2019.

Figure ES.17. Inflation-Adjusted Federal, State, and Local Spending Per Student, 2001-2019



District-specific findings are included in two tables attached to the full report. A sample of individual district findings is below for six school districts.

Figure ES.18. Findings for Six Select School Districts, 2001-2019 (Adjusted for Inflation)

District	Percent Change Students	Percent Change Total Expenditures	Percent Change Total Expenditures Per Student
CLAREMONT	-15.7%	30.7%	55.0%
CONTOOCH VALLEY	-32.6%	26.0%	86.9%
MANCHESTER	-22.3%	22.7%	58.0%
NASHUA	-17.8%	2.8%	25.1%
NEW CASTLE	-36.6%	62.3%	156.1%
PLYMOUTH	-20.0%	25.0%	56.3%

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Data Notes and Terms

Unless specified otherwise, all data on expenditures and staffing come from data reported by the New Hampshire Education Department (NHED) annually to the U.S. Department of Education (USDE) or data from the NHED and public school districts that were reported to the U.S. Census Bureau.

All years mentioned in the report are academic years. For example, 2001 is the 2000-01 academic year, and 2019 represents the 2018-19 academic year.

To maintain consistency, data are reported for district public schools, as New Hampshire did not have charter public schools in 2001.

Finally, expenditure and compensation data, when considered over time, are presented in “real” terms, which means they are adjusted for inflation. It is routine for researchers and policymakers to use adjusted dollars for changes in the cost of living over time, and across states for differences in the cost of living. Adjusting for changes in the cost of living over time is customarily done using the headline Consumer Price Index (CPI-U) that is reported in the media each month. However, economists have generally understood for many decades that the CPI-U overestimates true changes in the cost of living. That is why the U.S. Federal Reserve System and many others now use the PCE price index (Personal Consumption Expenditures) to measure changes in inflation over time. In this paper, I use the PCE price index to adjust for inflation. The implication of this choice is that the PCE price index increased 37.5 percent between 2001-2019, while the CPI-U increased by 43.8 percent during this time. Again, economists generally regard the PCE price index as a more accurate measure of changes in the cost of living over time and the CPI-U as overestimating these changes. Given that the vast majority of public school spending is for salaries, benefits, and wages paid to employees, it is reasonable to use the average changes in the cost of living.

While some data are only available to 2019, other data are accessible for more recent academic years. However, to be consistent across all data elements, and to avoid any argument that the results were skewed by the COVID-19 pandemic, all data are reported to 2019. When more recent data are available, I do briefly mention that, and the more recent data strengthen the findings in this report (i.e. the trends identified in this report continued after 2019).

Organization of this Report

Section I details the changes in inflation-adjusted expenditures per student in New Hampshire public school districts in first two decades of the 21st Century.

Section II details how New Hampshire public school districts have spent the very large increases in funding they have received.

Section III describes the changes in compensation in New Hampshire public school districts this century.

Section IV shows that K-12 public school districts have been the priority of state and local governments in the 21st Century while the rest of state and local government, considered collectively, has not been prioritized.

Section V explains three reasons why it is extremely likely that significant increases in New Hampshire public school funding will continue in the years after this report's publication.

Section VI shows that the large increases in public school district funding in New Hampshire after 2001 did not lead to increased student performance on national measures of educational progress.

Section VII offers recommendations. Specifically, I recommend that New Hampshire follow the lead of states like Arizona and Florida, which spend significantly less per student in their public schools, offer families significantly more school choice opportunities, and have seen very large relative increases in student learning since 2003. A summary of the other evidence on the positive returns to education choice policies is also presented.

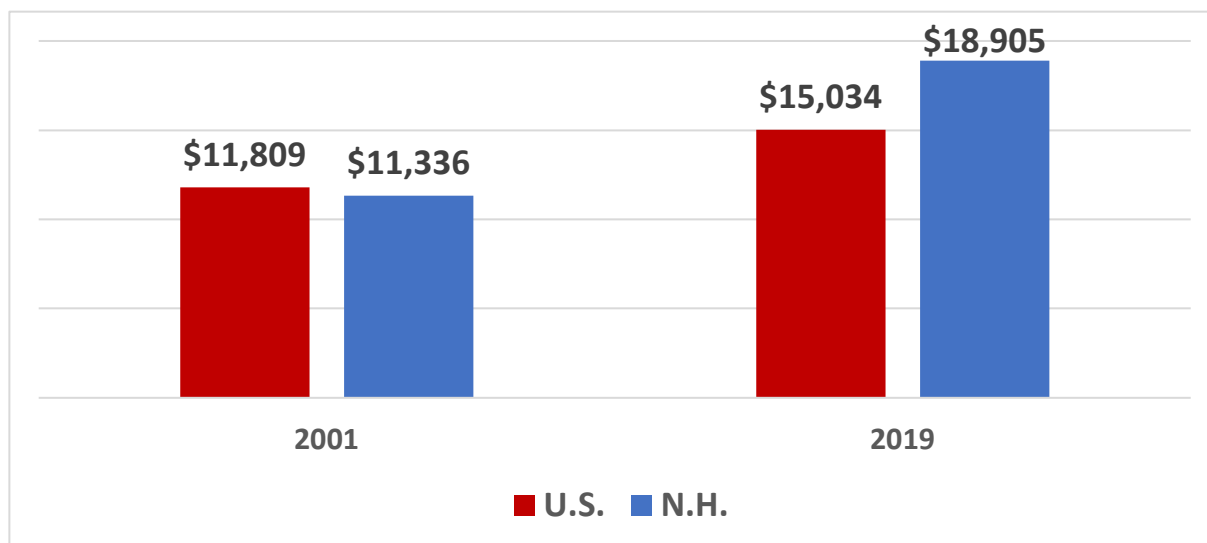
Section VIII is a postscript that shares data that has become available in the years after 2019 and shows that the 2001 to 2019 trends in the New Hampshire public education system have continued.

I. Real Expenditures Per Student from 2000-01 to 2018-19

Between 2001-2019, public schools in New Hampshire increased their total expenditures per student on an inflation-adjusted basis by 66.8 percent, from \$11,336 in 2001 to \$18,905 in 2019 (figure 1.1).²

This means that New Hampshire public school students had 66.8 percent more in inflation-adjusted taxpayer funding devoted to their education in 2019 than in 2001. This is a very large increase in real resources per student over a fairly short period of time.

Figure 1.1. Real (inflation-adjusted) Expenditures Per Student in Public Schools



Source: Data reported annually by the NHED and other state departments of education to the National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>. 2001 spending figures were adjusted upwards to account for the rise in the cost of living between 2001-2019 using the PCE price index, <https://fred.stlouisfed.org/series/PCEPI>.

Figure 1.1 above also shows the increase in total public school spending per student nationally and in New Hampshire. The inflation-adjusted increase in spending per student in U.S. public schools overall was 27.3 percent (from \$11,809 per student in 2001 to \$15,034 in 2019). But New Hampshire's increase, at 66.8%, was more than twice as large.

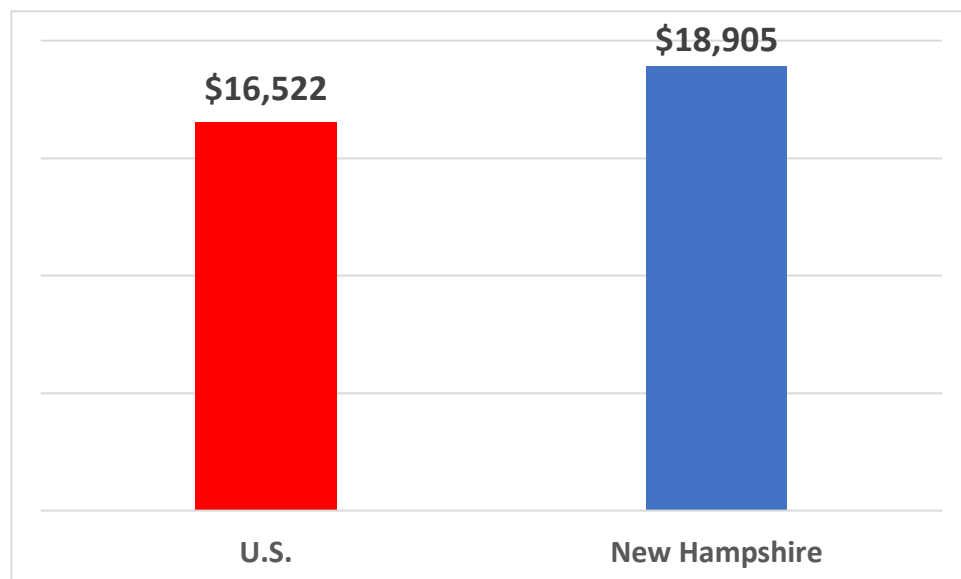
In 2001, public schools in New Hampshire were spending \$473 *less* than the average for public schools nationally. By 2019 (the 2018-19 academic year), New Hampshire public schools spent \$3,871 *more* per student than the national average.

² Actual spending in New Hampshire public schools in academic year 2001 was \$8,245 per student. The \$11,336 figure reported in figure 1.1 above is adjusted for the increase in the cost of living between 2001-2019. The \$8,245 figure from 2001 had the purchasing power of \$11,336 in 2019. The same adjustment was done for the national average of public school spending per student in 2001 as well.

Nevertheless, the cost of living in New Hampshire is estimated to be 9.9 percent above the national average. Adjusting for the higher cost of living in New Hampshire relative to the national average, Granite State public schools had \$2,383 more real spending per student than the average for public schools nationally (figure 1.2).

Thus, the significant increases in taxpayer funds given to New Hampshire public schools after 2001 have propelled their spending to a height well above (\$2,383 and 14.4 percent above) the national average in spending per student.

Figure 1.2. Cost of Living-adjusted Expenditures Per Student in Public Schools



Data reported annually by the NHED and other state departments of education to the National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>. National average spending figures were adjusted upwards by 9.9 percent to account for the Granite State's estimated higher cost of living relative to the national average, <https://worldpopulationreview.com/state-rankings/cost-of-living-index-by-state>.

The next section offers an analysis of how New Hampshire public schools have spent this tremendous increase in real funds per student given to them by taxpayers in the 21st Century.

II. How New Hampshire Public Schools Spent Their Large Increases in Funding

When state departments of education annually report public school spending to the U.S. DOE, they break this spending into several federally defined categories. In this report, I use four of these expenditure categories and aggregate all other public school expenditures into a fifth category that I call “support services.” The expenditure categories for New Hampshire public schools considered in this section are:

- Instruction
- General Administration
- School Administration
- Capital and Debt Service
- Support Services, which is an aggregation of all other public school spending.

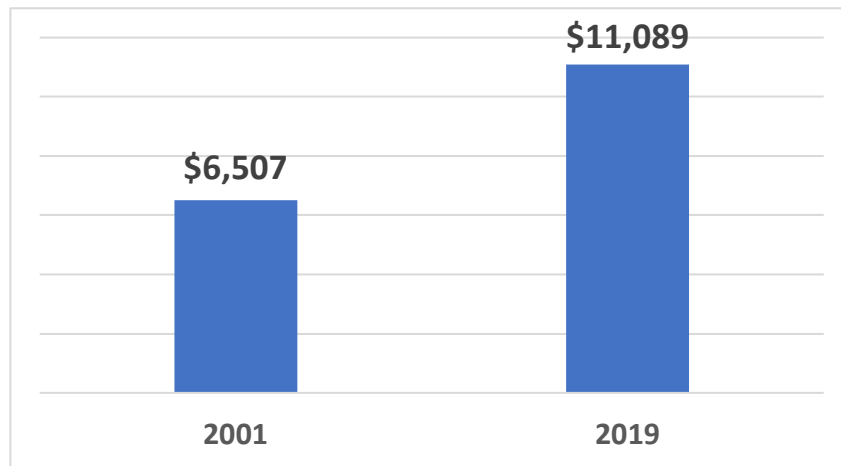
The federal definitions for these categories are listed in the appendix to this report. In short, “instruction” includes classroom expenditures on teachers, aides/paraprofessionals, and classroom textbooks and supplies. “General administration” includes spending on district office and school administrative unit (SAU) personnel and local school boards, including superintendents and instructional coordinators. “School administration” includes costs for principals, assistant principals, and other central office personnel. “Capital and debt service” includes expenditures for capital outlay (new construction and capital renovations), and principal and interest payments on debt that must be repaid. All other public school expenditures are aggregated into a category I call “support services,” which includes expenditures for operations and maintenance, instructional staff support services, and student support services.

Next, I show the increases in each of these five expenditure categories in New Hampshire public schools between 2001-2019, where these increases are on a per student basis and are adjusted for differences in the cost of living over time. The source of these data on specific expenditure categories is the same as listed in figure 1.1 above—data reported annually by the NHED to the U.S. DOE.

Instruction

New Hampshire public schools have increased real spending on instruction by 70 percent, from \$6,507 per student in 2001 to \$11,089 per student in 2019. Thus, New Hampshire public school students had 70 percent more in taxpayer funds devoted to instruction in 2019, relative to their public school counterparts in 2001. Expenditures for instruction were 58.7 percent of total expenditures in 2019.

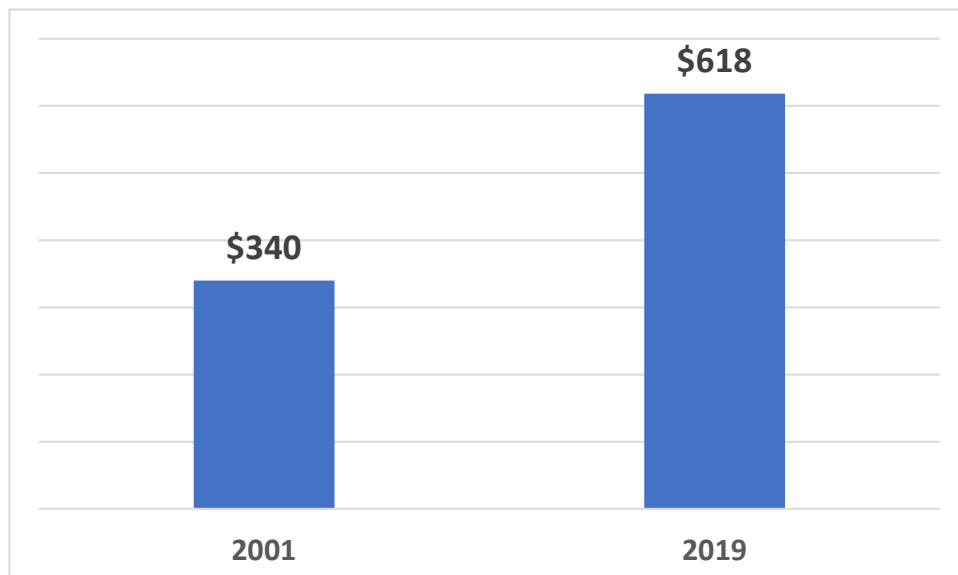
Figure 2.1 Real (inflation-adjusted) Instruction Expenditures Per Student



General Administration

Per-pupil spending on general administration increased by 82 percent from 2001-2019, from \$340 to \$618, as shown in figure 2.2 below.

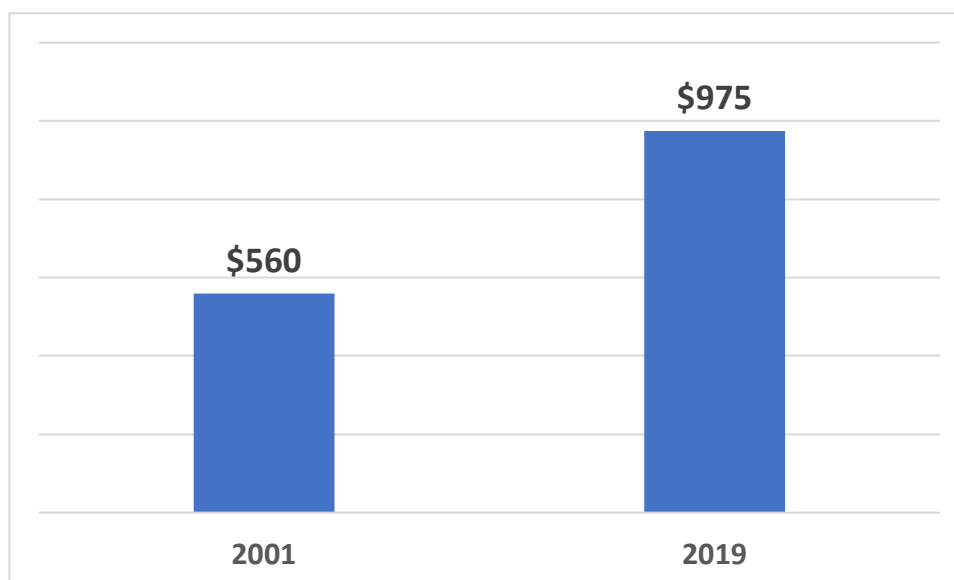
Figure 2.2. Real (inflation-adjusted) Expenditures Per Student for General Administration



School Administration

Per-pupil spending on School Administration increased by 74 percent, from \$560 to \$975, between 2001-2019.

