

Measures of Schools and Students in Berlin

April 2023

Inequitable education funding in New Hampshire affects far more than the property taxpayer. Students' educational experiences can be drastically different all over the state. Below is some helpful information about the schools in Berlin and how they compare to the rest of the state.

Students and Student Characteristics

Berlin School District has grades from kindergarten through 12th grade between Berlin Elementary School, Berlin Middle School, and Berlin High School. Table 1 shows enrollment in October 2023 by grade

Table 1

Grade	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Students	67	70	70	69	69	79	77	72	71	121	81	99	64	1,010

Table 2

Category	American Indian/Alaskan Native	Asian or Pacific Islander	Hispanic	Black Non-Hispanic	White Non-Hispanic	Multi-Race	Total
Students	1	7	39	6	968	30	1,051

968 of the 1,050 students in 2021 were white non-Hispanic.

In the 2021-22 school year, there were 1,051 public school students in Berlin. Of these, 517 were eligible for free/reduced-price school meals, meaning their family's income was below 185% of the Federal Poverty Line. This was 49% of the students, considerably more than the statewide average of 23%.

Also in the 2021-22 school year, there were 236 students who were receiving special education services with an Individual Education Plan (IEP). This was 22% of the students, a bit more than the statewide average of 19%.

There were 2 students who were English language learners, less than 1% of all students. Statewide, 3% of students were English language learners in the 2021-22 school year.

How Much Do Teachers Earn in Berlin?

In 2007-08 there were 116 teachers. In 2021-22 there were 98 teachers.

In 2021-22 the average teacher salary in Berlin was \$65,044. This was 4% above the state average of \$62,695. Since 2010, Berlin's average teacher salary has been above the state average, while it has been above that of White Mountains, and below that of Portsmouth since 2008.

Berlin's average teacher salary increased by 34% from 2007-08. At the same time, the Consumer Price Index increased by 36%.

Average teacher salary is affected by two things: the actual salary schedule of a district and the number of years of teaching experience among the teachers. Teacher salary schedules generally increase salaries as teachers gain experience through years on the job. It is therefore possible for two districts that have identical salary schedules to have different average salaries. The salary of a newly recruited teacher depends on the district's salary schedule, not on the average teacher's salary.

Starting salaries, on the other hand, show us what a recent college graduate could earn as a first-time teacher in a district. This is important for hiring and retaining quality teachers over the long term. The starting salaries for teachers in New Hampshire ranged from \$31,712 to \$59,752 in the 2021-22 school year.

Berlin has a starting salary for its teachers of \$39,681 for the 2021-2022 school year. Berlin's starting salary for teachers is 2% lower than the state average of \$40,478. In Figure 2 we can see that schools like Lebanon and the White Mountains have different starting salaries than Berlin.

