

Chapter 2

This chapter begins with the general background and history of the ConVal school district. Relevant background in the areas of academics, facilities, technology, food services, and transportation follow.

District Geography

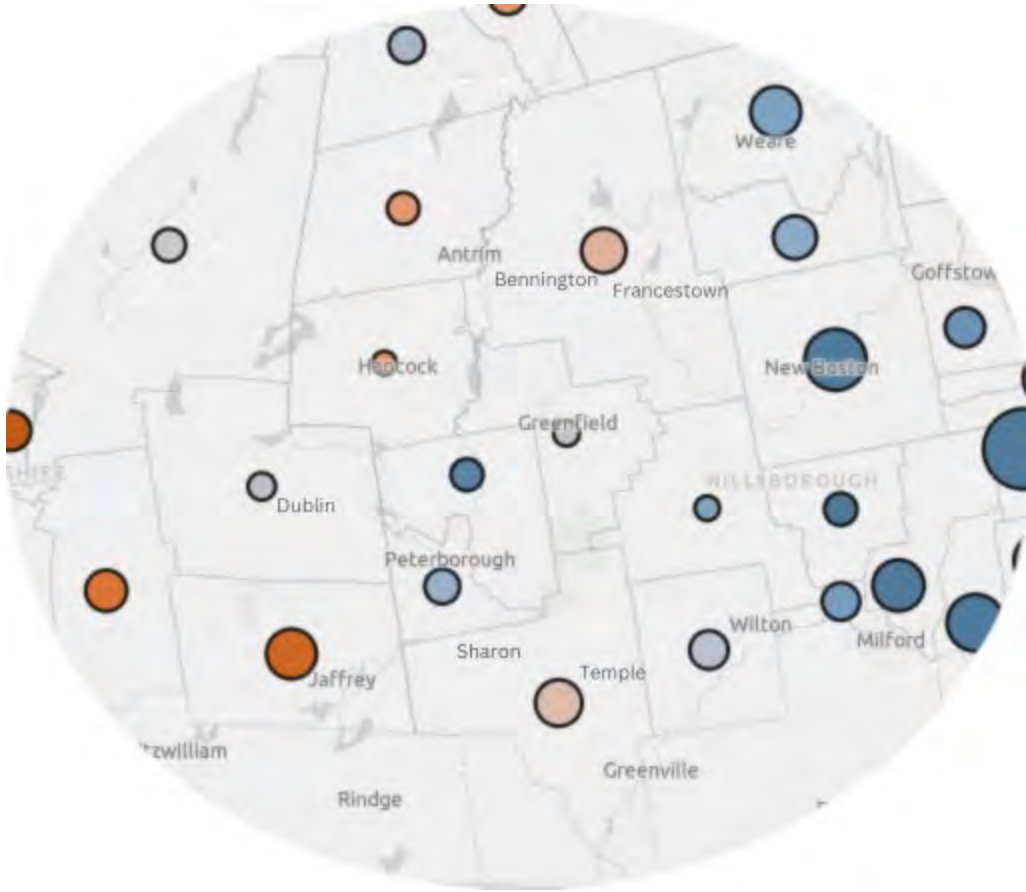
The ConVal School District is in the southwestern area of the state and includes 250 square miles. Per the 1967 Articles of Agreement, the district was formed by combining the school systems of 9 towns, which resulted in a somewhat unusual overall district border. One of the towns, Dublin, lies in Cheshire County, while the rest lie in Hillsborough County.

Composition of the ConVal School District



Looking at population density and household income, ConVal is considered by the US Census Bureau to be a “rural-fringe” community. Its population density is more similar to areas to its west. Household income varies in the district, with higher incomes in the southern part of the district and lower incomes in the northern part.

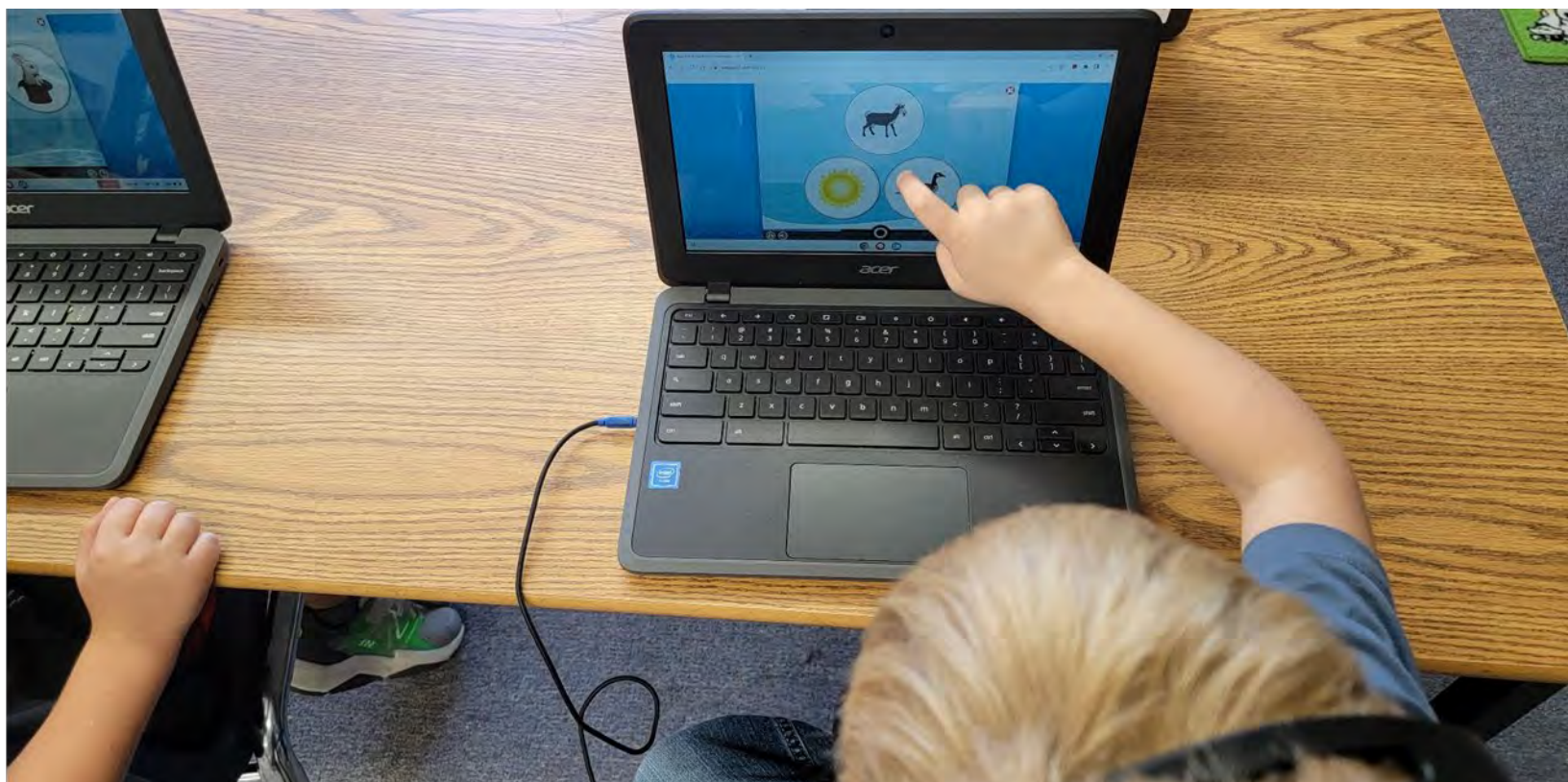
ConVal and Area Population Density and Household Income