Figure 2.3 Real (inflation-adjusted) Expenditures Per Student for School Administration

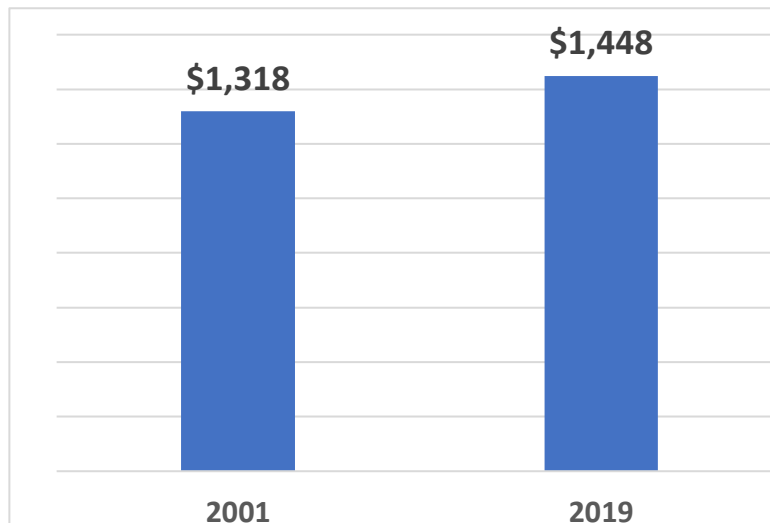


Capital & Debt Service

There are three reasons public school districts need to engage in capital expenditures, including borrowing money for capital expenditures. They are: to repair buildings, to replace buildings, and to construct new buildings to accommodate enrollment growth. New Hampshire public school districts have experienced an enrollment decline of almost 30,000 students in the first two decades of the 21st Century, and the National Center for Education Statistics at the U.S. DOE projects a further enrollment decline of more than 20,000 students by 2030. Given the significant enrollment reductions and the projection of further declines, the vast majority of New Hampshire public school districts have no cause for growth-based construction. Thus, their needs for capital and debt expenses should be lower relative to states with growing student populations.

Given this context, the inflation-adjusted increase in per student spending on capital & debt service was 10 percent between 2001-2019—far below the increases for instruction and administration noted above (and far below the increase for support services noted in the next subsection).

Figure 2.4 Real (inflation-adjusted) Expenditures Per Student for Capital & Debt Service



Capital & debt service expenditures increased from \$1,318 per student in 2001 to \$1,448 in 2019. Given falling enrollments in the recent past, and the likelihood of continued decline, one would expect further muted increases or even decreases in capital expenditures by New Hampshire public school districts in the near future. Going forward, state policymakers and local school boards should keep a sharp eye on proposals for capital expenditures by public school districts, as the need for these expenditures is significantly lower now relative to the beginning of the 21st Century. Put differently, just because a given school district spent \$X on capital expenditures 20 years ago does not mean it needs to spend that much now and into the future, adjusted for inflation of course, given the large enrollment declines most public school districts are experiencing.

Support Services

As noted previously, all other public school expenditures—expenditures outside of instruction, general and school administration, and capital & debt service expenses—are aggregated into this final category termed “support services.” Thus, support services includes public school expenditures on operations and maintenance, instructional staff support services, and student support services.

Like expenditures on instruction and administration, New Hampshire public school expenditures on support services increased rather dramatically this century, on a per student and inflation-adjusted basis. Specifically, as shown in figure 2.5, these expenditures increased by 83 percent between 2001-2019, from \$2,611 to \$4,775 per student.

Figure 2.5. Real (inflation-adjusted) Expenditures Per Student for All Other Expenditures

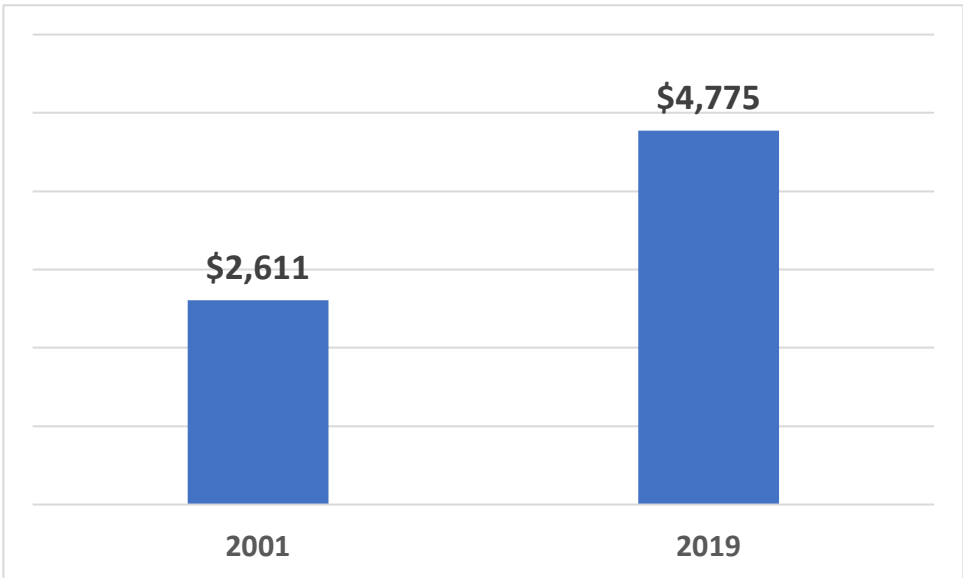
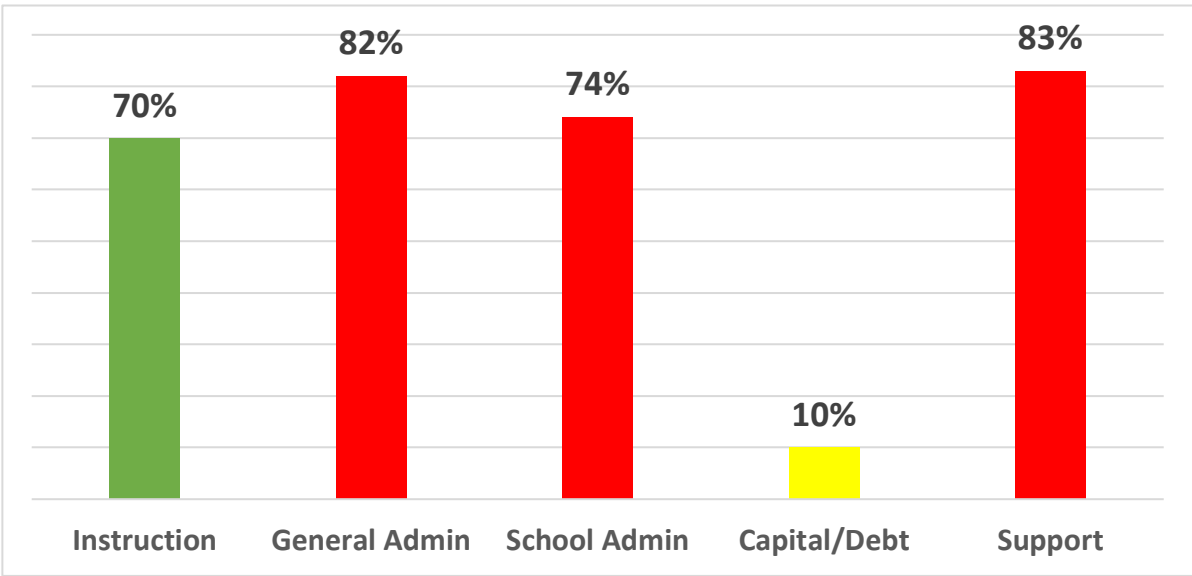


Figure 2.6 shows the inflation-adjusted increases in spending per student for each expenditure category. New Hampshire public school students today have dramatically more taxpayer funds per student devoted to their public school education relative to New Hampshire public school students at the turn of the 21st Century. Specifically, in descending order, they have more taxpayer funds spent on support services (83 percent real increase per student), general administration (82 percent), school administration (74 percent), instruction (70 percent), and capital & debt service (10 percent).

Figure 2.6. Real (inflation-adjusted) Percent Increases in Spending Per Student



Data for Individual Public School Districts

Data on expenditures for each school district in 2001-2019 are reported in appendix table 1. The appendix table allows readers to compare data across districts. (Data on staffing trends in individual districts is discussed later in this report and are presented in appendix table 2.) Charter schools are not included in the appendix tables, as they were not authorized in New Hampshire in 2001, thus 2001 data does not exist for these public schools.

Here, I show the data for six sample districts (Claremont, Contoocook Valley, Manchester, Nashua, New Castle, and Plymouth) for purposes of illustration.

Table 2.1. Number of Students Served and Expenditures (Adjusted for Inflation) in 2001-2019 in Six Public School Districts

District	Number of Students 2001	Number of Students 2019	Total Expenditures 2001	Total Expenditures 2019	Total Expenditures Per Student 2001	Total Expenditures Per Student 2019
CLAREMONT	2,114	1,783	\$26,106,910	\$34,119,000	\$12,350	\$19,136
CONTOOCCOOK VALLEY	3,227	2,176	\$37,295,390	\$47,005,000	\$11,557	\$21,602
MANCHESTER	17,407	13,522	\$151,406,057	\$185,847,000	\$8,698	\$13,744
NASHUA	13,668	11,229	\$162,752,643	\$167,293,000	\$11,908	\$14,898
NEW CASTLE	71	45	\$1,304,727	\$2,118,000	\$18,376	\$47,067
PLYMOUTH	524	419	\$6,412,272	\$8,014,000	\$12,237	\$19,126

Source: National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

As shown in table 2.1 above, each of these six school districts experienced significant enrollment declines between 2001-2019, while increasing total expenditures, adjusted for inflation. For example, the number of students in Manchester fell by almost 3,900 students during this time, but total expenditures in 2019 rose from \$26.1 million to \$34.1 million, adjusted for inflation. Total expenditures per student increased by more than \$5,000 per student—over and above the increase in the cost of living. Thus, Manchester public schools spent \$5,046 more in real resources per student in 2019 than in 2001.

New Castle is a very small school district. Its enrollment fell from 71 students to 45 students between 2001-2019. In 2019, the district spent just over \$47,000 per student.

Table 2.2 shows the percent changes in enrollment, total spending, and unspent “other” funds between 2001-2019. At the end of each year, public school districts typically have unspent funds available to spend in future years. Having excess unspent funds at the end of each year is a sign of fiscal health. The far right column of table 2.2 does not include year-end unspent funds that are dedicated for future capital expenses or for debt service payments. Debt must be repaid, and older schools must be repaired, and very old schools must be replaced. Therefore, table 2.2 only reports unspent year-end funds that are available for future operational spending. The U.S. DOE terms

these funds as unspent “other” funds, since they do not include unspent year-end funds dedicated for future capital expenses or debt service payments. Manchester and Nashua data on unspent funds were missing in the database—perhaps these districts did not report these unspent funds to the NHED or there was some other snafu?

Table 2.2. Percent Change in Students, Total Expenditures and Unspent “Other” Funds, 2001-2019

District	Students % Change 01 to 19	Total Expenditures % Change 01 to 19	Total Expenditures Per Student % Change 01 to 19	Unspent Other Funds Per Student % Change 01 to 19
CLAREMONT	-15.7%	30.7%	55.0%	33743.7%
CONTOOCOOK VALLEY	-32.6%	26.0%	86.9%	2046.9%
MANCHESTER	-22.3%	22.7%	58.0%	
NASHUA	-17.8%	2.8%	25.1%	
NEW CASTLE	-36.6%	62.3%	156.1%	138.1%
PLYMOUTH	-20.0%	25.0%	56.3%	-95.7%

Source: National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

The increase in unspent other funds for Claremont was so large because the district only had \$12 per student in unspent other funds in 2001. In 2019, Claremont had \$3,962 per student in these unspent funds. Again, having unspent other funds at the end of a given year is a sure sign of fiscal health. That said, Plymouth had the largest decline statewide and was one of the few districts in the state that saw a decline in unspent other funds—even with a 25 percent increase in inflation-adjusted total expenditures along with a 25 percent decline in its student population over this time period.

The reason that total expenditures per student had significantly larger percentage increases relative to the increases in total expenditures was because each of these districts experienced significant enrollment declines. Thus, large increases in inflation-adjusted total expenditures translates into extremely large increases in real resources per student, when student enrollments are also declining.

In the next few subsections, I describe the increases in current spending, staffing, and teacher salaries in New Hampshire public schools since 2001.

Current Public School Spending

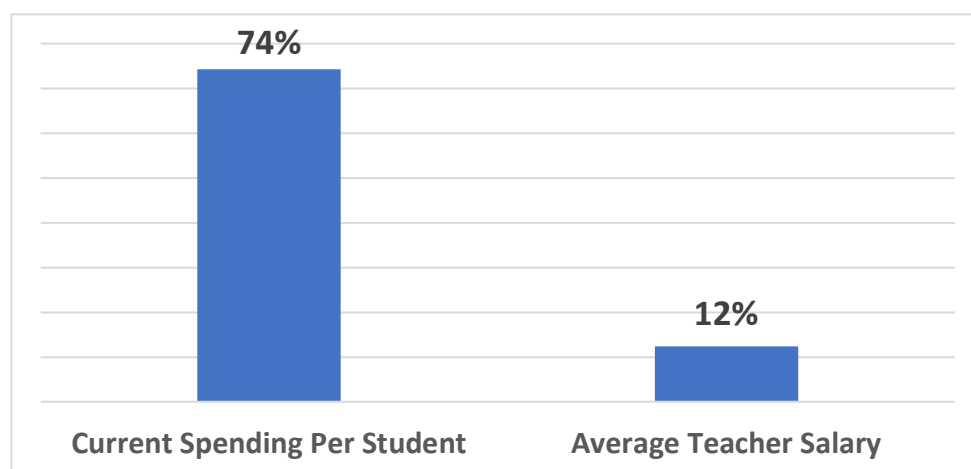
In this subsection I consider the increase in *current* spending per student in New Hampshire public schools since 2001. Current spending per student equals total spending per student minus expenditures on capital & debt service. In 2019, 78.3 percent of current spending was spent on

personnel in salaries, wages, and benefits in New Hampshire public schools.³ Given publicly available data reported by the U.S. DOE, I am able to analyze changes in teacher salaries and staffing in New Hampshire public schools over time, and since capital and debt service expenditures are not used for personnel expenses, they are excluded from the analyses below.

Between 2001-2019, adjusted for inflation, New Hampshire public schools saw a 74 percent increase in current spending per student (figure 2.7). Nevertheless, average teacher salaries increased by only 12 percent, adjusted for inflation, during that time. While there was a 74 percent higher level of funding for current spending for each New Hampshire public school student in 2019 as compared to 2001, their teachers were paid only 12 percent more on an inflation-adjusted basis.

The good news is that New Hampshire public school teachers in 2019 were better paid than New Hampshire teachers in 2001, 12 percent more, over and above the increase in the cost of living during this period. The bad news is that taxpayer funding per student for current expenditures increased by 74 percent per student, yet the salary increases for teachers were far below this increase.

Figure 2.7. Change in New Hampshire Public School Current Spending Per Student and Average Teacher Salaries, 2001-2019



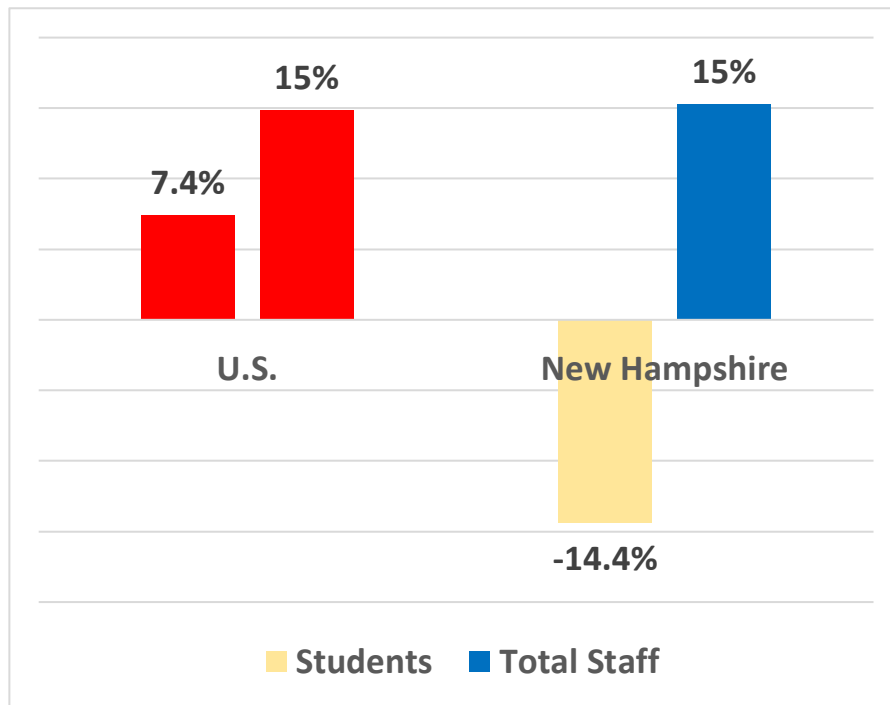
Source and Notes: Data on New Hampshire public school current spending per student and teacher salaries, come from the *Digest of Education Statistics*, National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>. Current spending per student and teacher salaries were adjusted for inflation using the PCE price index, <https://fred.stlouisfed.org/series/PCEPI>.