Figure 1

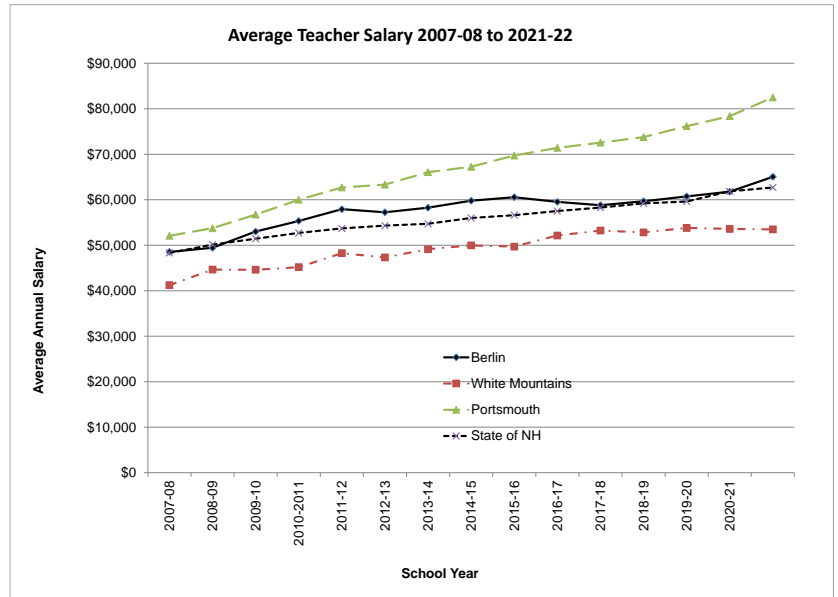
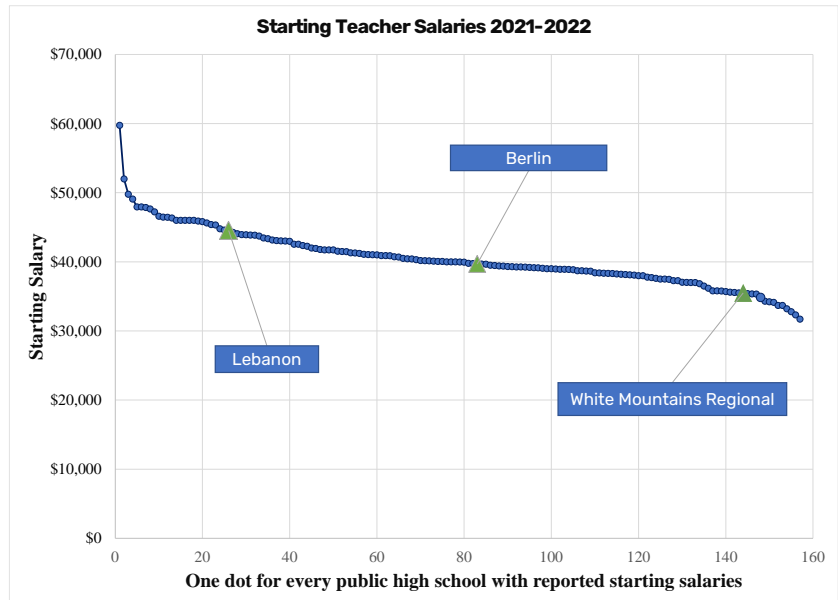


Figure 2



What Sports are Available to Berlin High School Students?

The New Hampshire Interscholastic Athletic Association (NHIAA) organizes high school sports competitions in New Hampshire. Of 34 NHIAA sports in 2019-20, Berlin offered 14 athletic programs for its 365 enrolled high school students. Of the high schools with enrollment under 400 students, the average number of sports was under 20. The number of interscholastic sports available to Berlin students at Berlin was average for high schools of similar size.

The interscholastic sports offered at Berlin were:

Boys and Girls Ice Hockey, Boys & Girls Cross Country, Field Hockey, Boys Soccer, Spirit, Boys Basketball, Girls Basketball, Unified Basketball, Baseball, Softball, Outdoor Track, Girls Tennis, and Boys Tennis.

The sports available in any particular year will depend, of course, on the availability of coaches and whether enough students sign up.