Circle size indicates population size.

Color indicates household median income, with darker red for lower income and darker blue for higher income.

This map can be explored interactively at <https://tinyurl.com/yetk6xam>.



District Enrollment Trends

Like all school districts, the ConVal school district’s enrollment depends on larger population trends. None of the available data indicate that those population trends will result in substantial increases in ConVal student numbers in the next 10 years.

Rather than a never-ending spiral of growth, there are signs that the overall human population is approaching a peak. At the global level, outside of Africa, the world’s population is likely to peak in the 2050s. The largest countries by gross domestic product (GDP) all have fertility rates below 2.1 births per woman, which is needed to maintain a steady population (absent in-migrations). As noted in *The Economist*, “The result is that in much of the world the patter of tiny feet is being drowned out by the clatter of walking sticks.”¹ This trend has a direct impact on the number of children who will be enrolled in schools 5, 10, 15 years from now.

The US Congressional Budget Office (CBO) is projecting a US population of 373M by 2052, up from 336M in 2023. The projected growth rate of 0.3% per year is only 1/3rd the growth rate the US experienced from 1983 to 2022. Moreover, about 3/4th of the overall growth over the next 10 years will be due to net immigration. New births, the ultimate source of school enrollments, will account for only a small fraction of the growth. Through 2052, the CBO is projecting fertility rates of 1.75 or less. That rate is below the replacement rate.²

The 2020-2050 projections of the New Hampshire Department of Business and Economic Affairs indicate that none of the towns in the ConVal community will be immune to the overall population trends. The 2020 fertility rate for Hillsborough County was 1.4 and is not expected to exceed 1.7 prior to 2050.³ Most of the ConVal towns are not expected to gain more than 100 residents overall through 2035 and most are projected to gain less than 200 residents by 2050. As children are just a fraction of the overall population, the outlook for potential ConVal students within the district borders is generally flat.

¹ <https://www.economist.com/leaders/2023/06/01/global-fertility-has-collapsed-with-profound-economic-consequences>

² <https://www.cbo.gov/publication/57975>

³ The 2020 rate for Cheshire County was 1.3. It is not expected to exceed 1.5 through 2050. Source: <https://www.nheconomy.com/getmedia/0205c62d-9c30-4b00-9c9e-d81d8f17b8b3/NH-Population-Projections-2020-2050-Final-Report-092022.pdf>

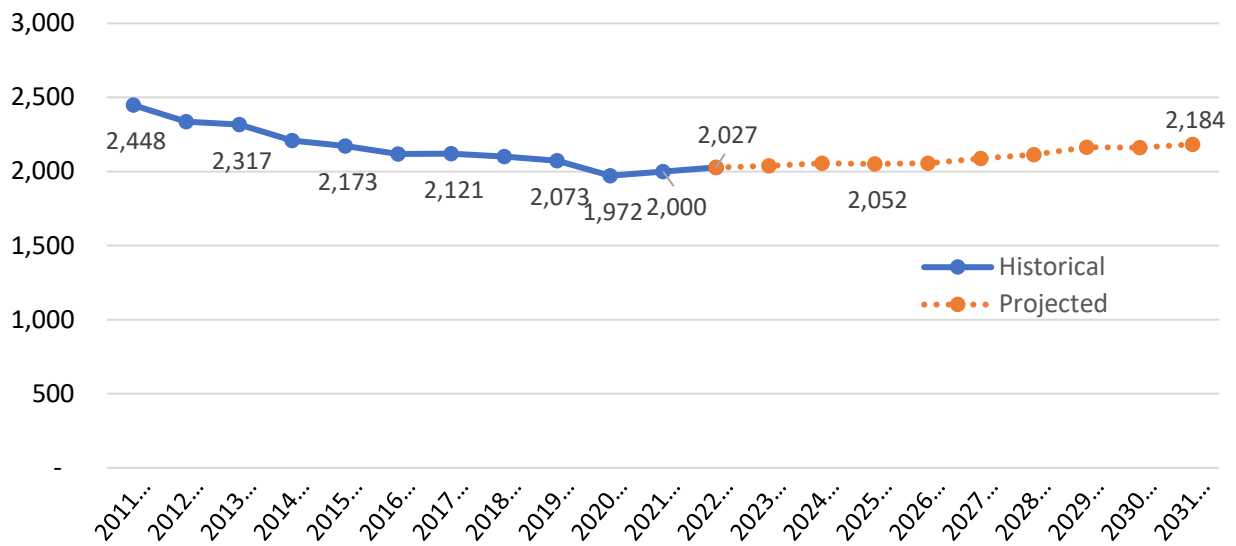
ConVal Town Population Projections

Town	2020 Census	Population Gain 2025-2035	Population Gain 2025-2050
Antrim	2,651	151	192
Bennington	1,501	85	108
Dublin	1,532	8	-78
Fracestown	1,610	92	116
Greenfield	1,716	97	124
Hancock	1,731	87	110
Peterborough	6,418	365	463
Sharon	359	21	26
Temple	1,382	78	99
Total	18,900	984	1,160

Source: New Hampshire Department of Business and Economic Affairs

The New England School Development Council (NESDEC) provides enrollment projections to affiliated school districts, including ConVal. In November 2021, NESDEC provided the district with historical trend analysis and projections through 2031-32. Between 2011-12 and 2021-22, NESDEC noted an overall loss of 448 K-12 students in ConVal (-18.3%). Between 2021-22 and 2026-27, NESDEC predicts growth of 56 K-12 students (+2.8%). Between 2026-27 and 2031-32, NESDEC predicts growth of 128 students (6.2%). This means that the projected 2031-32 enrollment in ConVal is likely to be close to that of 2015-16 (2,173).