How could New Hampshire public schools receive such a large increase in taxpayer funding and yet not increase teacher salaries by nearly as much? One big reason is that they increased staffing levels.

As shown in the right-hand-side of figure 2.8 below, while the number of students served in New Hampshire public schools decreased by 14.4 percent between 2001-2019, the number full-time equivalent (FTE) total staff increased by 15 percent.

³ <https://www.census.gov/programs-surveys/school-finances/data/tables.html>.

Figure 2.8. Staffing Surge in Public Schools, U.S. and New Hampshire, 2001-2019

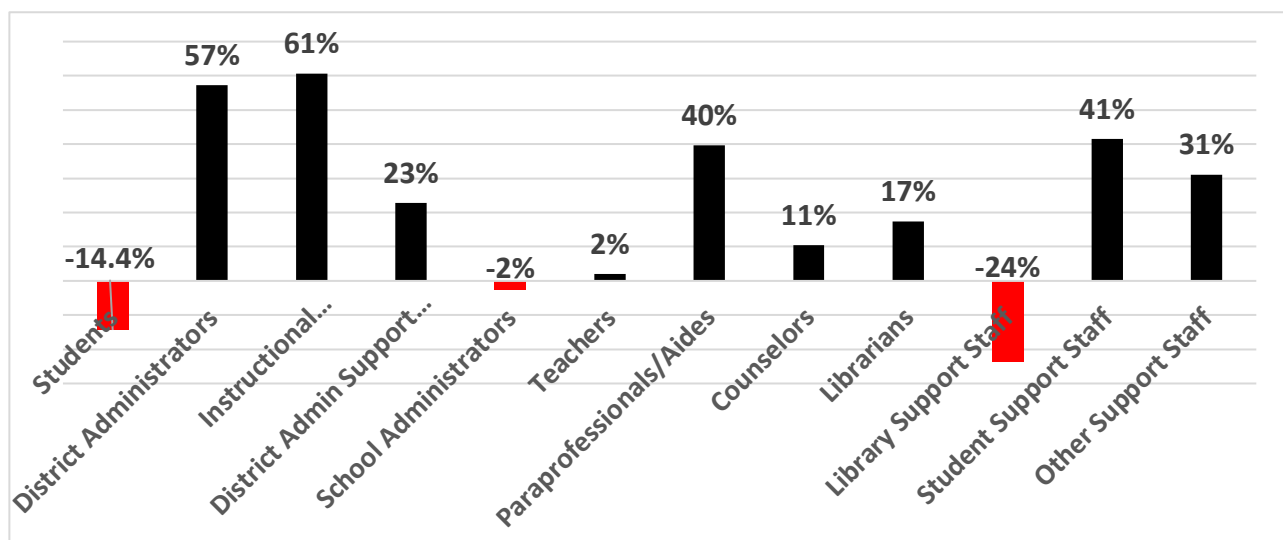


Source: *Digest of Education Statistics*, National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

This staffing surge in New Hampshire public schools was more pronounced than the staffing surge in public schools nationally. In U.S. public schools overall, the number of students increased by 7.4 percent between 2001-2019, while the number of FTE staff increased by 15 percent.

Figure 2.9 shows the staffing surge in New Hampshire public schools by employee category. Readers will notice extremely large differences in staffing increases across categories.

Figure 2.9. New Hampshire Public School Staffing Surge by Employee Category, 2001-2019



Source: *Digest of Education Statistics*, National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

The largest percentage increase in staff in New Hampshire public schools between 2001-2019 occurred in district administration. Instructional coordinators, who are considered district administrators by the U.S. DOE, increased by 61 percent, while the number of other district administrators increased by 57 percent. The category of district-level administrators does not include school-level administrators such as principals and assistant principals. The category district-level administrators also does not include district- or school-level administrative support staff such as administrative assistants and clerical workers, as these are counted as support staff.

Student support staff increased by 41 percent, while the number of paraprofessionals/aides increased by 40 percent. Student support staff includes personnel such as social workers, psychologists, audiologists, speech-language pathologists, other professional support personnel, and coaches and other athletic personnel who are not teachers. If coaches and other athletic personnel are also teachers, then these individuals are counted as teachers.

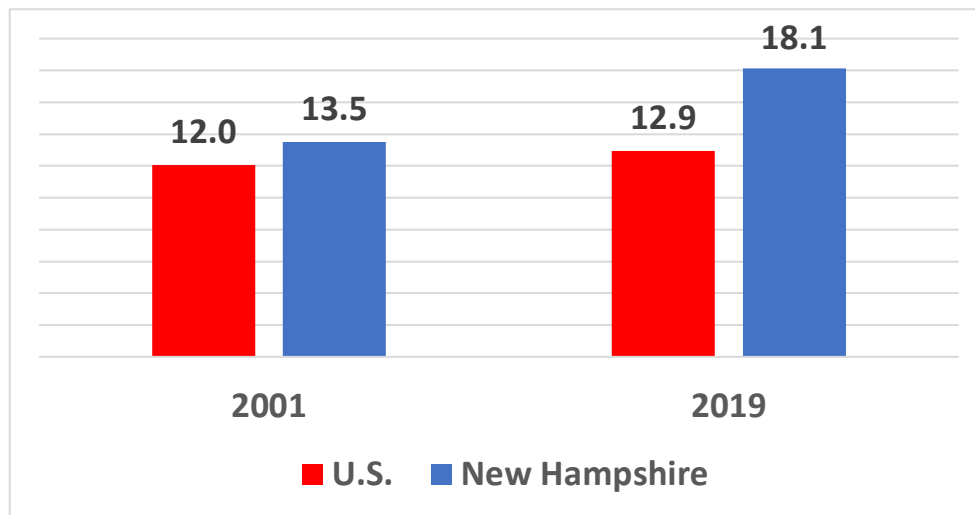
The number of teachers increased by 2 percent, and school administrators declined 2 percent.

State officials should look into the large decline in library support staff (-24 percent) along with the extremely large increases in student support staff (41 percent) and other support staff (31 percent). Long experience with public school staffing data suggests to me that it is extremely likely that in later years at least some library support staff were coded as student support or other support staff. It would be worth examining how library support personnel were coded in 2001 relative to how they have been coded in more recent years.

Public school students in New Hampshire had significantly more access to public school staff in 2019 than their predecessors did in 2001. Specifically, the number of full-time equivalent public school staff per 100 students increased from 13.5 in 2001 to 18.1 in 2019 (figure 2.10 below).

This increase is massive over a short period of time, representing a 34.1 percent increase in staffing per 100 students during this 20-year period. It also yields dramatically more staffing for New Hampshire public schools relative to the national average. In 2019, public schools nationally employed 12.9 FTE staff per 100 students, while New Hampshire public schools employed 18.1 staff per 100 students—5.2 more staff per 100 students than the national average.

Figure 2.10. Public School Staff Per 100 Students



Source: *Digest of Education Statistics*, National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

The increases in staffing since 2001 in public schools present an opportunity cost to taxpayers, but also an opportunity cost to the public school districts themselves. The opportunity cost to taxpayers will be presented in section IV.

The opportunity cost to school districts manifested itself as follows. Every additional dollar spent on hiring new staff above what was needed to accommodate student enrollment growth could not be used to increase teacher salaries further or otherwise enhance classroom instruction. As stated above, New Hampshire public school districts received 74 percent more taxpayer funding in 2019 relative to 2001, on an inflation-adjusted and per student basis, while average teacher salaries increased by only 12 percent over this time period, adjusted for inflation.

Given their disproportionate focus on hiring more staff, it is perhaps not surprising that New Hampshire public schools pay their teachers less than the national average. In 2021 (the most recent data available allowing for national comparison), teacher salaries in New Hampshire averaged \$59,182 per year, while the national average was 5.3 percent higher at \$62,304 per year.⁴ The cost of living in New Hampshire is estimated to be 9.9 percent higher than the national average, which makes the lower teacher salaries in New Hampshire even more noteworthy. This preference for

⁴ National Center for Education Statistics at the U.S. DOE, https://nces.ed.gov/programs/digest/d20/tables/dt20_211.60.asp.

hiring staff rather than raising teacher pay could make it harder for districts to recruit teachers going forward.

The staffing surge in New Hampshire public schools after 2001 has presented a stark opportunity cost. Given the importance of effective teachers⁵ in student learning, it is far from clear that the broad increases in non-teaching staff were a net benefit to New Hampshire students. That said, it would be simplistic to suggest that raising teacher salaries is the single best way to improve student learning. Later in this report, I evaluate to what extent, if any, the large increase in taxpayer resources given to New Hampshire public schools (and the resulting large staffing surge) increased student learning.

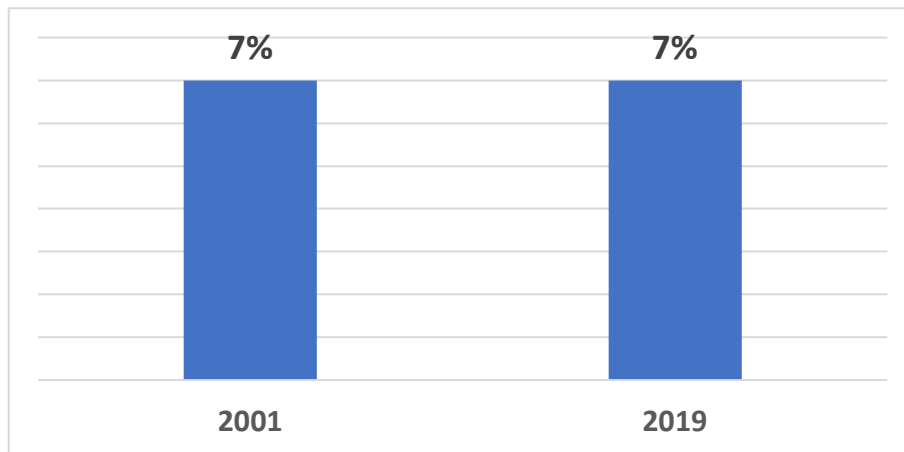
Were New Hampshire Students Changing?

Perhaps public school students in New Hampshire in 2020 were very different than their 2001 counterparts, and these differences could justify some of the large staffing increases. For example, if New Hampshire public schools experienced a large increase in special-needs students, the additional support staff might be needed. I consider three characteristics of students: child poverty rates, the percent of students classified as having an Individualized Education Plan (IEP), and the percent receiving English Language Learner (EL) services. While two of these three characteristics were more prevalent in New Hampshire public schools in 2019 relative to 2001, those changes do not appear to have necessitated the extremely large public school staffing increases.

First, child poverty rates were 7 percent in both 2001 and 2019. Child poverty rates did increase nationally and in New Hampshire during the Great Recession (2008-2012), but these rates tended to fall after 2012, until the COVID-19 pandemic. Child poverty rates were only 7 percent in New Hampshire in 2019 (figure 2.11 below). However, child poverty rates in the United States were 17 percent in both 2001 and 2019. If lower-income students truly need more staff relative to students from middle-and higher-income families, then New Hampshire should have less staffing relative to public schools nationally, as New Hampshire has a much lower percentage of low-income students. Instead, New Hampshire has 5.2 more FTE staff per 100 students than the national average.

⁵ There are myriad empirical studies that find the effectiveness of individual teachers is a strong predictor of student learning outcomes. See, for example, Rivkin, et al. (2005), <https://hanushek.stanford.edu/sites/default/files/publications/Rivkin%2BHanushek%2BKain%202005%20Ecta%2073%282%29.pdf>.

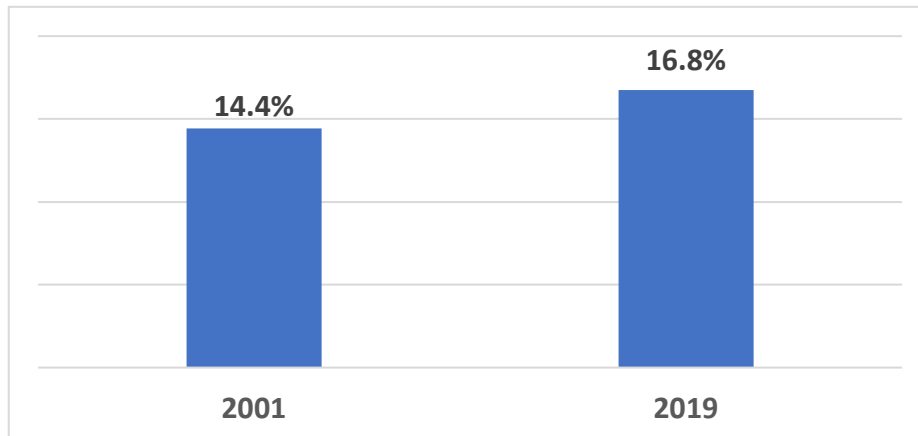
Figure 2.11. New Hampshire Child Poverty Rates



Source: U.S. Census Bureau, Census 2000 Supplementary Survey, 2001 Supplementary Survey, 2002 through 2021 American Community Survey, retrieved from: <https://datacenter.kidscount.org/data/tables/43-children-in-poverty#detailed/1/any/false/2048,1729,37,871,870,573,869,36,868,867/any/321,322>.

Some students need specialized services that necessitate more staffing. Students with special needs receive an Individualized Education Plan (IEP), essentially a promise to provide additional services. In 2001, 14.4 percent of New Hampshire public school students had an IEP. The percentage of students with an IEP increased to 16.8 percent by 2019 (figure 2.12).

Figure 2.12. Percent of Students with an Individualized Education Plan (IEP)



Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/programs/digest/>.

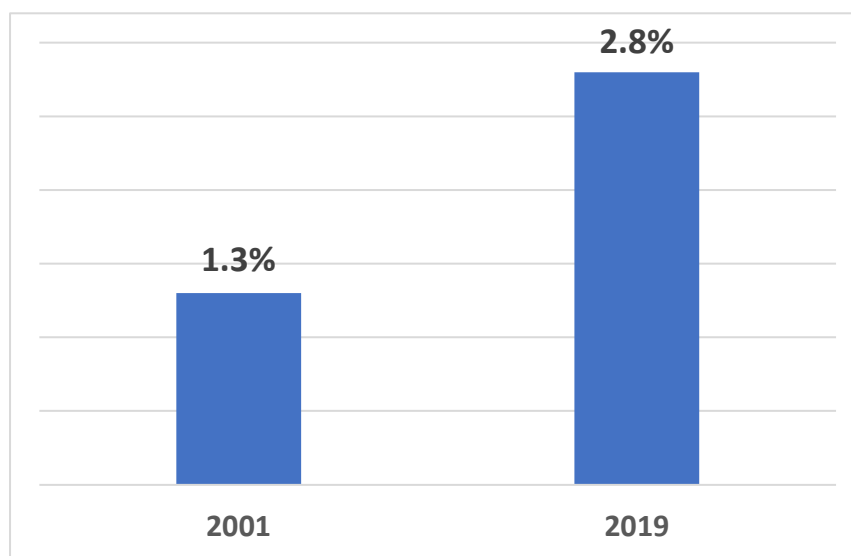
The national average also increased over this time, with 13.3 percent of American students having an IEP in 2001, and 14.1 percent having one in 2019. So New Hampshire public schools had a higher percentage of students needing extra services (16.8 percent) relative to the national average (14.1 percent). Nevertheless, this higher rate of special education classification does not imply that New Hampshire public schools needed such a dramatic increase in staffing. Though the percentage of students with special needs increased relative to the total student population, the number of students

with special needs fell. There were 147 fewer special needs students in New Hampshire public schools in 2019 relative to 2001, yet the number of FTE staff was 4,284 higher in 2019 as vs. 2001. Clearly, 4,284 additional staff are not needed to serve 147 fewer special needs students with an IEP.

This reasoning also applies to the growth in English Language Learner (EL) students in New Hampshire public schools (figure 2.13). While the percent of students receiving EL services increased from 1.3 percent in 2001 to 2.8 percent in 2019, the number of EL students increased by only 2,264 students statewide. Again, this numerical increase in EL students cannot explain why New Hampshire public schools increased their staffing by more than 4,000 FTE personnel between 2001-2019.