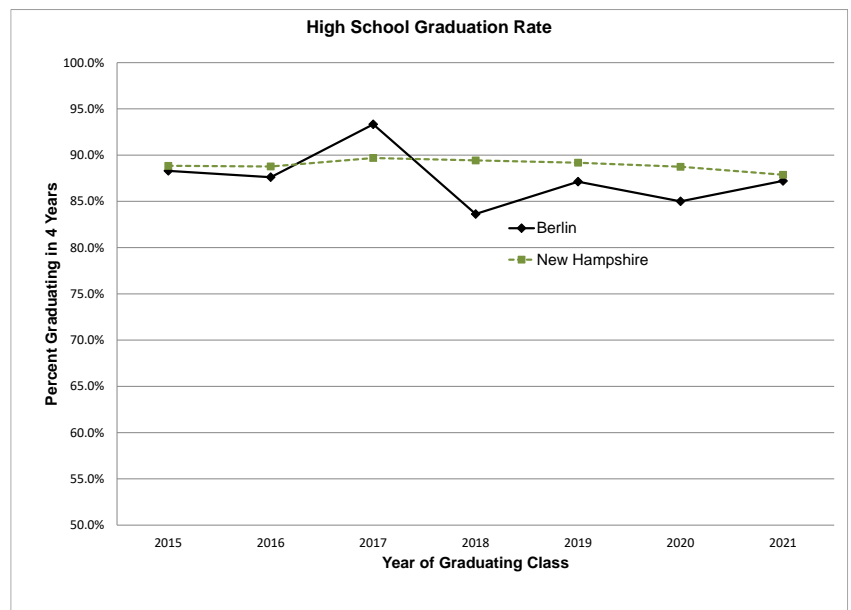
What is the High School Graduation Rate?

High schools that serve students from multiple elementary school districts or towns report graduates and graduation rates in total, not separately for each town. Berlin's graduating classes include students from only Berlin. The data that follows is for all students at Berlin.

Berlin graduated 603 students in graduating classes from 2015 through 2021. The graduation rate over those 7 years averaged 87.5%. This was slightly below the state average of 88.9% over the same years.

Of course, the rate varied somewhat from year to year as shown in Figure 3.

Figure 3



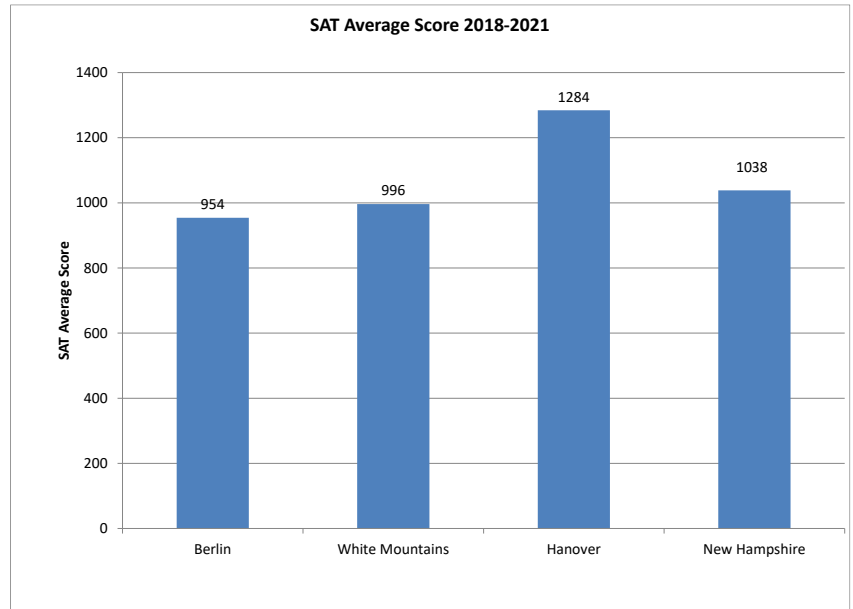
Ranking the 81 New Hampshire public high schools' graduation rates over this period from highest rate (1) to lowest rate (81), Berlin ranks 53rd.

How Well Do High School Students Do on the Annual SAT Exam?

One of the standardized exams used by New Hampshire to measure student achievement in high school is the SAT of the College Board. There are two parts: Mathematics and Evidence-Based Reading and Writing. The possible range of combined scores is 400 to 1600.

Figure 4

Over the four years from 2018 through 2021, 325 students at Berlin took the SAT exams in the spring of their junior year. The average score of those students was 954 while the New Hampshire average was 1038. Of the 79 public high schools for which data was available, Berlin ranked 69th (rank #1 being highest average score and rank #79 being lowest average score).¹ Berlin was one of the lowest scorers in the state.