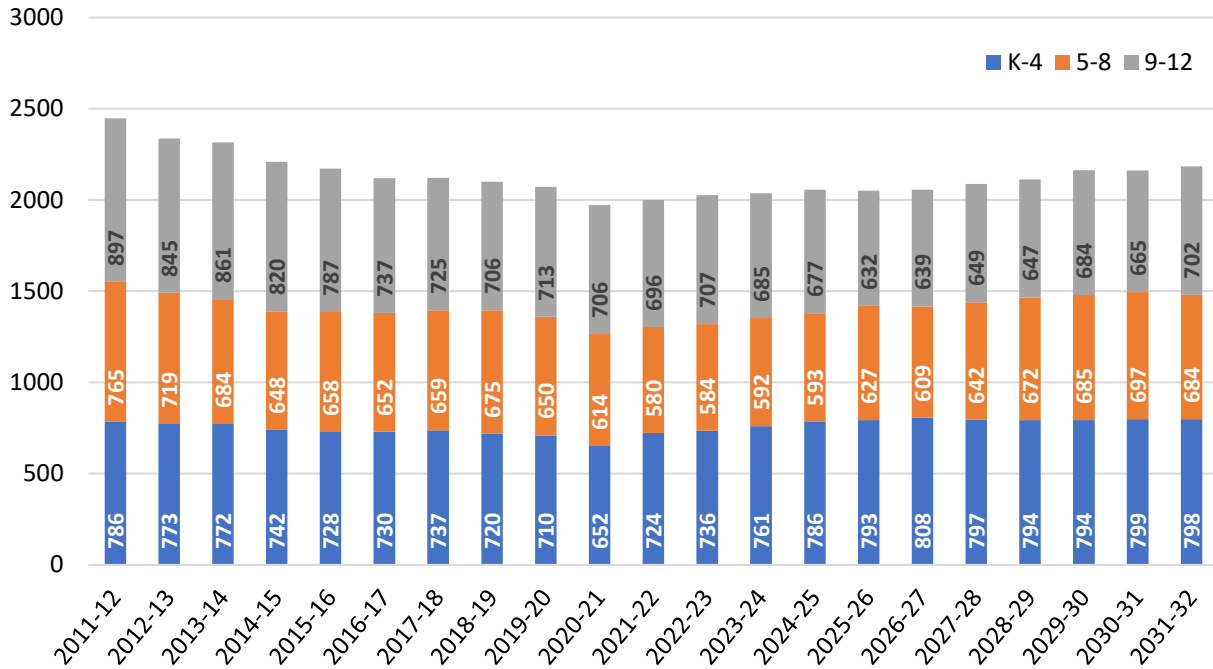
NESDEC ConVal Enrollment Projections



Source: NESDEC

Looking at the same data grouped by grades K-4, 5-8, and 9-12, NESDEC is not predicting large increases in a particular grade grouping at the expense of another over the next 10 years. Between 2021-22 and 2031-32, NESDEC estimates a total addition of 74 K-4, 104 grade 5-8, and 6 grade 9-12 students.

NESDEC ConVal Historical Enrollment and Projections by Grade Grouping



Source: NESDEC

Relevant District History

ConVal the school district was created by the 1967 Articles of Agreement. The Articles came about as the result of 2 years of self-study, during which the members of the Contoocook Valley School Study Committee sought to create “the most efficient and economical means to raise [the] quality [of local schools] to the highest standard possible.” One of the driving factors for the 1967 agreement was the committee’s recognition that, “More and more, towns like ours are finding co-operation [sic], pooling of resources, the only answer to the problem of giving their children the schools they need without placing intolerable burdens on their taxpayers.”

In making their final recommendations, the committee noted, “The time is right for us to come together to form a modern, comprehensive school system. The benefits of acting now are numerous; the dangers of delay are real.”

Well-known among ConVal residents are the tangible outcomes of the 1967 agreement: the creation of ConVal HS and the continued operation of the 8 elementary schools. The only method by which the agreement can be modified is by approval of 2/3rd of the voters on a warrant article. Left unstated in the agreement is a specific definition of an elementary school. A minimum enrollment is not stated, nor are grades to be served explicitly stated. The district’s legal counsel has provided opinions on several matters related to the reconfiguration question:

- ◆ If enrollment in a ConVal elementary school drops to 0, the 1967 agreement does not provide a path for closing a school. The district would still be liable to maintain the building with an approved plan to reopen the building within 2 years if it became needed. This would avoid the building being deemed an unused facility under state law.

- ◆ State law defines an “elementary school” as having grades K-3, while any grouping of grades 4-8 defines a middle school.

A brief recap of the history relevant to this project is provided in the table below.

Year	Relevant History
1967	<ul style="list-style-type: none"> ◆ Articles of Agreement drafted, establishing Contoocook Valley school district by merging 9 towns, creating 8 elementary schools.
1985	<ul style="list-style-type: none"> ◆ The district contracts with a consulting firm to complete a “comprehensive system study” that includes a look at demographic trends and the possible impacts from beginning to provide Kindergarten. With 762⁴ ConVal R1-4 students in 1984-85, the authors projected 936 R1-4 students by 1990-91. The study noted that some of the smaller ES will be overcapacity if Kindergarten is added and enrollment trends continue.
1987	<ul style="list-style-type: none"> ◆ With a 16% budget increase looming, a local realtor proposed school consolidation. A warrant article was proposed to sell existing smaller schools to build a larger regional elementary school in the northern part of the district. With only half of the expected voter turnout, the proposal failed - In favor: 119 (18%), Against: 549 (82%)
2006	<ul style="list-style-type: none"> ◆ Article 5 of the Articles of Agreement was amended to allow MS students to be reassigned to elementary schools as the district population changes. This amendment passed - In favor: 3,180 (72%), Against: 1,210 (28%)
2012	<ul style="list-style-type: none"> ◆ Declining enrollment led to resurfaced discussions about school reorganization. ◆ Model Study Committee formed to create educational and financial reorganization models. As part of this work, ConVal mailed a survey to 9,000 eligible households. ◆ The survey presented four restructuring options and asked respondents to rank them in order of preference: <ul style="list-style-type: none"> ○ Model #2/3 – Combination (move 5th grade to ES, close GBS): Received support of 32% of respondents ○ Model #4 - Small School(s) Closing (close up to 5 ES): 25% support ○ Model #5 - Large-Scale Consolidation (create 2 ES, 1 MS, and keep the existing HS): 24% support ○ Model #1 - Status Quo, with enhancements to programming: 24% support Collectively, 81% favored some form of change that included closing 1+ schools. ◆ The survey asked respondents to rank their primary education priorities from a list of 18 options. Of the 18, the top 2 vote getters were: <ul style="list-style-type: none"> ○ “Preparing students to be knowledgeable and involved citizens”: 576 votes ○ “Prepare students for college and career success”: 575 votes The lowest 2 vote getters were: <ul style="list-style-type: none"> ○ “Full-time principals in all schools”: 62 votes ○ “K-4 elementary school configuration”: 57 votes ◆ Model Study Committee opted to not proceed with the proposed models, instead recommending an alternative amendment to allow school closures when operating below capacity, based on a 2/3rd majority vote of the 13-member school board. ◆ Under the proposed change, considering a school for closure would also require a 10-step closing study conducted by the school board.