Although the percentage of EL students increased in New Hampshire between 2001-2019, the percentage of EL students in the Granite State remained far below the national average in 2019. Just 2.8 percent of New Hampshire public school students received EL services in 2019, while the national average was 9.9 percent, over 3.5 times as large.⁶

Figure 2.13. Percent of Students Receiving English Language Learner (EL) Services

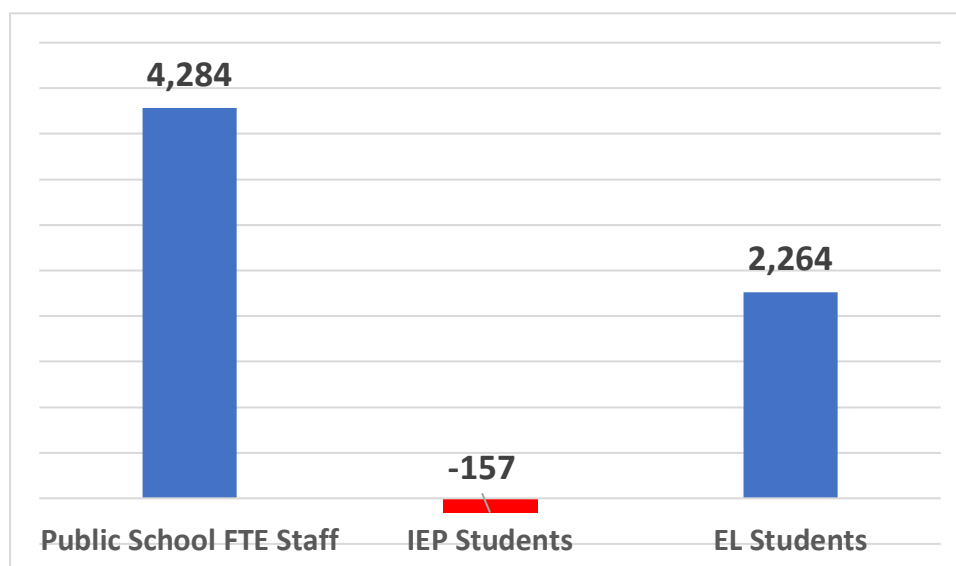


Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/programs/digest/>.

Please consider this thought experiment: If each additional EL student in New Hampshire public schools had been provided a dedicated one-one-one educator, there would have been 2,020 additional staff (figure 2.14 below) who remained to serve the 30,000 fewer students in New Hampshire public schools in 2019 relative to 2001.

⁶ National Center for Education Statistics, U.S. DOE, https://nces.ed.gov/programs/digest/d21/tables/dt21_204.20.asp?current=yes.

Figure 2.14. Increases in Total Staff, IEP Students, and EL students in New Hampshire Public Schools, 2001-2019



Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/programs/digest/>.

The data in table 2.3 below show the differences in student characteristics between public schools nationally and in New Hampshire in 2019. These data are used to show in figure 2.15 the differences in the number of students of each type who would be present in a 500-student public school in New Hampshire relative to the national average.

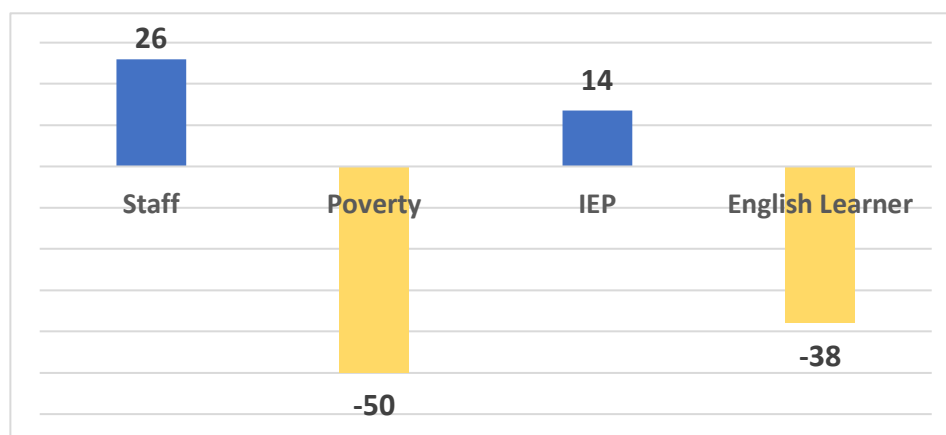
Table 2.3. Student Characteristics

	Student Poverty	IEP	English Learner
U.S.	17%	14.1%	9.9%
New Hampshire	7%	16.8%	2.8%

Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/programs/digest/> and U.S. Census Bureau, Census 2000 Supplementary Survey, 2001 Supplementary Survey, 2002 through 2021 American Community Survey, retrieved from: <https://datacenter.kidscount.org/data/tables/43-children-in-poverty#detailed/1/any/false/2048,1729,37,871,870,573,869,36,868,867/any/321,322>.

As shown below in figure 2.15, a representative 500-student public school in New Hampshire—representative of the state average—would have 14 more special needs (IEP) students than the national average, 50 fewer students living in families who are in poverty, and 38 fewer English Language Learner (EL) students. However, that representative New Hampshire public school that had 500 students would also have **26 more FTE staff** relative to the national average.

Figure 2.15. For a 500-Student Public School, Average Differences in Staffing and Students Between New Hampshire and the National Average



Source: Author calculations using the data from table 2.3 above.

Considering the evidence, I see no reason why student characteristics or changes in student characteristics necessitated the large FTE staffing increases (15 percent) in New Hampshire public schools from 2001-2019, especially when the student population fell by 14.4 percent.

Sample Districts

Table 2.4 shows the changes in the number of students and total staff in six sample districts between 2001-2019. Student enrollment declined substantially in each of the six districts during this time, but the number of staff increased in three of the districts—16.4 percent in Claremont, 1.1 percent in Nashua, and 2.1 percent in New Castle.

Table 2.4. Public School Students and Staff, 2001 and 2019

District	Number of Students 2001	Number of Students 2019	Total Staff 2001	Total Staff 2019	% Change Students 2001 to 2019	% Change Total Staff 2001 to 2019	Total Staff Per 100 Students 2001	Total Staff Per 100 Students 2019
CLAREMONT	2,114	1,783	338.6	394.2	-15.7%	16.4%	16.0	22.1
CONTOOCH VALLEY	3,227	2,176	427.9	360.6	-32.6%	-15.7%	13.3	16.6
MANCHESTER	17,407	13,522	1,804.9	1,697.2	-22.3%	-6.0%	10.4	12.6
NASHUA	13,668	11,229	1,731.9	1,750.4	-17.8%	1.1%	12.7	15.6
NEW CASTLE	71	45	9.5	9.7	-36.6%	2.1%	13.4	21.6
PLYMOUTH	524	419	103.6	94.4	-20.0%	-8.9%	19.8	22.5

Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/ccd/elsi/>.

While the number of total staff declined in the other three districts, their declines were much smaller than the declines in their student population. Thus, for each of the six districts, there were large increases in the number of FTE total staff per 100 students between 2001-2019. Interestingly, while both are large public school districts, Nashua Public Schools employed three more FTE staff per 100 students relative to Manchester.

Tables 2.5a and 2.5b below report the percent changes in students and personnel in each staffing category from 2001 to 2019.

Table 2.5a. Percent Change in Public School Students and Staff Categories, 2001-2019

District	% Change Students 2001 to 2019	% Change District Admin 2001 to 2019	% Change District Admin Support 2001 to 2019	% Change School Admin 2001 to 2019	% Change School Admin Support 2001 to 2019	% Change Teachers 2001 to 2019
CLAREMONT	-15.7%	0.0%	-27.7%	33.3%	-21.5%	-9.1%
CONTOOCOOK VALLEY	-32.6%	-50.0%	-42.0%	-18.8%	-6.2%	-11.1%
MANCHESTER	-22.3%	70.8%	-7.9%	-3.1%	-17.6%	-9.9%
NASHUA	-17.8%	-44.0%	1.7%	21.2%	13.2%	2.2%
NEW CASTLE	-36.6%			100.0%	-42.9%	22.7%
PLYMOUTH	-20.0%	16.7%	-11.1%	-50.0%	0.0%	-2.9%

Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/ccd/elsi/>.

Manchester and Nashua had opposite patterns with respect to administration: Manchester increased district administration, but reduced district administration support and school administration and school administration support personnel. Nashua reduced district administration, but increased district administration support and school administration and school administration support personnel. Appendix Table 2 reports more detailed data on staffing for these six districts and all other public school districts in New Hampshire.

Per administration employees in Manchester and Nashua, Appendix Table 2 shows that after these changes Manchester and Nashua employed about the same number of district administrators. Manchester increased its total number of administrators (district plus school administrators) while decreasing the number of teachers employed. Nashua reduced its number of total administrators and modestly increased its teacher workforce between 2001-2019. That said, all six districts, including Manchester and Nashua, had the capacity for smaller class sizes in 2019 relative to 2001

because they either increased the number of teachers or had smaller reductions in the number of teachers employed, relative to their declines in the number of students served.

Also, many districts in New Hampshire, including New Castle, report employing no district administrators.

Table 2.5b. Percent Change in Public School Students and Staff Categories, 2001-2019

District	% Change Students 2001 to 2019	% Change Aides/Parapros 2001 to 2019	% Change Counselors 2001 to 2019	% Change Librarians 2001 to 2019	% Change Library Support 2001 to 2019	% Change Other Support 2001 to 2019
CLAREMONT	-15.7%	30.0%	-11.1%	-48.7%	-100.0%	101.6%
CONTOOCCOOK VALLEY	-32.6%	12.6%	8.9%	56.0%	-100.0%	-59.4%
MANCHESTER	-22.3%	0.2%	-0.9%	36.9%	-94.7%	2.7%
NASHUA	-17.8%	7.6%	12.9%	48.4%	-57.9%	-7.0%
NEW CASTLE	-36.6%		400.0%			200.0%
PLYMOUTH	-20.0%	25.0%	0.0%	0.0%	-100.0%	-57.9%

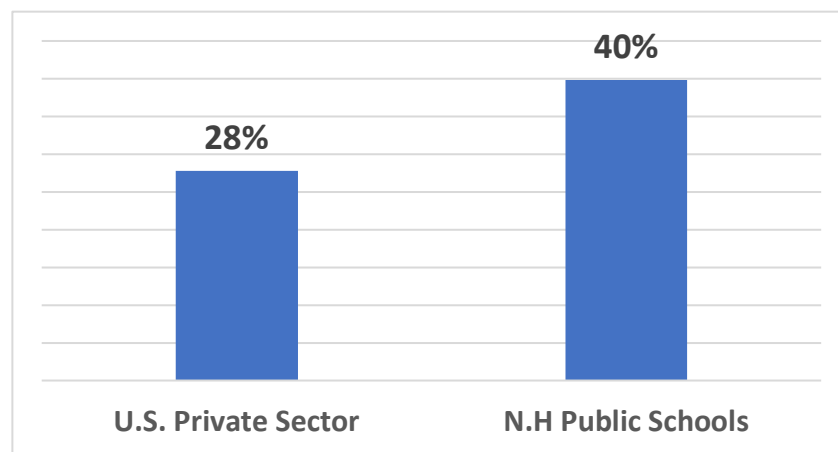
Source: National Center for Education Statistics, U.S. DOE, <https://nces.ed.gov/ccd/elsi/>.

Table 2.5b shows the percent changes in students and staffing from 2001-2019 for all remaining public school employee categories. All six sample districts employed more paraprofessionals/aides in 2019 relative to 2001, despite the significant declines in the number of students served. Again, the declines in library support staff may be due to these employees being classified into one of the support categories. For example it is hard to believe that Claremont eliminated all library support positions between 2001-2019 and simultaneously increased its “other” support personnel by 101.6 percent. Perhaps these figures for Claremont represent a coding issue, where library support personnel were coded one way in 2001 and a different way in more recent years.

III. Growth in Compensation for N.H. Public School Employees, 2001-2019

The U.S. Census Bureau annually collects data on the amount of total compensation paid to public school employees in each state, where compensation includes wages, salaries, and benefits. Figure 3.1 shows the increase in total compensation paid, per employee, to New Hampshire public school staff between 2001-2019, adjusted for the increase in the cost of living. Over this time, New Hampshire public school staff (teachers, administrators, support personnel—everyone employed by Granite State public schools) experienced a 40 percent real increase in their compensation (pay plus benefits), on average, over and above the increase in the cost of living. That is, a New Hampshire public school employee earning average compensation in 2019 had 40 percent more real purchasing power than a public school employee earning average New Hampshire public school employee compensation in 2001.

Figure 3.1. Increase in Real (inflation-adjusted) Compensation 2001-2019



Source: Authors calculations using data from the U.S. Bureau of Labor Statistics, <https://www.bls.gov/bls/news-release/ecec.htm#2003>, and the U.S. Bureau of the Census, <https://www.census.gov/programs-surveys/school-finances/data/tables.html>. The inflation-adjustment was using the PCE Price Index, <https://fred.stlouisfed.org/series/PCEPI>.

The U.S. Bureau of Labor Statistics (BLS) periodically reports hourly compensation for all employed private sector workers. Adjusting hourly compensation for the increase in the cost of living, the average American private sector worker saw an increase in purchasing power of 28 percent between 2001-2019 (figure 3.1).

Comparing the two groups, New Hampshire public school employees experienced a real increase in their purchasing power that was 12 percentage points higher than the increase in the private sector between 2001-2019.

Given that average teacher salaries increased only 12 percent above the cost of living during this time, the public education system in New Hampshire must have increased the salaries of administrators and all other non-teachers a lot, and/or increased the generosity of benefit packages (health insurance, retirement, etc.) significantly—in addition to hiring additional staff as the number of students served declined. And the increases in total compensation (salary plus benefits) per New

Hampshire public school employee overall significantly exceeded the increase in total compensation per American private-sector employee, adjusted for inflation, between 2001-2019.

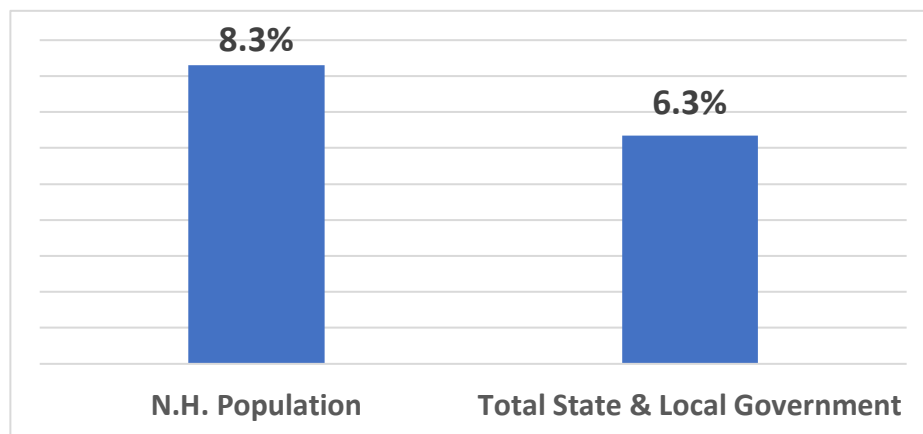
Thus, one opportunity cost of the public school staffing surge was that teacher compensation did not rise as fast as it could have. Another opportunity cost of the public school staffing surge is presented in the next section—limits on employment for all other state and local government services when these other government services are considered collectively.

IV. What Government Functions Have Been State and Local Priorities in New Hampshire Since 2001?

The state and local governments provide a variety of services to the people of New Hampshire, including libraries, roads, police and fire protection, courts, corrections, public colleges and universities, water and sewer, parks and recreation areas, protection of natural resources, administration of programs for and payments to the less fortunate, and K-12 public schools. There are fierce and perennial debates about whether each of these government services receives too much, too little, or about the right level of taxpayer funding. In this section, I provide information on employment changes and changes in salaries in these government functions after 2001. Changes in employment will allow taxpayers and policymakers to see which state and local government functions have been the highest priorities in New Hampshire since 2001, and which have not.

Using data from the U.S. Census Bureau's Annual Survey of Public Employment and Payroll (ASPEP), I first show the changes in the number of full-time equivalent (FTE) employees in various state and local government functions between March 2001 and March 2019. The year 2001 was chosen as the reference year to be consistent with the rest of this report.

Figure 4.1. Change in Total FTE State and Local Government Employment and the Population of New Hampshire, 2001-2019

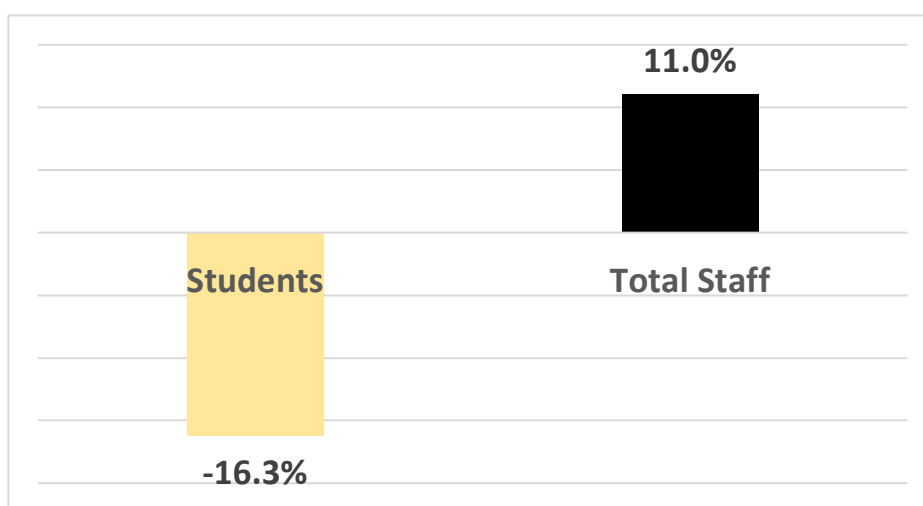


Source: Author calculations using the U.S. Census Bureau's Annual Survey of Public Employment and Payroll (ASPEP) annual data files, <https://www.census.gov/programs-surveys/apes.html> and <https://www2.nhes.nh.gov/GraniteStats/SessionServlet?page=Population.jsp&SID=18&state=000000&stateName=New%20Hampshire>.