The total October enrollment over 4 years of the junior year totaled 361. As a percentage of enrollment, 10% were not tested. The percentage of untested students statewide was 12.2%. Thus, Berlin was able to test a larger percentage of its juniors than the average.

What Courses are Available to Students in Berlin?

Course availability is an important measure of a student’s educational opportunity. Based on Course of Studies collected from NH Public High Schools from the 2021-22 school year, course offerings were compiled, as well as the state average of nine-course categories ranging from Math to Arts. Table 4 shows that Berlin falls below the state average in all categories except for math and career technical courses.

The availability of courses is tied to several factors. The size of a school plays a large role in what a school can offer as well as staffing, transportation, and licensure. Berlin has 365 students, while the average high school size in NH is 692.

Table 4

¹ Scores are not available for Bud Carlson Academy in Rochester and Pittsburg High School because the number of test takers in any particular year was fewer than 5.

School	World Language	AP	English Electives	Math	Social Study Electives	Computer Technologies	Career Tech	Arts & Performing Arts	Science Electives
Berlin # of courses	4	5	8	18	9	4	50	8	6
State Average # of courses	14	9	11	17	10	6	26	23	13

Advanced Placement Results in Berlin

In the four-year span from 2018 to 2021, there were 22,966 AP exam takers and 36,355 exams taken in New Hampshire. As a percentage of enrollment, 10.6% of students took AP exams. During that time, Berlin had 54 test takers and 80 exams taken. 37 of those exams scored high enough to earn credit at some colleges.

Berlin offered 4 AP courses for the 2021-2022 academic year. Table 5 compares Berlin to the state's averages for test takers as a percentage of enrollment, the percentage of exams that scored a 3,4, or 5, and the number of students who scored a 3 or higher out of 100 students. Berlin fell above the state averages for all three categories.

Table 5

School	Test takers as a % of enrollment	% of Exams Scored 3,4,5	Successful AP Test per 100 enrolled
Berlin	3.6%	46.3%	2.4
State Average	10.6%	69.1%	11.6

How Likely Are Students from Berlin to Apply, Earn Admittance, and Enroll at The University of New Hampshire?

The University of New Hampshire (UNH) is one of New Hampshire's public higher education institutions. The school is often a popular choice for many NH students graduating from public high schools. Though not the only choice, analyzing the application, admission, and enrollment patterns among New Hampshire High Schools can tell us interesting things about the post-secondary paths of students.

Based on data collected by the University of New Hampshire, counts of applications, admissions, and enrollments over a 5-year time period between 2017-2021 were available for analysis. Using the senior enrollments as of October 1st at NH public high schools over a 5-year period helps protect the identity of students at small schools and helps build a better sample.

On average, based on the years 2017-2021, 27% of New Hampshire's public school senior class applied to the UNH. Of those students who applied, 83.8% of them were admitted to the University of New Hampshire. Though, on average only 7.4% of all seniors ended up enrolling and attending UNH.

Berlin was below the state average in terms of UNH applications, admissions, and enrollments. Over the 5 years, Berlin had 18.9% of their seniors apply to UNH. Of those applicants, 74.7% were admitted and only 5.9% of their seniors enrolled and attended UNH.

As seen throughout this paper, educational experiences for New Hampshire students vary widely across the state. A school's finances can make a large impact on the student population in their post-secondary lives.

Note: Data used in this report are taken from reports and spreadsheets of the NH Department of Education, The University of New Hampshire, and the College Board (2022 Adequacy Summary, School Sports, Average Daily Membership Based Upon Attendance and Residence (ADM), Average Class Size by School, and DoE25 Extract for State Profile Data for various years, Teacher Salaries, SAT scores, and graduation rates). Such data are reported by New Hampshire school districts to the Department. The number of courses offered was hand collected from Programs of Study from 79 New Hampshire Public High Schools.