⁴ Table 2 of the report.

Year	Relevant History
2013	<ul style="list-style-type: none"> ◆ Public vote on two amendments related to school reorganization: <ul style="list-style-type: none"> ○ Warrant Article - Amend Article 5 to grant authorization for school closure when a school is operating below its capacity (based on 2012 recommendation of the Model Study Committee). In favor: 58%, Against: 42% ○ Petition Article - Consolidate district into one central middle school, amend Article 5 for grades 5-8 and leave the rest of the articles unchanged. In favor: 1,622 (37%), Against: 2,819 (63%) ◆ Requiring a 2/3rd approval vote, both proposals failed.
2014	<ul style="list-style-type: none"> ◆ New district study committee appointed.
2016-17	<ul style="list-style-type: none"> ◆ At the School Board’s request, the Administrative Council formed 2 groups, 1 to study consolidation options, and 1 to study reconfiguration options. The consolidation group studied options to reduce the number of schools while the reconfiguration studied options for possible new educational models that retained the current 11 schools. After analyzing 5 potential models, the consolidation group recommended moving to a 4-school district: 2 primary ES (PreK-3), 1 upper ES (4-6), and 1 combined MS/HS. The group estimated annual savings of \$3.0M, which included a reduction of 43.8 positions (\$2.5M) and reduced facilities expenditures (\$0.5M). The study assumed that the district would retain the 7 mothballed buildings and spend \$338k annually for the dormant buildings. The group did not estimate potential costs or savings from food services or transportation adjustments.
2018	<ul style="list-style-type: none"> ◆ Warrant article that proposed the authorization for the school board to close schools with fewer than 50 students enrolled for 2 consecutive years failed. In favor: 1,345 votes (46%), Against: 1,586 votes (54%)
2018-19	<ul style="list-style-type: none"> ◆ ConVal revisited reconfiguration options and analyzed 5 potential models. That team recommended 2 options: 4 schools (same as was recommended in 2016-17) and 8 schools (4 town ES with PreK-2, 2 upper ES with 3-5, 1 MS with 6-8, and 1 HS).
2019	<ul style="list-style-type: none"> ◆ Two cost-saving proposals on the ballot: <ul style="list-style-type: none"> ○ One warrant article aimed to reduce the number of district schools from 11 to 5. In favor 1,444 votes (36%), Against 2,519 votes (64%) ○ The other warrant article proposed a change to the funding formula, incurring a surcharge on towns whose school enrollment falls below 65. In favor: 1,720 (44%), Against: 2,212 (56%). ○ Both measures failed. ◆ Instead, a petition article requiring the school board to complete an analysis of the potential impacts of school closure prior to proposing any further school-closure plans on the warrant passed. In favor: 3,111 (78%), Against: 883 (22%)

Academics

Regular Education

New Hampshire allows a maximum of 25 students per class in grades K-2 but encourages districts to strive for class sizes of 20 or fewer. The state allows for a maximum of 30 students per class in grades 3-5, provided that each school strives to achieve a class size of 25 students or fewer. ConVal was well below that guidance in 2022-23. Average class size in elementary schools ranged from 9.3 to 16.2. The state guidance for middle and high school classes is 30 or fewer as well. GBS averaged 11.2 and SMS averaged 16.4. It's important to mention that the NHDOE reported a number of 24.2 for SMS, but district staff believes that to be an error. Therefore, Prismatic used a district-provided figure instead.

ConVal Average Elementary Class Sizes, 2022-23

School	Grades 1-2 Avg Class Size	Grades 3-4 Avg Class Size	Grades 5-8 Avg Class Size
AES	13.0	11.5	--
BES/Pierce	15.0	13.0	--
DCS	13.5	10.5	--
FES	10.0	8.0	--
GES	14.5	14.5	--
HES	10.5	13.5	--
PES	14.3	14.2	--
TES	5.0	7.0	--
GBS	--	--	11.2
SMS	--	--	16.4

Source: <https://my.doe.nh.gov/iPlatform/Report>

When compared to peers, ConVal elementary schools average smaller class sizes. When class sizes are small, students often miss the opportunity to work in groups and benefit from the diversity of classmates, which comes with larger classes. Students benefit from hearing thoughts and opinions different from their own, which is limited in small classes. Small classes also limit the opportunity for students to develop friendships. Student absences can drastically impact the instructional plan for the day if a class is extremely small.

Class size research typically refers to classes with 20 or fewer students as “small” in size. In elementary classes with 20 or fewer students, achievement, engagement, and long-term success were better overall, than classes with more than 20 students.⁵ Of influences which impact student achievement, reducing class size ranked 186 out of 252, with an effect size of 0.21. Collective teacher efficacy, teacher quality, curriculum, and instructional strategies have a greater impact than reducing class size.⁶ There is scant research available on the differences in academic achievement between the elementary class sizes that ConVal has and those of what is traditionally considered “small.”

Compared to peer districts, ConVal had the second-lowest class sizes in grades 1-2 and the lowest class sizes in grades 3-4 in 2022-23. In grades 1-2, ConVal was 4.5 students below the peer average of 17.0; in

⁵ <https://ncte.org/statement/why-class-size-matters/>

⁶ <https://visible-learning.org/hattie-ranking-influences-effect-sizes-learning-achievement/>

grades 3-4, ConVal was 5.8 students below the peer average of 17.8. The transition from extremely small elementary schools to larger middle schools and high school settings can be difficult because students have not experienced group classroom learning or the larger numbers in ancillary spaces such as cafeteria.

2022-23 Peer Class Size Comparisons

School	Grades 1-2 Avg Class Size	Grades 3-4 Avg Class Size
Berlin	17.5	17.3
Fall Mountain Regional	11.3	12.4
Gilford	17.1	17.6
Kearsarge	15.4	16.3
Litchfield	18.0	20.8
Monadnock Regional	17.8	17.7
Windham	21.9	22.8
Peer Average	17.0	17.8
ConVal	12.5	12.0

Source: <https://my.doe.nh.gov/iPlatform/Report>

Academic performance in ConVal ES was inconsistent across the district. Proficiency percentages varied between schools. The difference in percent proficient between schools in 2022-23 was 58% in math and 28% in reading. PES was the only elementary school above the state average on state assessments in both reading and math for 2020-23.