In March 2001, the state and local governments in New Hampshire collectively employed 65,689 FTE employees according to the U.S. Census Bureau's ASPEP survey. By March 2019, FTE employment had increased to 69,858. As shown in figure 4.1 above, the increase in state and local government employment from 2001 to 2019 was 6.3 percent, while the increase in the population of New Hampshire was 8.3 percent. Thus, in terms of public sector employment relative to the size of the population served, state and local government was a bit smaller overall in 2019 relative to 2001.

However, the changes in employment relative to workload varied significantly across government functions. Specifically, K-12 public schools saw a substantial increase in employment despite a substantial decline in the number of students served. As shown in figure 4.2, as the number of FTE public school students in district schools decreased by 16.3 percent from 2001-2019, the number of public school FTE employees increased by 11 percent.

Figure 4.2. Change in Total FTE Public K-12 Employment and the Number of FTE Students Served in New Hampshire Public Schools, 2001-2019 (only district public schools are included, so charter schools are excluded)



Source: Author calculations using the U.S. Census Bureau’s Annual Survey of Public Employment and Payroll (ASPEP) annual data files, <https://www.census.gov/programs-surveys/apes.html> and the annual tables from the *Digest of Education Statistics* published by the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

The changes in students served and public school employment in figure 4.2 differ from analogous data presented earlier in the report because different data sources were used to measure public school employment. The data on employment in figure 4.2 below come from the U.S. Census Bureau, where the Census Bureau does not count charter school employment. Thus, the data in this section excludes charter school student counts as well. In prior sections of the report, I used data reported by the NHED to the U.S. DOE. The virtue of the U.S. DOE data is that provides more disaggregation of employees by type (e.g. teachers, administrators, etc.). The U.S. Census Bureau provides data on employment on all other state and local government functions.

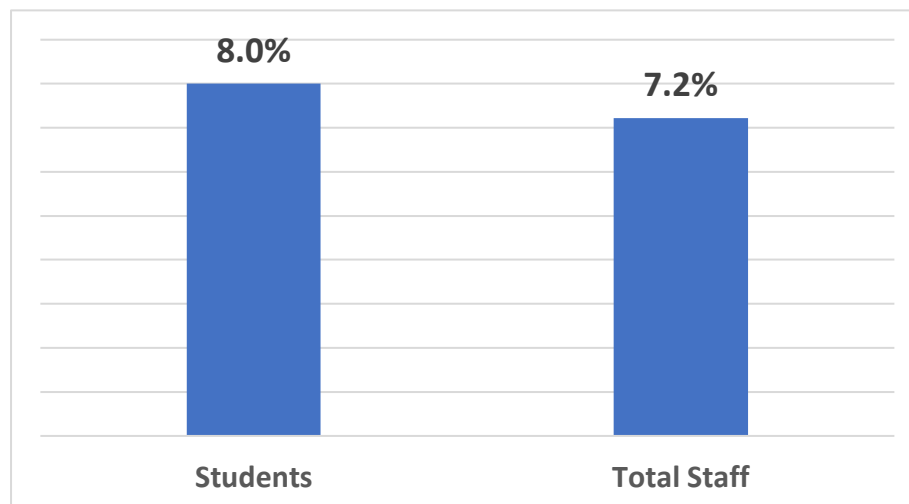
The increase in employment in New Hampshire’s K-12 public schools, while the number of students they serve fell significantly, was in stark contrast to the experience in the state’s public colleges and universities.

To measure the change in workload for public colleges and universities (as was done with K-12 public schools), I report the change in the number of FTE students between 2001-2019.

Between 2001-2019, the number of FTE public college and university employees increased by 7.2 percent while the number of FTE students served increased by 8 percent (figure 4.3). Thus, the

increase in employment in new Hampshire's public colleges and universities was roughly commensurate with, and slightly less than, the increase in the number of students they served.

Figure 4.3. Change in Total FTE Public College and University Employment and the Number of FTE Students Served, 2003-2019

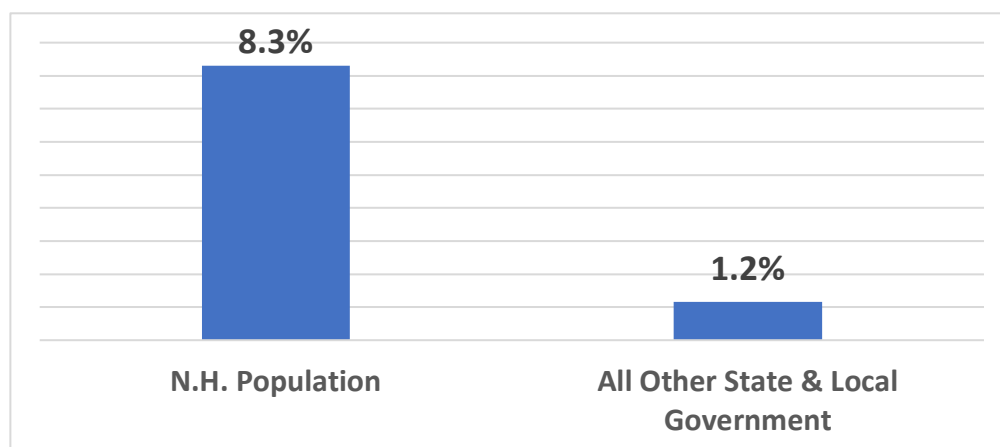


Source: Author calculations using the U.S. Census Bureau's Annual Survey of Public Employment and Payroll (ASPEP) annual data files, <https://www.census.gov/programs-surveys/apes.html> and the annual tables from the *Digest of Education Statistics* published by the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

The experience in K-12 public schools in New Hampshire was also in stark contrast to the rest of state and local government functions, where “all other state and local government functions” excludes both K-12 public schools and public colleges and universities, since both of those are broken out separately above.

As the number of Granite Staters increased by 8.3 percent between 2001-2019, FTE employment in “all other state and local government functions” increased by only 1.2 percent (figure 4.4). Thus, K-12 public education has been prioritized by state and local governments relative to other government functions as a group.

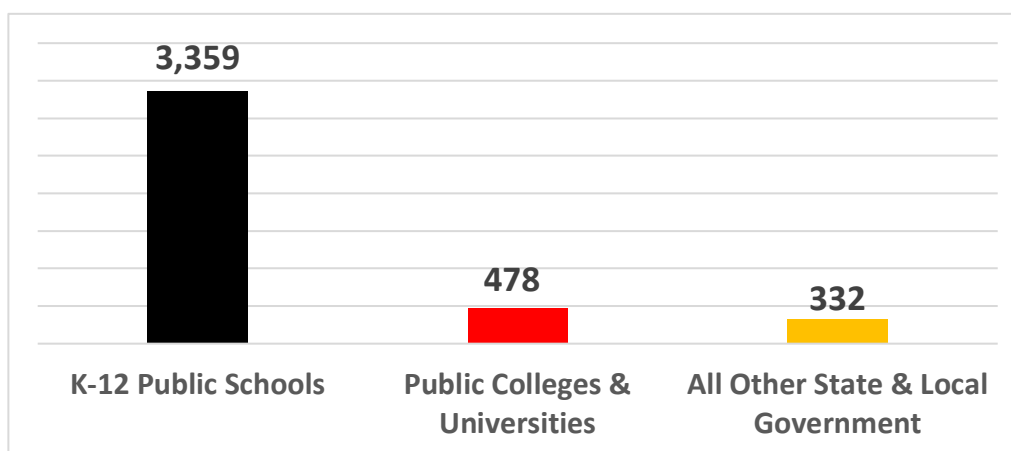
Figure 4.4. Change in Total FTE All Other State & Local Government Employment and the Population of New Hampshire, 2001-2019



Source: Author calculations using the U.S. Census Bureau's Annual Survey of Public Employment and Payroll (ASPEP) annual data files, <https://www.census.gov/programs-surveys/apes.html> and <https://www2.nhes.nh.gov/GraniteStats/SessionServlet?page=Population.jsp&SID=18&state=000000&stateName=New%20Hampshire>.

Collectively, the increase in employment in district public schools after 2001 was 3,359 FTE employees, whereas public colleges and universities experienced a net employment increase of 478 FTEs. For all other functions of state and local government, there was a net increase of only 332 FTE employees (figure 4.5).

Figure 4.5. Change in Total FTE State and Local Government Employment in New Hampshire, 2001-2019



Source: Author calculations using the U.S. Census Bureau's Annual Survey of Public Employment and Payroll (ASPEP) annual data files, <https://www.census.gov/programs-surveys/apes.html>.

There were differing patterns within the “all other state and local government” category. To highlight the largest absolute changes, the number of highway employees falling by 884 and the number of workers in fire protection increasing by 550.

Using employment as a measure of government priorities, New Hampshire’s top priority this century has been K-12 district public schools, despite the large decline in student enrollment. The rest of state and local government collectively has not been a public priority.

V. The Post-2019 K-12 Public School Funding Landscape in New Hampshire

For three reasons, it is very likely that New Hampshire public schools have experienced extremely large increases in funding in the years after 2019 and that these large increases will continue for at least a few more years after the 2022-23 academic year.

The first reason is due to the large amounts of additional federal funding, *over and above* the federal funding routinely given to public schools, that came to New Hampshire school districts from three Covid-related relief efforts for public schools. The second reason is the decline in public school enrollments that occurred in New Hampshire after 2020. The third reason is due to the increases in unspent monies that public school districts have been accruing at the end of each year. Regarding this third reason, it is possible that New Hampshire public school districts will not spend their larger fund balances in the future. However, they will be able to turn to these funds if the national or state macroeconomy enters a recession. That said, for these three reasons, it is extremely likely that expenditures per student have significantly increased since 2019 and that these increases will continue for at least a few more years after publication of this report.

I consider in turn each of these three reasons why spending in New Hampshire public schools is likely undergoing another episode of rapid and large spending increases.

Covid-Era Federal Bailouts of Public Schools

The data on public school expenditures after the 2018-19 academic year are not yet available for all states, and since that time the federal government has provided three large tranches of Covid-related relief funds for school districts. These additional funds from federal taxpayers—in addition to the typical federal funding given to public school districts—will allow school districts to significantly increase their expenditures between 2020 and 2024 and to increase their unspent end-of-year funds that may be spent after 2024.

From the three Covid-era bailouts, the federal government has provided New Hampshire public school districts a total of \$544,268,338 in Elementary and Secondary School Emergency Relief (ESSER) funds. As of December 31, 2022, New Hampshire public school districts had spent only 34.2 percent of this \$544.3 million from federal taxpayers.⁷ The remaining \$357.9 million must be spent by September 30, 2024. All across the country, public school districts are using significant portions of these ESSER funds for routine expenditures.⁸ By using these ESSER funds for routine expenditures, districts will be able to increase spending now, pad their unspent reserves, and/or to reduce property taxes. It will be interesting to see how New Hampshire public school districts decide to what extent they will engage in net increases in spending and pad their reserves, and to what extent they will reduce property taxes. (The education-specific funding tallied here does not necessarily include all Covid relief funding a school district could access.)

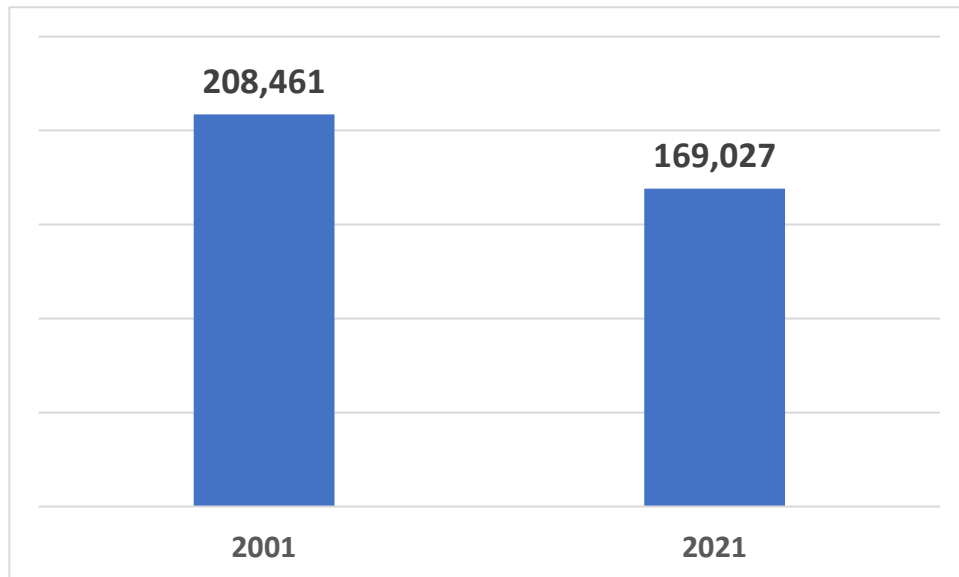
⁷ <https://covid-relief-data.ed.gov/profile/state/NH>. This U.S. DOE website is updated periodically, and at the time of writing the data were current as of December 31, 2022.

⁸ <https://edunomicslab.org/esser-spending/>

Covid-Era Enrollment Declines

New Hampshire public schools lost almost 40,000 students between 2001 and 2021, a decrease of 18.9 percent (figure 5.1). Between 2019 and 2021, New Hampshire public schools saw an enrollment decline of about 9,500 students.

Figure 5.1. Headcount Public School Enrollment in New Hampshire Public Schools

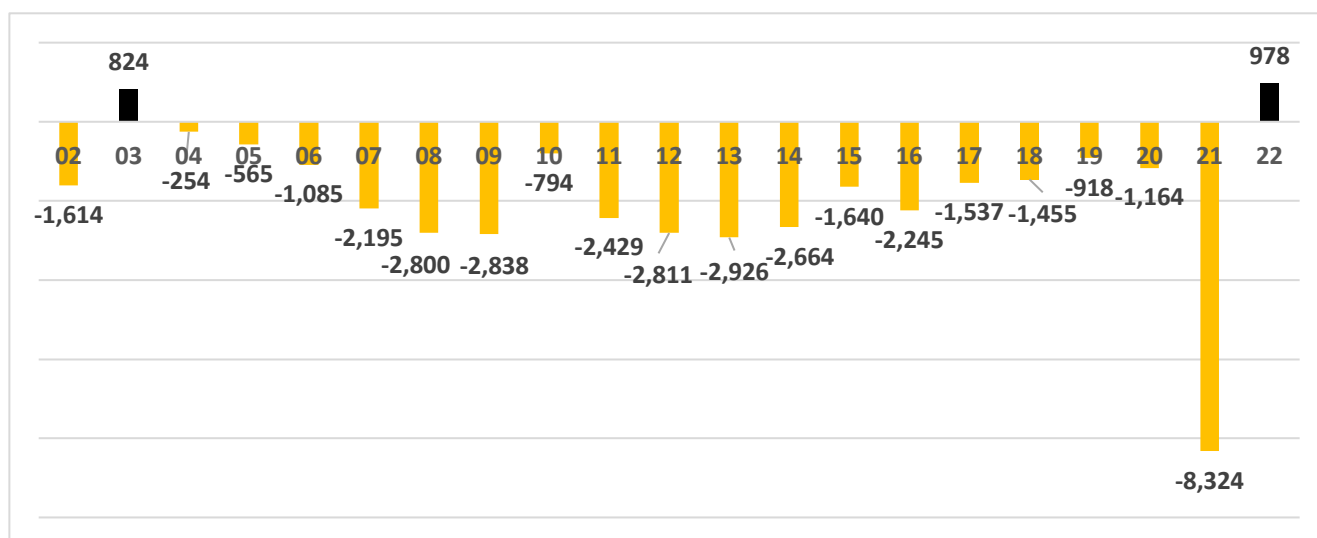


Source: National Center for Education Statistics, U.S. DOE, https://nces.ed.gov/programs/digest/current_tables.asp.

Figure 5.2 below shows the change in headcount student enrollments for the prior academic year, where “02” shows the decline in student enrollment from 2001-2002, for example. On average, New Hampshire public schools experienced statewide enrollment declines of 1,831 students from one year to the next. The median decline was 1,614 students, which means that in half the years districts lost fewer than 1,614 students and in the other half districts lost more than 1,614 students from one year to the next).

Figure 5.2 shows that in 2003 New Hampshire public schools saw an enrollment increase of 824 from the prior year. And in 2021, directionally the same as the national trend (albeit with a larger magnitude) New Hampshire public schools saw an enrollment decline of 8,324 students.

Figure 5.2. Change in Headcount Enrollment from the Prior Academic Year, New Hampshire Public Schools, Academic Years 2002-2022

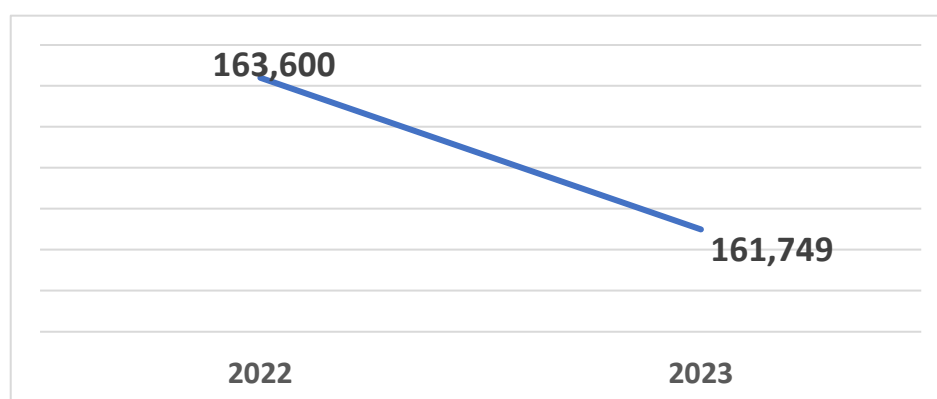


Source: National Center for Education Statistics, U.S. DOE, https://nces.ed.gov/programs/digest/current_tables.asp.

While New Hampshire public schools did see an enrollment increase of 978 students in 2022, this increase was far smaller than the decrease of 8,324 students from 2020-2021.

Further, the NHED reports that there was another enrollment decline between academic years 2022 and 2023. The NHED reports enrollments in full-time equivalents, so their enrollment numbers are lower than the headcount numbers (displayed above) reported annually to the U.S. DOE. As shown in figure 5.3, FTE enrollments dropped by another 1,851 students from 2022 to 2023 in New Hampshire public schools.

Figure 5.3. Drop in FTE Student Enrollments, New Hampshire Public Schools



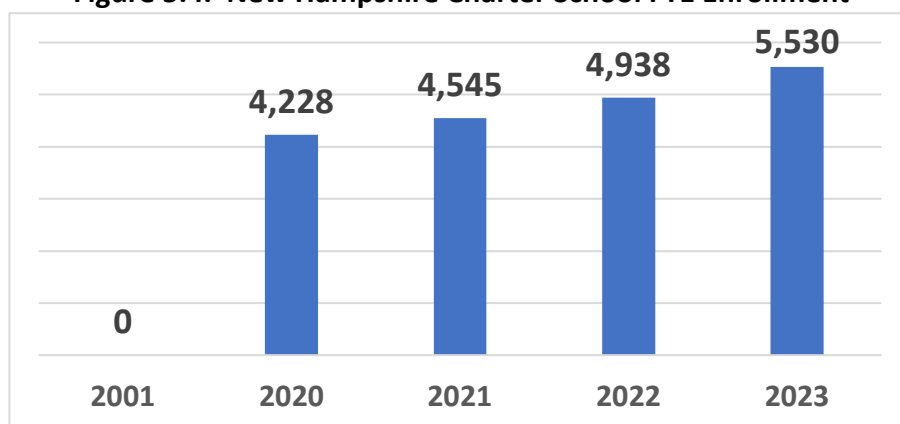
Source: NHED, <https://www.education.nh.gov/who-we-are/division-of-educator-and-analytic-resources/bureau-of-education-statistics/attendance-and-enrollment-reports>.

District public schools are experiencing even larger enrollment declines than suggested by the data above, as more New Hampshire families are choosing chartered public schools for their children. In 2001, New Hampshire had no charter schools. However, NHED reports consistent enrollment increases for charter schools in recent years (figure 5.4 below). The enrollments in figure 5.4 are FTEs and show that even during the pandemic, when district public schools nationally experienced significant enrollment declines and New Hampshire district schools experienced massive enrollment declines, N.H. charter schools saw their enrollments increase consistently, from 4,228 FTE students in 2020 to 5,530 in 2023.

Given the large net enrollment declines in district public schools, this enrollment increase in charter schools is remarkable.

Unfortunately, there is more bad news regarding student enrollments in New Hampshire public schools. In projections made prior to the pandemic, the U.S. DOE forecasts that headcount enrollments in New Hampshire public schools will decline further, from 170,004 in 2022 to 144,600 in 2031.⁹ This 144,600 forecast includes charter public school students. Thus, if charter schools in New Hampshire continue to grow, or even just maintain their enrollments, district public schools will experience additional and precipitous enrollment declines the rest of this decade, if the forecast from the federal government is even somewhat accurate.

Figure 5.4. New Hampshire Charter School FTE Enrollment



Source: NHED, <https://www.education.nh.gov/who-we-are/division-of-educator-and-analytic-resources/bureau-of-education-statistics/attendance-and-enrollment-reports>

If New Hampshire public school districts do not see increases in enrollments in 2024 and beyond, they will have a large amount of federal funding and any increases in state and local funding that will be spent on fewer students. Further, local school boards are often strongly supported by public school employees, and given that political support, they may be reluctant to reduce property tax rates, except when required by state law, when they serve fewer students, which means local funding could significantly increase on a per student basis. In the next several years, the amount of property tax revenue raised by local school boards relative to the number of students they actually serve is a trend worth watching carefully.

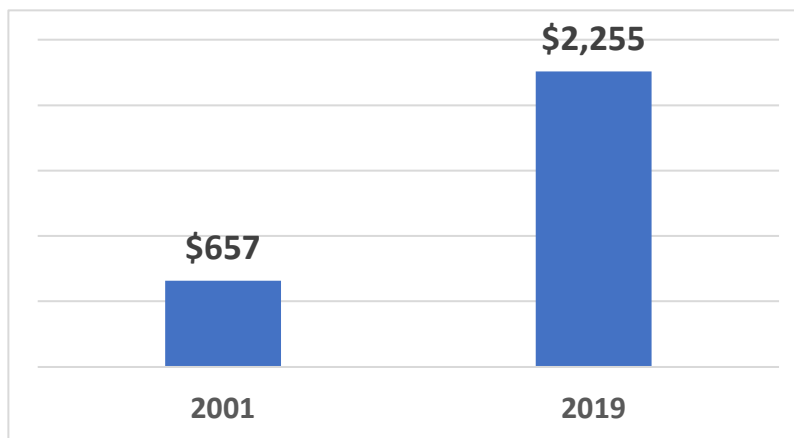
⁹ Source: National Center for Education Statistics, U.S. DOE, https://nces.ed.gov/programs/digest/d22/tables/dt22_203.20.asp?current=yes.

Unspent School District Fund Balances

At the end of each school year, school districts have unspent funds. These end-of-year funds reflect revenues received in prior years but not spent. These fund balances are available to be used to pay future expenses, including debt obligation, capital expenses, and to serve as rainy-day funds. Unspent end-of-year fund balances are reported in three separate categories—debt service funds, bond funds, and “other” funds. Debt must be repaid, older school buildings need to be repaired, and very old school buildings need to be replaced. Thus, for the discussion below, I exclude debt service and bond funds, and only consider unspent “other” fund balances.

Figure 5.5 shows the change in unspent “other” fund balances on a per student and inflation-adjusted basis between 2001-2019. Unspent other fund balances, those unspent end-of-year funds not earmarked for debt service or future capital projects, held by New Hampshire public school districts at the end of the academic year, increased by 243 percent between 2001- 2019—from \$657 per student to \$2,255 per student, on a real inflation-adjusted basis.

Figure 5.5. Real (inflation-adjusted) Unspent Year-End “Other” Funds, 2001 and 2019
(“Other” funds excludes unspent funds earmarked for capital projects and debt service)



Source: Data reported annually by the NHED to the National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/ccd/elsi/tableGenerator.aspx>. 2001 spending figures were adjusted upwards to account for the rise in the cost of living between 2001-2019 using the PCE price index, <https://fred.stlouisfed.org/series/PCEPI>.

This increase in unspent fund balances suggests that New Hampshire public school districts collected more funding than needed to educate students between 2001-2019, even with the negative economic shock of the Great Recession. Every entity needs some degree of cash reserves, of course. Nevertheless, this substantial increase in fiscal health suggests that funding has not been a challenge for New Hampshire school districts during this time.

Given the large federal Covid bailout funds, the student enrollment declines that are expected to continue, and the increases in unspent fund balances in recent years, it is extremely likely that New Hampshire public schools will experience another episode of rapid increases in expenditures per student, and these rapid increases in spending likely began after the 2018-19 academic year.

VI. New Hampshire Public Schools Got a Large Influx of Taxpayer Funding in Recent Decades: Are New Hampshire Students Learning More?

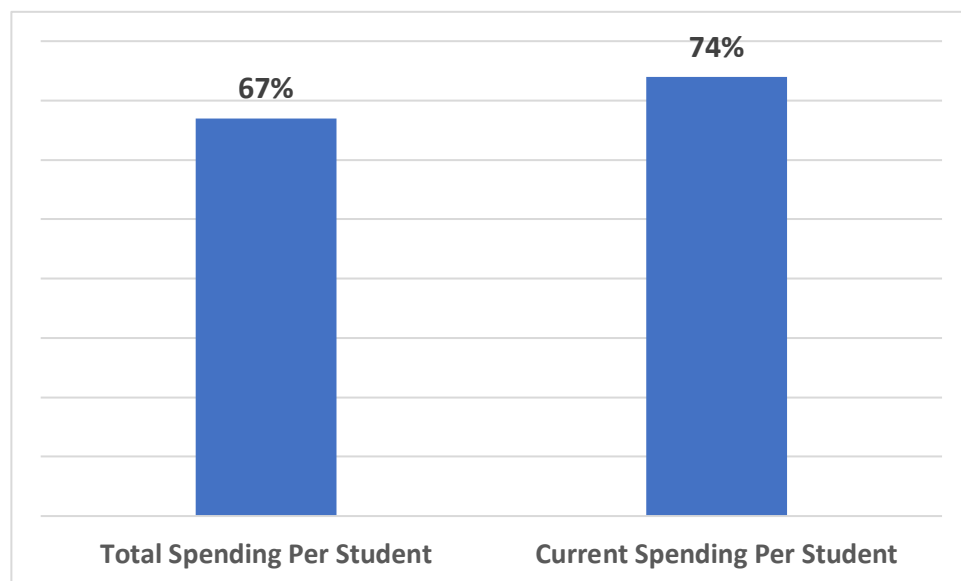
When policymakers decided to spend more taxpayer dollars on K-12 public schools in recent decades, presumably they believed that the increase in funds would improve learning outcomes for students. In this section, I document the large increases in taxpayer funding given to New Hampshire public schools and the return on those investments.

Increases in Taxpayer Funding for New Hampshire Public Schools Over Time

From 2001-2019, per-student expenditures on New Hampshire public schools increased dramatically. Total spending per student increased by 67 percent more than the cost of living from 2001-2019, while current spending per student increased by 74 percent (figure 6.1). As stated above, current spending is total spending minus expenditures for capital and debt service.

A student in a New Hampshire public school in 2019 had 67 percent more total expenditures devoted to their education relative to a New Hampshire public school student in 2001—and 74 percent more in current expenditures.

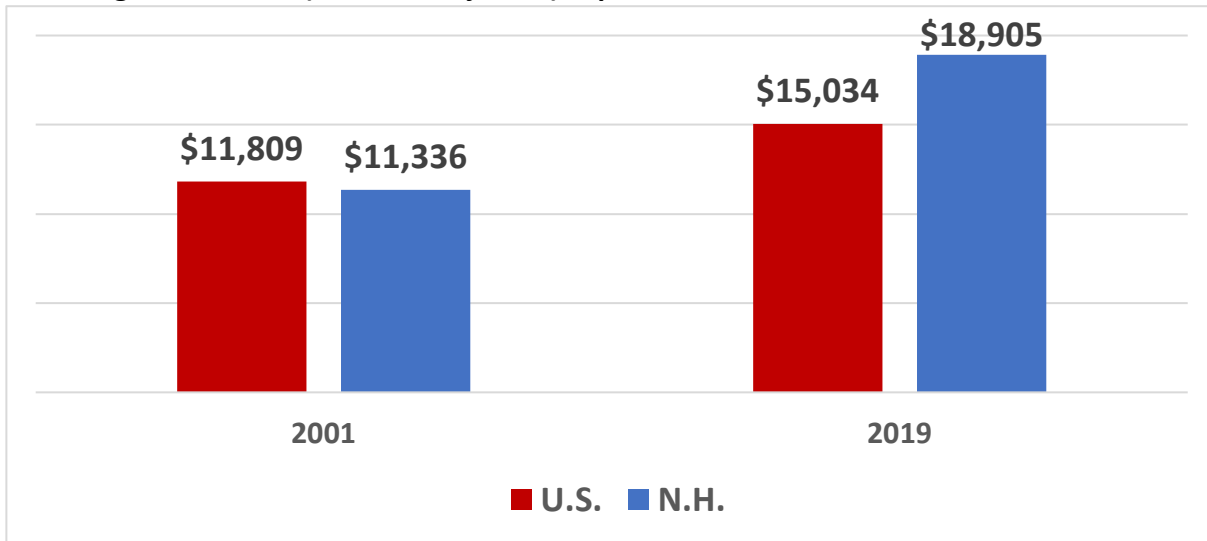
Figure 6.1. Inflation-Adjusted Change in Total and Current Spending Per Student in New Hampshire Public Schools, Academic Years 2001-2019



Source: Actual data on current spending per student are from the Digest of Education Statistics, National Center for Education Statistics, U.S. DOE. The inflation adjustment was made using the PCE Price Index, <https://fred.stlouisfed.org/series/PCEPI>. AY 2020 current spending comes from <https://nces.ed.gov/ccd/elsi/>.

As stated previously, in 2001 New Hampshire public schools were spending almost \$500 less per student than the national average, but by 2019, they were spending almost \$4,000 more per student than the national average (figure 6.2).

Figure 6.2. Real (inflation-adjusted) Expenditures Per Student in Public Schools



Source: Data reported annually by the NHED and other state departments of education to the National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/d03/tables/dt168.asp> and https://nces.ed.gov/programs/digest/d21/tables/dt21_236.75.asp?current=yes. 2001 spending figures were adjusted upwards to account for the rise in the cost of living between 2001-2019 using the PCE price index, <https://fred.stlouisfed.org/series/PCEPI>.

The cost of living in New Hampshire is estimated to be 9.9 percent more than the national average. In 2019, New Hampshire public schools were spending 25.7 percent more than the national average. Therefore, New Hampshire public school students have significantly more spent on their public schools relative to the national average.

Was There a Return on This Large Increase in Taxpayer Spending?

Since 2003, every state has been required by federal law to participate in the National Assessment of Educational Progress (NAEP). NAEP is a battery of exams given to a sample of students in each state, and the NAEP exams are often “considered the ‘gold standard’ of assessments.”¹⁰ Further, research has shown that improvements in state-level NAEP test scores are causally linked to higher rates of economic growth (Hanushek and Woessmann, 2012).¹¹ That is, the research by Hanushek and Woessmann and the research of others has shown that NAEP test scores are measuring learning outcomes that are valuable to students and their communities.

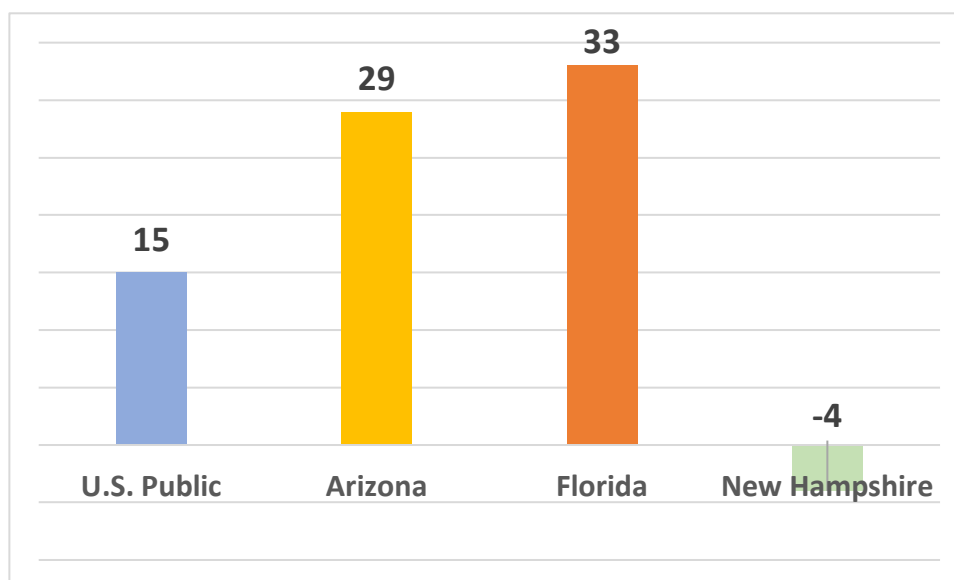
Since I am able to get comparable student achievement data across all states back to 2003 using NAEP test scores, I focus the analysis on the time period after 2003. Despite the massive increase in taxpayer resources given to New Hampshire public schools from 2001-2019, NAEP test scores declined in New Hampshire after 2003.