Reading and Math Proficiency for Grades 3 & 4

School	2020-21		2021-22		2022-23	
	Reading	Math	Reading	Math	Reading	Math
AES	29%	26%	29%	34%	40%	43%
BES/Pierce	29%	<10%	35%	15%	68%	32%
DCS	53%	40%	47%	58%	57%	40%
FES	60%	33%	72%	83%	67%	87%
GES	35%	58%	33%	77%	56%	54%
HES	67%	67%	60%	45%	48%	56%
PES	60%	52%	58%	62%	63%	65%
TES	41%	41%	44%	61%	43%	57%
State	47%	43%	47%	50%	48%	51%

Source: <https://my.doe.nh.gov/iPlatform/Report>

Though most peer districts reported average class sizes larger than those in ConVal, elementary reading and math achievement data were below that of most peers and the state.

Peer Comparison Reading and Math Proficiency Grades 3 & 4

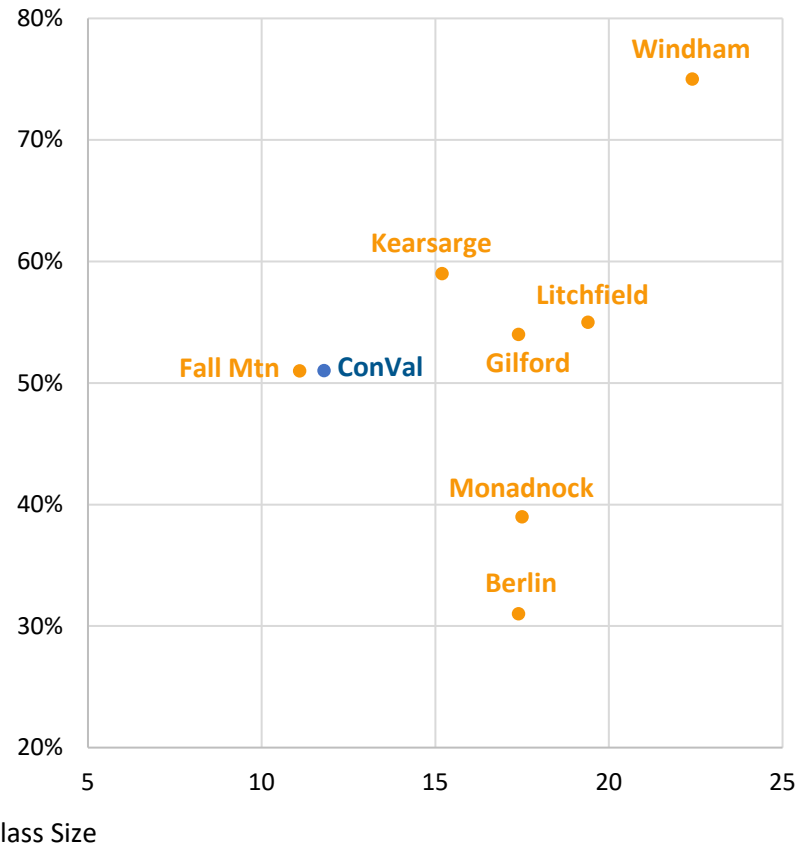
District	2020-21		2021-22		2022-23	
	Reading	Math	Reading	Math	Reading	Math
ConVal	47%	32%	48%	37%	51%	40%
Berlin	31%	25%	35%	34%	31%	29%
Fall Mountain Regional	48%	33%	50%	36%	51%	36%
Gilford	53%	53%	57%	50%	54%	49%
Kearsarge	60%	44%	56%	44%	59%	41%
Litchfield	56%	39%	52%	37%	55%	38%
Monadnock Regional	37%	25%	38%	29%	39%	31%
Windham	74%	64%	73%	68%	75%	70%
State	52%	38%	51%	40%	52%	42%

Source: <https://my.doe.nh.gov/iPlatform/Report>

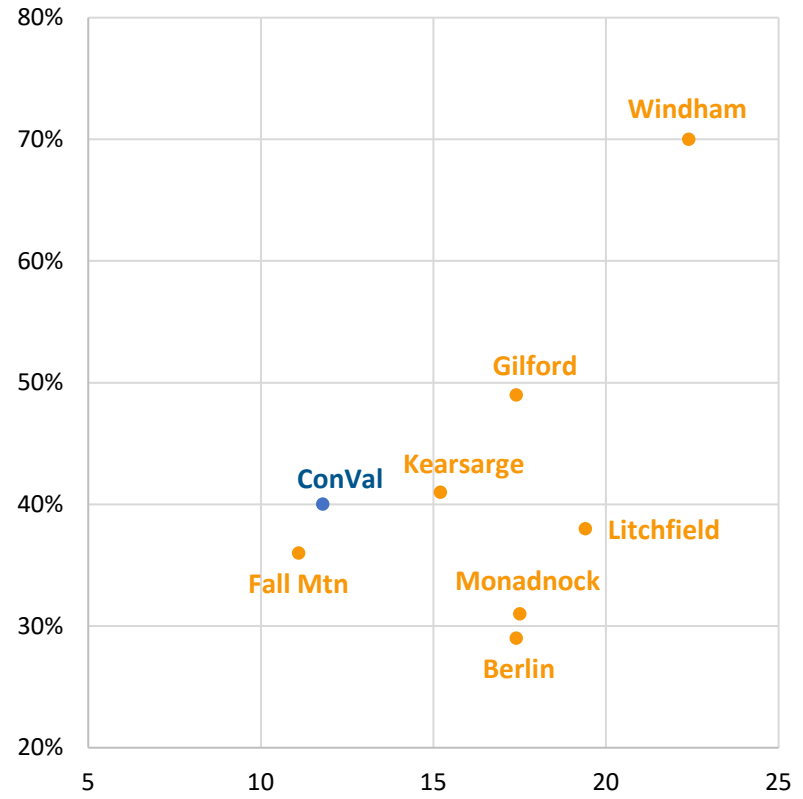
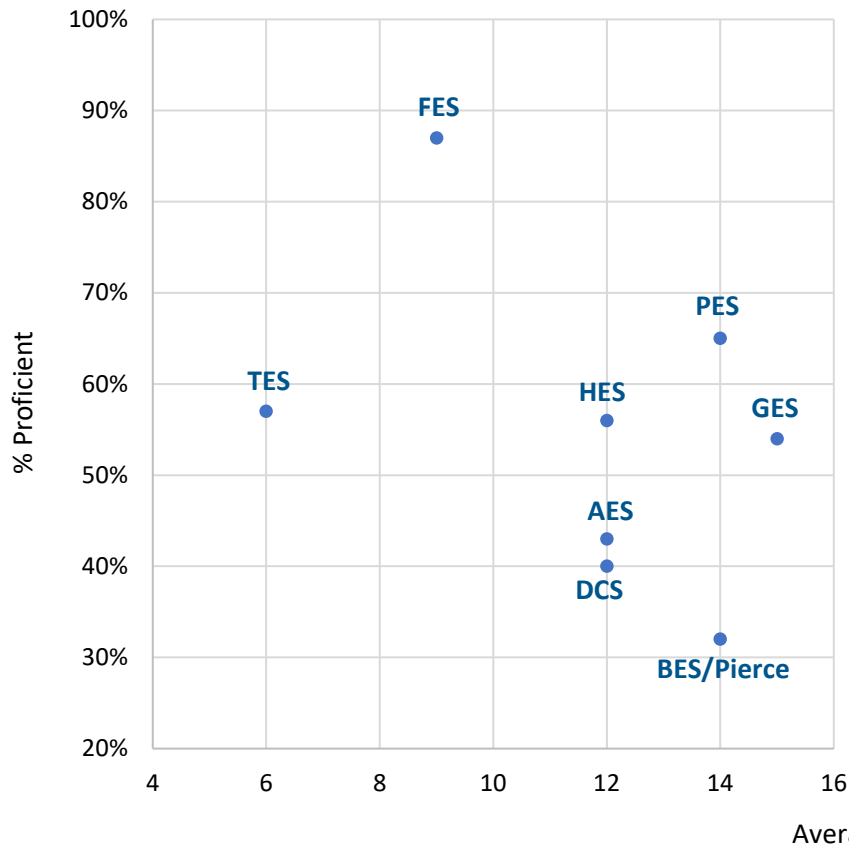
As shown in the graphs on the following pages, student achievement data available from NHDOE show:

- ◆ In elementary schools, there was some variance in both average class size (all grades) and academic performance. The largest average class sizes were reported at GES (15), BES/Pierce (14), and PES (14). The schools with the smallest average class sizes were TES (6) and FES (9). The schools with the highest proficiency on state test scores in reading (grades 3-4) in 2022-23 were BES/Pierce (68%), FES (67%), and PES (63%). The schools with the lowest proficiency in reading were AES (40%), and TES (43%). When compared to peer districts, ConVal was below average in both class size and proficiency.
- ◆ FES and PES followed a similar trend in proficiency on state test scores in math (grades 3-4) in 2022-23. FES had the highest proficiency (87%), followed by PES (65%). The schools with the lowest proficiency in math were BES/Pierce (32%), DCS (40%), and AES (43%). When compared to peer districts, ConVal was below average in both class size and math proficiency.
- ◆ In middle schools (grades 5-8), there was also variance in both average class size and academic performance. The largest average class size was reported at SMS (16.4) and was larger than that of GBS (11.2). Overall, 52% of students at SMS were proficient on 2022-23 state assessments in reading, compared to 42% at GBS. When compared to peer districts, ConVal was below average in both class size and proficiency.
- ◆ Overall, 38% of students at GBS were proficient on 2022-23 state assessments in math (grades 5-8), compared to 36% at SMS. When compared to peer districts, ConVal was below average in class size and above average in proficiency.
- ◆ Overall, 40% of students at SMS were proficient on 2022-23 state assessments in science (grades 5 and 8), compared to 31% at GBS. When compared to peer districts, ConVal was below average in class size and above average in proficiency.

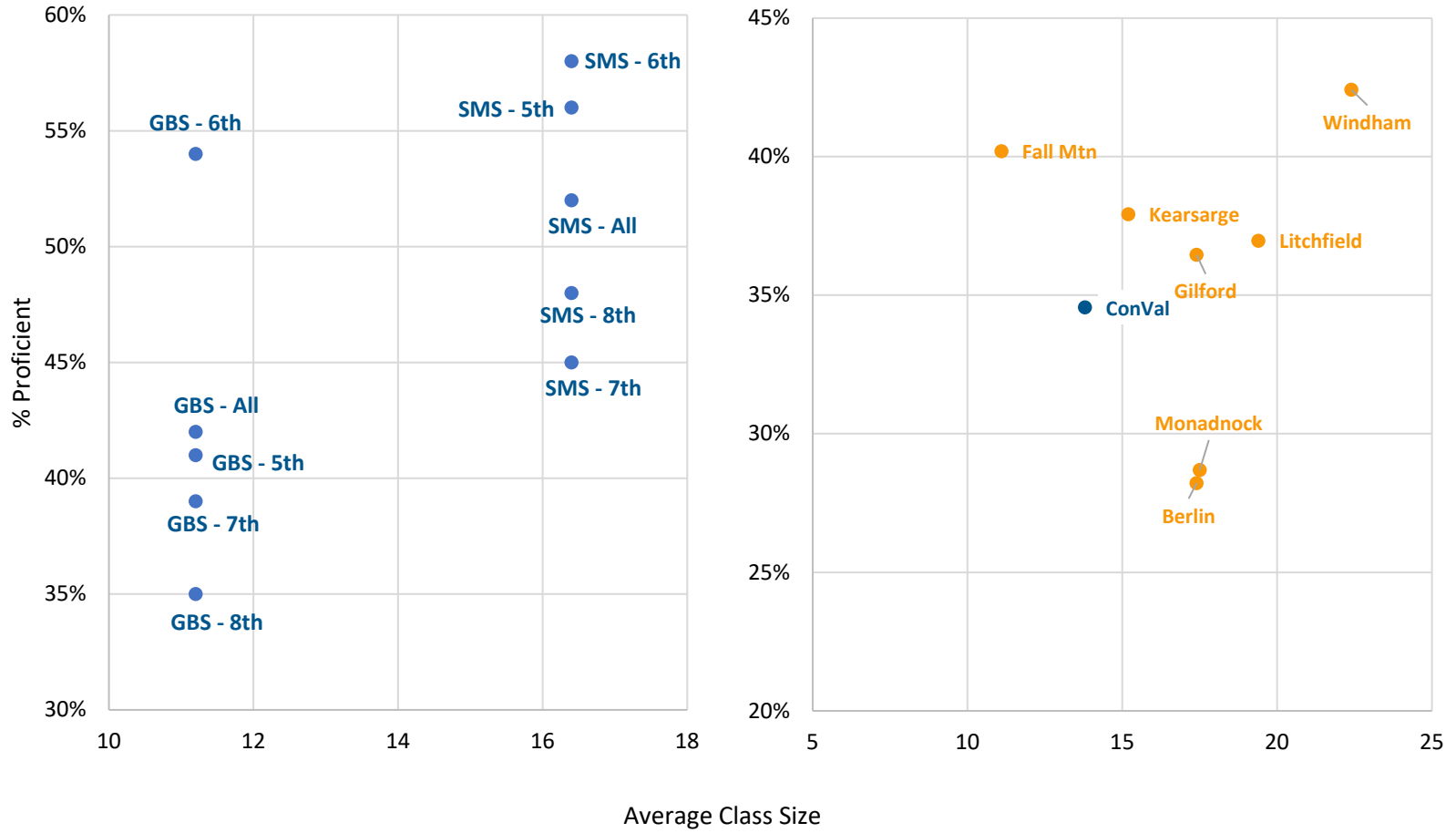
Class Size and ELA Proficiency, Grades 3-4, 2022-23