¹⁰ See, for example, https://nces.ed.gov/whatsnew/commissioner/remarks2022/3_11_2022.asp.

¹¹ Hanushek and Woessmann (2012) also provide a survey of the literature which consistently shows that higher NAEP test scores are linked to higher economic growth, <https://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BWoesmann%202012%20JEconGrowth%2017%284%29.pdf>.

Adding up grade 4 and grade 8 Reading and Mathematics NAEP scores across these four exams and comparing the differences across time, we see that the national average increased 15 points between 2003 -2019. In New Hampshire, these NAEP scores fell by 4 points. Though New Hampshire’s 4-point decline is modest, the 19-point differential from the national average is significant.

Figure 6.3. Change in NAEP 4th and 8th Grade Reading and Math Scores Between 2003-2019

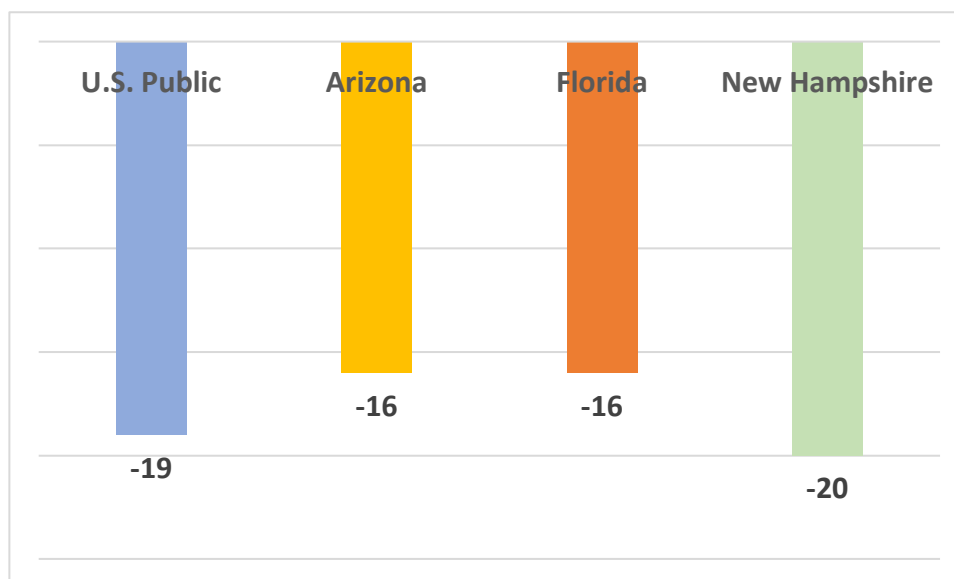


Source: Author calculations from <https://nces.ed.gov/nationsreportcard/data/>.

Figure 6.3 also shows the NAEP performance for Arizona and Florida. These states spend thousands of dollars less per student than New Hampshire, and they allow families to have the most K-12 school choice in the nation. Arizona (29 points) and Florida (33 points) had among the largest NAEP gains in the nation between 2003 and 2019.

During the pandemic, NAEP test scores fell nationwide, and the subpar academic performance in New Hampshire between 2003 and 2019 continued. Specifically, national NAEP scores from 2019-2022 fell by a collective 19 points across the grades 4 and 8 Reading and Mathematics exams (figure 6.4). President Biden’s U.S. Secretary of Education called the national drop in NAEP test scores “appalling” and “unacceptable.” In New Hampshire, these NAEP test scores fell by 20 points during this time. The drops in NAEP performance in both Arizona and Florida were 16 points. In addition, NAEP scores fell by only 6 points in Catholic schools nationwide between 2019 and 2022, which suggests that private schools appear to have been more resilient than public schools during the pandemic.

Figure 6.4. Change in NAEP 4th and 8th Grade Reading and Math Scores Between 2019-2022



Source: Author calculations from <https://nces.ed.gov/nationsreportcard/data/>.

Given the large increases in spending in New Hampshire public schools, it is noteworthy that student achievement as measured by NAEP performance fell after 2003. Further, given that New Hampshire public schools spent significantly more per student than the national average, and national NAEP test scores increased while New Hampshire NAEP scores fell, New Hampshire policymakers who want to improve student learning should consider alternatives to merely spending more taxpayer dollars.

Based on the historical evidence, policies like those in Arizona and Florida, where student learning is actually increasing, offer a good place to start. New Hampshire's new Education Freedom Account (EFA) program is a bold step that moves in the direction of successful policies adopted by Arizona and Florida. These latter states have adopted even more robust policy innovations in recent decades, and they have valuable student achievement gains to show for it.

Policy recommendations based on experiences in other states are described in the next section.

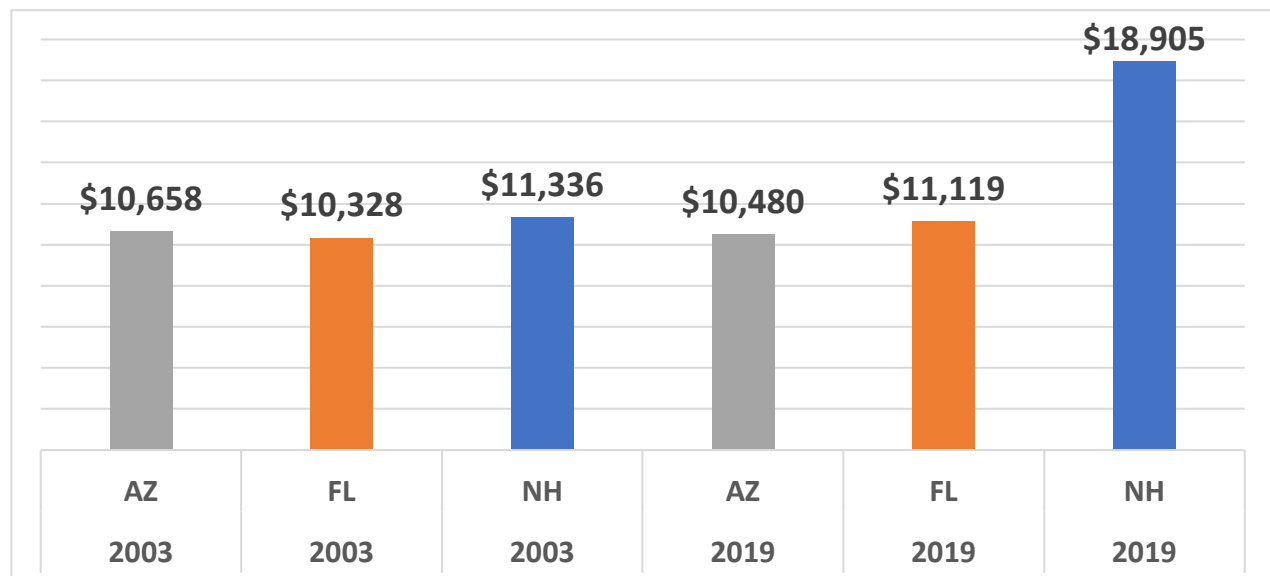
VII. Policy Recommendations for New Hampshire

What policies from other states have been successful in the real world? Arizona and Florida public schools have among the lowest spending per student in the nation, among the most richly funded school choice programs in the nation, and among the largest gains in NAEP test scores since 2003.

As shown in figure 7.1 below, in 2003 Arizona's public school spending was 6 percent below New Hampshire's. Florida's public school spending was 10 percent below New Hampshire's. By 2019, New Hampshire public school spending had increased 67 percent (from \$11,336 to \$18,905 per student), while per-student spending increases were significantly more modest in Florida, rising from \$10,328 to \$11,119. In Arizona, inflation-adjusted spending per student actually fell by 1.7 percent.

Consequently, New Hampshire public schools were spending 80 percent more per student than Arizona public schools by 2019 and 70 percent more than Florida public schools.

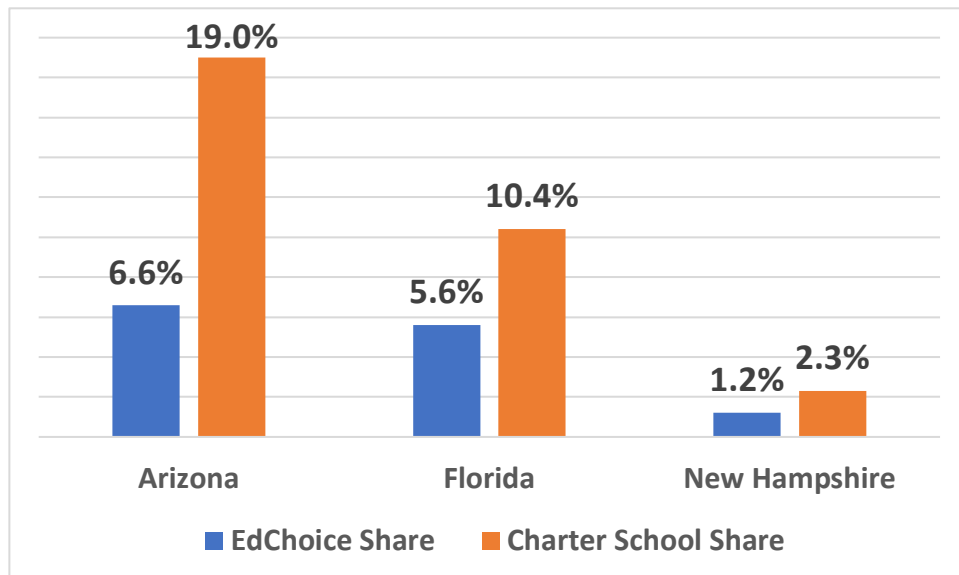
Figure 7.1. Total Spending Per Student, 2003 and 2019, Real (inflation-adjusted) Dollars



Source: *Digest of Education Statistics*, National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

State policymakers in Arizona and Florida also give families in their states significantly more educational freedom relative to what is permitted in New Hampshire. Figure 7.2 shows the percent of school-aged children in each of the three states who participate in a taxpayer-funded private school choice program (EdChoice share) and the percent of children who attend a chartered public school (Charter School Share). Arizona and Florida have the most private school choice in the nation, with 6.6 percent of Arizona children and 5.6 percent of Florida children participating in a taxpayer-funded private school choice program. Another 19 percent of Arizona students and 10.4 percent of Florida students attend a chartered public school.

Figure 7.2. Share of School Aged Children Participating in a Private School Choice Program (EdChoice Share) or Attending a Charter Public School (Charter School Share), 2021-22

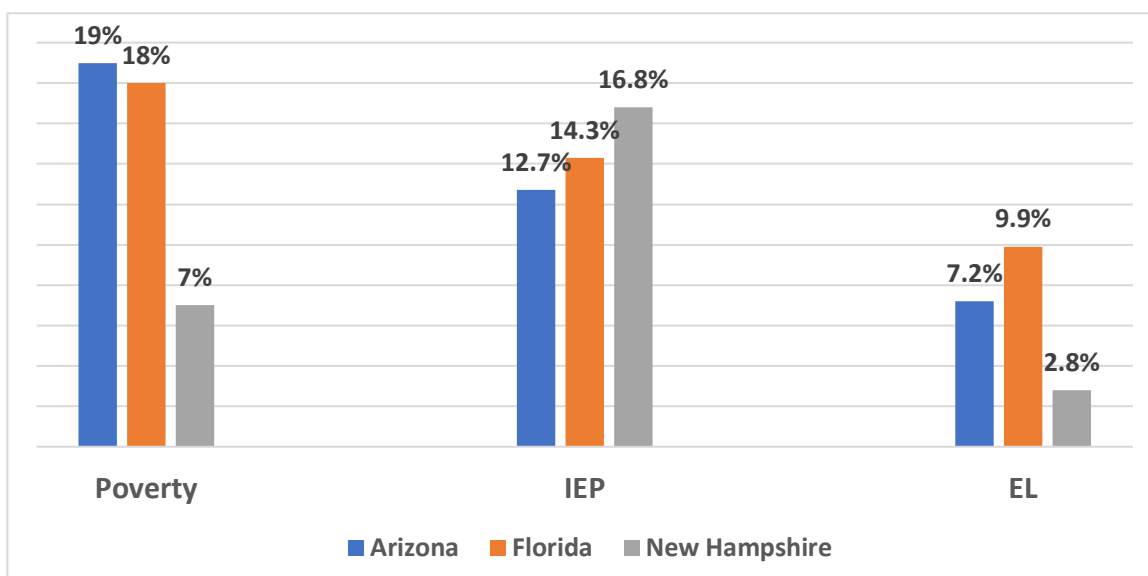


Source: Catt (2022), <https://www.edchoice.org/engage/2022-edchoice-share-where-are-americas-students-educated/#:~:text=Director%20of%20State%20Research%20and%20Special%20Projects%2C%20EdChoice&text=Catt%20is%20the%20director%20of,parents%20of%20school%2Daged%20children.>

In New Hampshire, the corresponding figures for the 2021-22 academic year were 1.2 percent of students participating in a private choice program (EdChoice share) and 2.3 percent enrolled in a charter school, both far below the shares in Arizona and Florida. While the EdChoice share in New Hampshire should increase given its new Education Freedom Account program, a significant gap exists between New Hampshire and the leading reform states of Arizona and Florida relative to the amount of K-12 educational choice offered to families in each state.

In addition, it is not the case that student demographic characteristics explain the differing performances on NAEP exams after 2003. As shown in figure 7.3 below, New Hampshire public schools had more special needs students relative to Arizona and Florida in the 2019-20 academic year: 17.1 percent in New Hampshire vs. 14.7 percent in Florida and 12.9 percent in Arizona. This difference may be due to Arizona and Florida offering relatively larger scholarships for special needs students to attend private schools or secure other educational services outside of schools. However, Arizona and Florida both have approximately twice as many school-aged children living in poverty relative to New Hampshire and more than twice as many English Language Learners in their public schools.

Figure 7.3. Percent of Students in Poverty, With an Individualized Education Plan (IEP), and Receiving English Language Learner (EL) Services, 2019



Source: Data on child poverty was tabulated by the U.S. Census Bureau and was retrieved here, <https://datacenter.kidscount.org/data/tables/43-children-in-poverty#detailed/1/any/false/2048,1729,37,871,870,573,869,36,868,867/any/321,322> . Data on IEP and EL rates comes from the National Center for Education Statistics at the U.S. DOE, https://nces.ed.gov/programs/digest/current_tables.asp.

Child poverty rates in Arizona and Florida were 17 percent and 18 percent, while the corresponding figure for New Hampshire was 9 percent. The percentage of English Language Learner (EL) students in Arizona and Florida public schools were 6.5 percent and 9.7 percent, respectively, while only 2.8 percent in New Hampshire public schools.

Based on these data, it does not appear that Arizona and Florida students are, on balance, more advantaged than New Hampshire students.

Clearly, based on the real-world evidence, the education policies of Arizona and Florida are worth emulating, if the policy goal is to increase student learning.

So, what can New Hampshire policymakers do to create the conditions favorable for increased student learning in the Granite State?

Arizona and Florida both have relatively open policies with respect to charter schools. Their levels of funding for charter schools, although below funding levels for district public schools, are significantly higher than in most states. Both states also have an array of private school choice programs such as education savings accounts and enhanced scholarships for special needs students. For details, readers may consult the following summaries of charter school policy and private school choice programs in Arizona and Florida:

- Private School Choice in Arizona, <https://www.edchoice.org/school-choice/state/arizona/>
- Private School Choice in Florida, <https://www.edchoice.org/school-choice/state/florida/>
- Charter School Policy in Arizona, <https://www.publiccharters.org/our-work/charter-law-database/states/arizona>
- Charter School Policy in Florida, <https://www.publiccharters.org/our-work/charter-law-database/states/florida>

In short, both states have robust opportunities for families to access education savings accounts and scholarships that may be used to offset tuition payments at private schools or to purchase non-school learning opportunities such as tutoring approved by the state. They also permit chartered public schools. Both opportunities—private school choice and charter schools—are funded in a manner that saves taxpayers money (as they are less expensive per student relative to district public schools), while keeping funding levels per student large enough provide families with a wide array of educational options.

To date, both Arizona and Florida have done a good job at avoiding burdensome regulations placed on private schools. Often opponents of education choice and some misguided choice supporters advocate for choice programs to contain the same regulations or many of the regulations placed on district public schools. The problem with such regulation is that it would actually take the “choice” out of education choice by turning private schools, other private education providers, and charter schools into entities identical or very similar to the district public schools. This limits choices available to parents, which limits the competitive pressure on district schools to improve.

New Hampshire policymakers already have taken some bold steps to emulate successful education policies used in states like Arizona and Florida. Charter schools, and the state’s Tax Credit Scholarship and Education Freedom Account programs offer choices to some families. Additional bold steps that New Hampshire policymakers should consider include:

- Allowing all Granite State families to access Education Freedom Accounts (EFAs) and Tax Credit Scholarships. Currently the programs impose income caps.
- Increasing funding awards for EFA students, especially for students with special needs. Public school funding surely exceeds \$20,000 per student in New Hampshire in the current academic year, while EFA awards average about \$5,000 per student.
- Ensuring that New Hampshire families have access to charter schools that receive 90 to 95 percent of the funding levels given to other public schools.