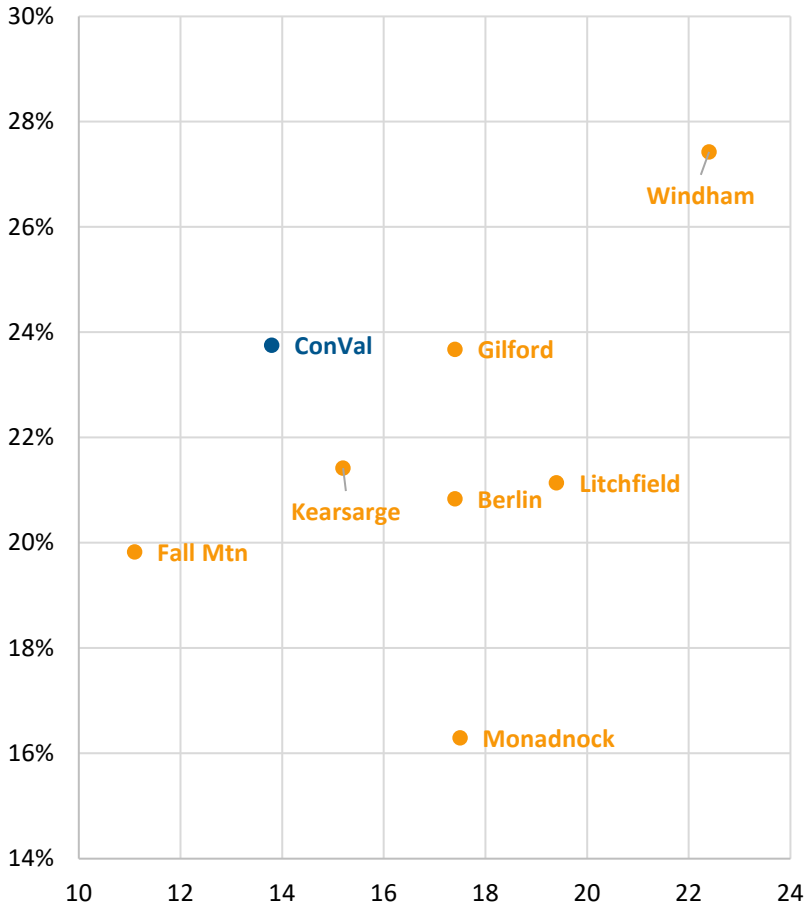
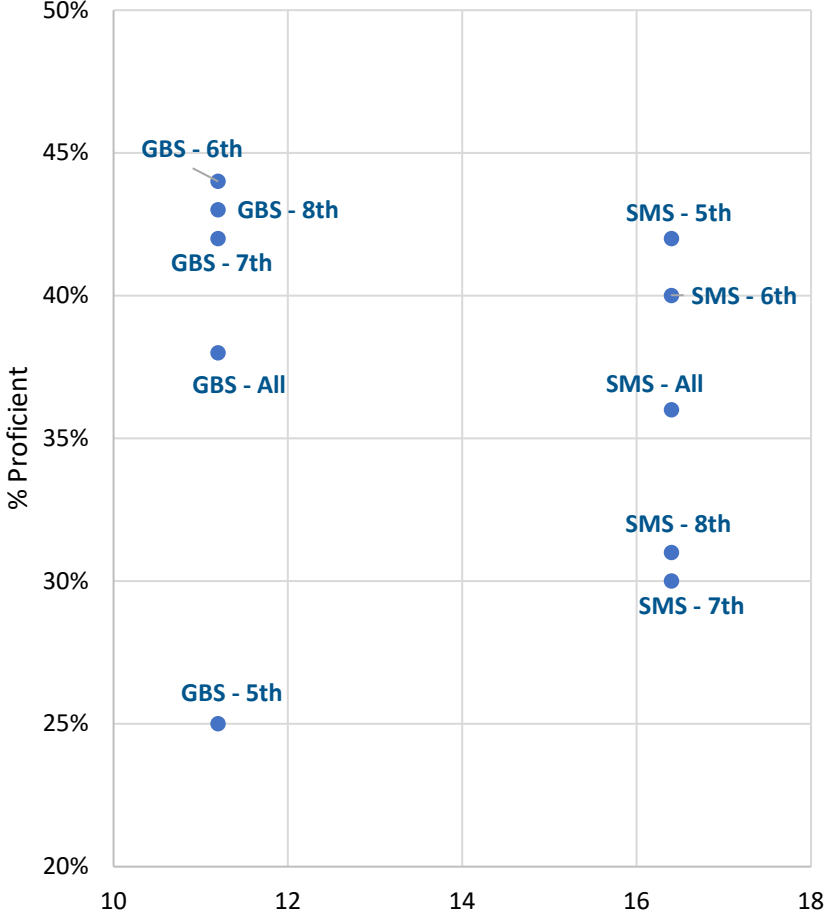
Class Size and Math Proficiency, Grades 3-4, 2022-23