While the evidence from Arizona and Florida regarding educational choice is compelling, there has been a voluminous amount of additional empirical data by many different researchers on the effects that educational choice programs have on students who choose such a program and on students who remain in public schools when a choice program becomes available. The results of this empirical research are overwhelmingly positive:

- Most studies find that test scores and educational attainment increase among students who exercise choice.
- Almost all studies find that students who remain in public schools experience test score increases when some students leave via choice programs. Twenty-five of 28 empirical studies find this result.
- Of 77 empirical studies on the fiscal effects of school choice programs, 68 find that private school choice programs have a positive fiscal effect on public school districts. Four studies find no visible effects, and five find negative effects. This is not surprising body of findings, given that public school districts retain significant funds when students leave for any reason, including via education choice programs.
- Six out of 7 studies find that choice programs lead to increased racial integration across schools, while the other found no visible effect.

By “empirical” studies, I mean studies that use actual data to analyze actual student, fiscal, or integration outcomes. A discussion and bibliography of this literature may be found here: <https://www.edchoice.org/research-library/?report=the-123s-of-school-choice-2/>.

In recent years, there has been a large increase in microschools and hybrid schools.¹² These private schools have significantly lower costs than district public schools or traditional private schools. Microschools and hybrid schools typically have students attend in person 2-3 days per week and then learn at home the remaining 2-3 days per week. Given this growing movement of low-cost K-12 schools, parents should be allowed to roll over unspent EFA dollars for future years or for college tuition expenses. They could also be allowed to use EFA funds on their other children if they believe one of their other children has additional needs.

As noted above, a large body of empirical evidence by a number of different researchers overwhelmingly suggests that giving parents more educational choice leads district public schools to improve and better outcomes for students who remain in district public schools.¹³ Thus, by providing more educational options for families, even students whose families choose for them to remain in district public schools would benefit, as has occurred in Arizona and Florida

In conclusion, a system of student-based funding, sometimes referred to as “backpack” funding, should be the ultimate goal for the New Hampshire K-12 education system. Under student-based funding, the control of all taxpayer funds devoted to the education of children would be given to

¹² For more on the microschool and hybrid school movement, please see: <https://www.amazon.com/Defining-Hybrid-Homeschools-America-Platoons/dp/1793606331> or <https://www.ajc.com/education/get-schooled-blog/opinion-hybrid-schools-could-be-americas-future/UGRFH2AVU5FKVJBEPNG5XDE3KU/>.

¹³ The organization EdChoice has helpfully compiled a list of all the academic studies of the effects of choice programs on student achievement among students who remained in public schools, <https://www.edchoice.org/school-choice-bibliography/#testscores>. As you will see at this link, there are 28 academic studies listed, and almost all of them find that when some students leave district public schools via a choice program that the students who remain in the district public schools experience modest test score gains.

families to allow them to direct those funds to the schools and educational settings they believe are best for their children.

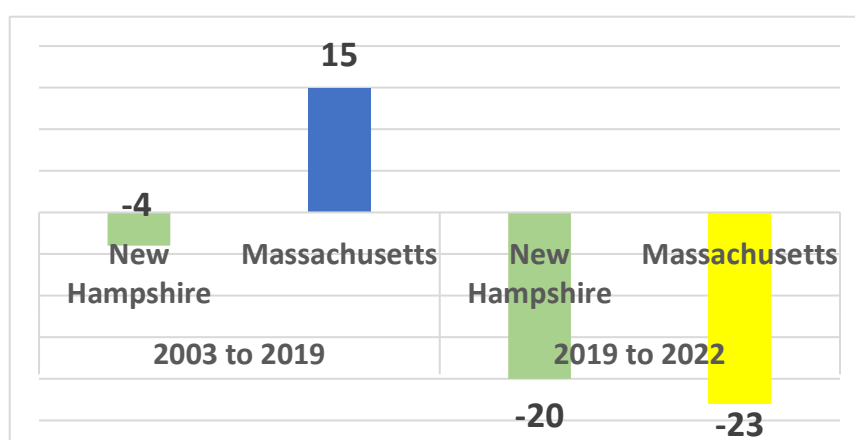
The effects of educational choice programs have been overwhelmingly positive to date. They've produced positive results in test scores, graduation rates, post-secondary outcomes, civic outcomes, and parental satisfaction. And they've produced positive outcomes for students who remain in district public schools.¹⁴

I offer one additional minor suggestion. New Hampshire taxpayers, policymakers, and local school board members should be asking hard questions about future capital expenditures by New Hampshire public school districts. Student enrollments are projected to decline significantly after 2022. Given projected enrollment declines statewide, careful examination of any future capital spending is warranted.

Massachusetts

In this subsection, I briefly compare the public education systems in New Hampshire and neighboring Massachusetts. In terms of student outcomes as measured by NAEP exams (figure 7.4), between 2003 and 2019 student scores on the four NAEP exams considered above (grades 4 and 8 Reading and Mathematics), Massachusetts students increased their scores by 15 points (the same as the national average and about half the gains as seen in Arizona and Florida). The decline in scores during the pandemic was a bit larger in Massachusetts. Scores in Massachusetts fell by 23 points while scores in New Hampshire fell by 20 points. Those were both a bit larger than the national decline of 19 points.

Figure 7.4. Change in NAEP 4th and 8th Grade Reading and Math Scores

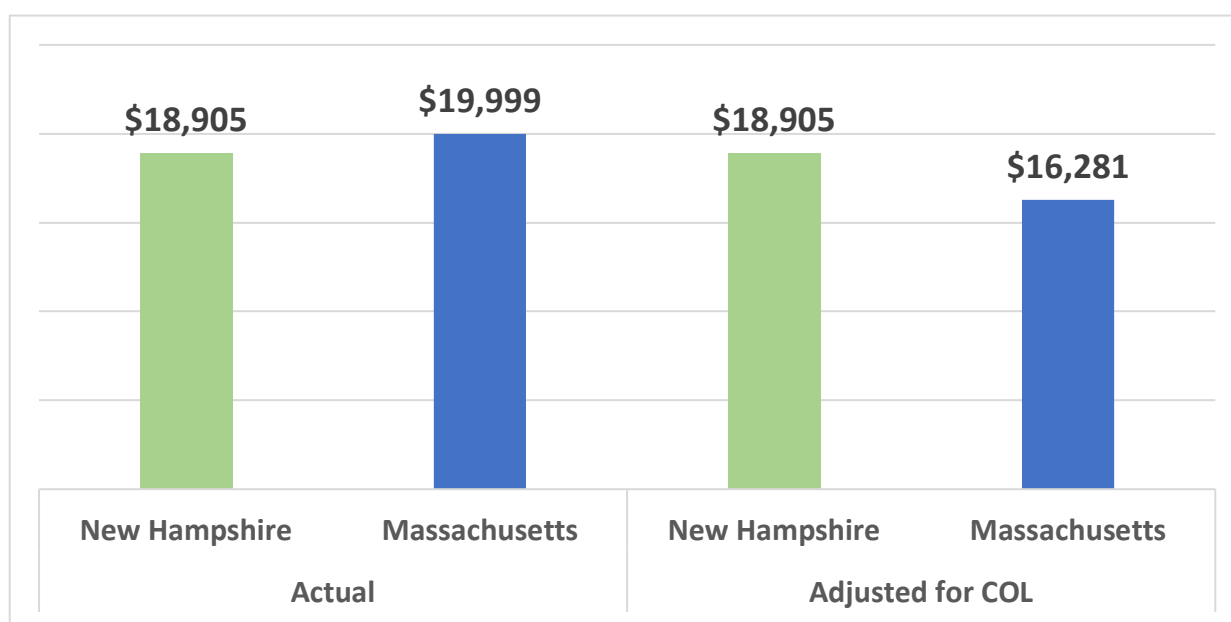


Source: Author calculations from <https://nces.ed.gov/nationsreportcard/data/>.

¹⁴ A survey of the voluminous amounts of academic research on this topic and lists of all of this research may be found here, <https://www.edchoice.org/research-library/?report=the-123s-of-school-choice-2/>.

While Massachusetts public schools spent more money per student than New Hampshire in 2019 (\$19,999 versus \$18,905, figure 7.5), these raw numbers do not take into account the large difference in the average cost of living between the states. Commonly used estimates suggest that the average cost of living in Massachusetts is 22.8 percent larger in Massachusetts than New Hampshire. Figure 7.5 shows that when taking into account differences in the cost of living, New Hampshire public schools spend over \$2,600 more per student than public schools in the Bay State (\$18,905 vs. \$16,281). Since the majority of public school expenditures are on personnel, taking into account the cost of living is needed for an apples-to-apples comparison.

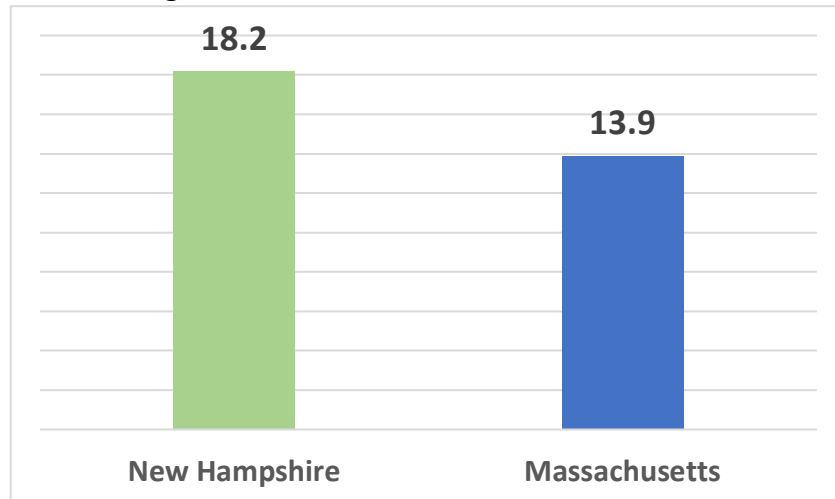
Figure 7.5. Total Expenditures Per Student, 2019



Source: Data reported annually by state departments of education to the National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>. Massachusetts spending data were adjusted downward by 22.8 percent to account for that state's higher cost of living relative to New Hampshire, <https://worldpopulationreview.com/state-rankings/cost-of-living-index-by-state>.

Massachusetts public schools spend their monies very differently than New Hampshire public schools do. As shown in figures 7.6 and 7.7 below, New Hampshire public schools have more staffing. New Hampshire public schools have 18.2 FTE staff per 100 students vs. 13.9 per 100 students in Massachusetts public schools. For a school of 500 students, New Hampshire would have about 21.5 more FTE staff than a school of the same size in the Bay State.

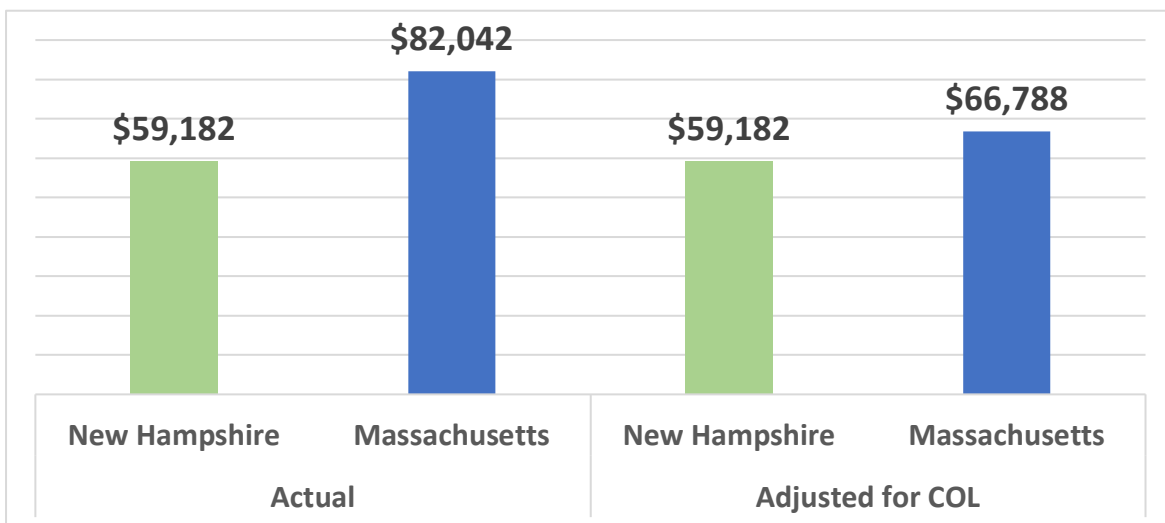
Figure 7.6. FTE Staff Per 100 Students, 2019



Source: Data reported annually by state departments of education to the National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>.

Since they do not have as much staffing, Massachusetts public schools are able to pay their teachers higher salaries. The raw difference is \$82,042 in the Bay State vs. \$59,182 in New Hampshire. Taking into account the cost of living, Massachusetts teachers are paid \$7,606 more on average than New Hampshire teachers, a difference of almost 13 percent (figure 7.7).

Figure 7.7. Average Teacher Salaries, 2019



Source: National Center for Education Statistics at the U.S. DOE, <https://nces.ed.gov/programs/digest/>. Massachusetts average teacher salaries were adjusted downward by 22.8 percent to account for that state's higher cost of living relative to New Hampshire, <https://worldpopulationreview.com/state-rankings/cost-of-living-index-by-state>.

In summary, Massachusetts public schools spent about \$2,600 less per student relative to New Hampshire in 2019, adjusted for differences in the cost of living. And Massachusetts had NAEP test score gains between 2003 and 2019, whereas test performance fell a bit in New Hampshire. While New Hampshire public schools have dramatically more staffing than public schools in the Bay State (about 21.5 more staff in a public school of 500 students), teacher salaries are a lot higher in Massachusetts, even on a cost-adjusted basis—\$66,788 versus \$59,182 in New Hampshire in 2019.

Both New Hampshire and Massachusetts spend dramatically more per student on their public schools than Arizona and Florida do. And students in both states posted lower performance gains on NAEP tests than Arizona and Florida students did (New Hampshire scores fell). Finally, Arizona and Florida achieved their impressive test score gains while permitting the highest amounts of educational choice in the nation.

The test score gains in Massachusetts were right at the national average between 2003-2019. But the test score declines in the Bay State were larger than average between 2019-2022. Massachusetts' performance was better than New Hampshire, but lower than the national average, over the 2003-2022 period. While some policymakers in New Hampshire may like to look to Massachusetts for good ideas, Arizona and Florida have had a better track record in recent decades with respect to K-12 education policy.

VIII. Postscript

Much of the data used in this report are available only to 2019. Since not all data were available past 2019, and to avoid generating unrepresentative findings from the unique issues that developed during the pandemic, it made sense to focus the analyses on the 2001 to 2019 period.

However, some data are available past 2019, and the data that are available show that the trends in the New Hampshire public education system from 2001 to 2019 continued after 2019.

Specifically:

- As stated previously, New Hampshire's NAEP test scores declined from 2019-2022 by more than the national average, which was itself a large decline.
- Average teacher salaries in New Hampshire increased by \$2,607 from 2019-2021, but the national average increased by \$2,786. This increased the disparity between New Hampshire and the national average.
- The net decline in public school students nationwide between 2019-2022 was 2.45 percent, while the decline in New Hampshire's public school population was almost twice as large—4.77 percent.

These three datapoints after 2019 indicate that the trends detailed in this report from 2001-2019 have continued in more recent years.

Appendix – Glossary of Public School Expenditure Categories

These definitions were created and are used by the National Center for Education Statistics at the U.S. DOE and state departments of education to categorize all education spending. Below, I reproduce these federal definitions of the expenditure categories used in this report.

Instruction. The sum of all Instructional Expenditures except Property expenditures. Instruction expenditures are for services and materials directly related to classroom instruction and the interaction between teachers and students. Teacher salaries and benefits, textbooks, classroom supplies and extra curricular activities are included in Instruction. Expenditures for the library and in-service teacher training are reported as instruction support services. Guidance counselors and nurses are reported under student support services.

General Administration. This is the sum of all expenditures for school district administration, including boards of education and their staff, and executive administration. Also included are expenditures for legal activities in interpretation of laws and statutes, and general liability situations.

School Administration. This is the sum of all support services expenditures for school administration excluding property expenditures.

Capital and Debt Service. This is the sum of capital outlay expenditures and debt service principal and interest payments.

All other public school expenditures, including instructional staff support services and student support services, are aggregated together in this report. In this report, I term these expenditures as “**support services.**” These expenditures would include costs for operations and maintenance, counselors, social workers, school nurses, cafeteria workers, bus drivers, IT specialists, etc.

These definitions of public school expenditure categories may be retrieved here, <https://nces.ed.gov/ccd/bat/glossary.asp?letter=A>.