Class Size and ELA Proficiency, Grades 5-8, 2022-23



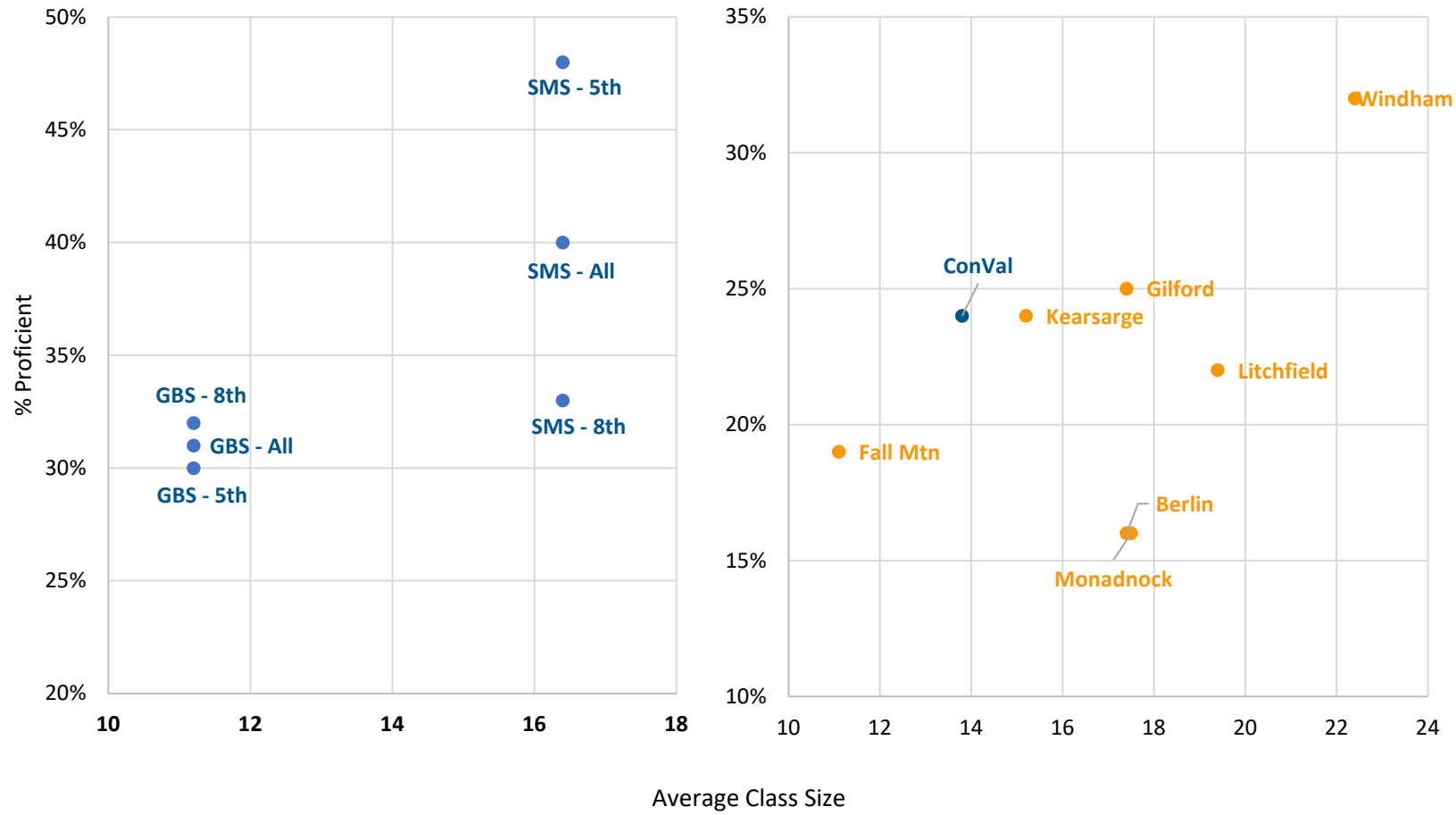
Class Size and Math Proficiency, Grades 5-8, 2022-23



Average Class Size

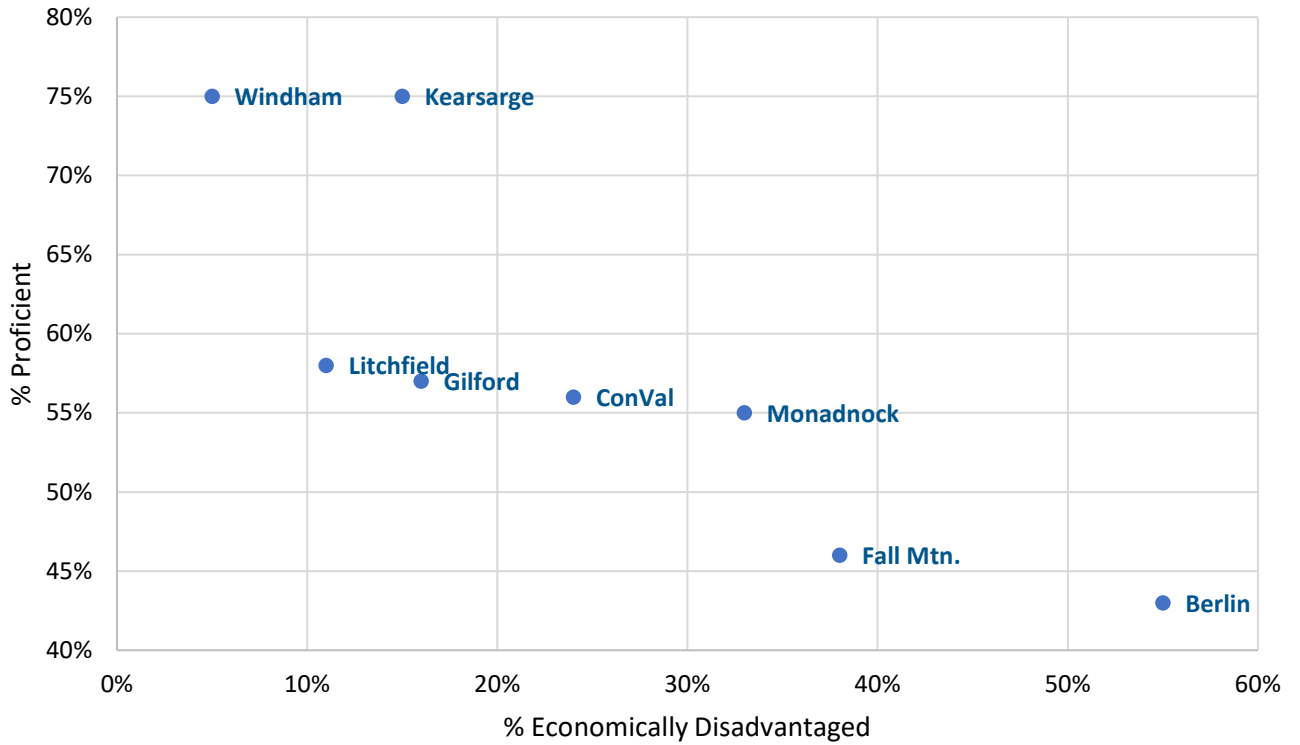


Class Size and Science Proficiency, Grades 5 & 8, 2022-23

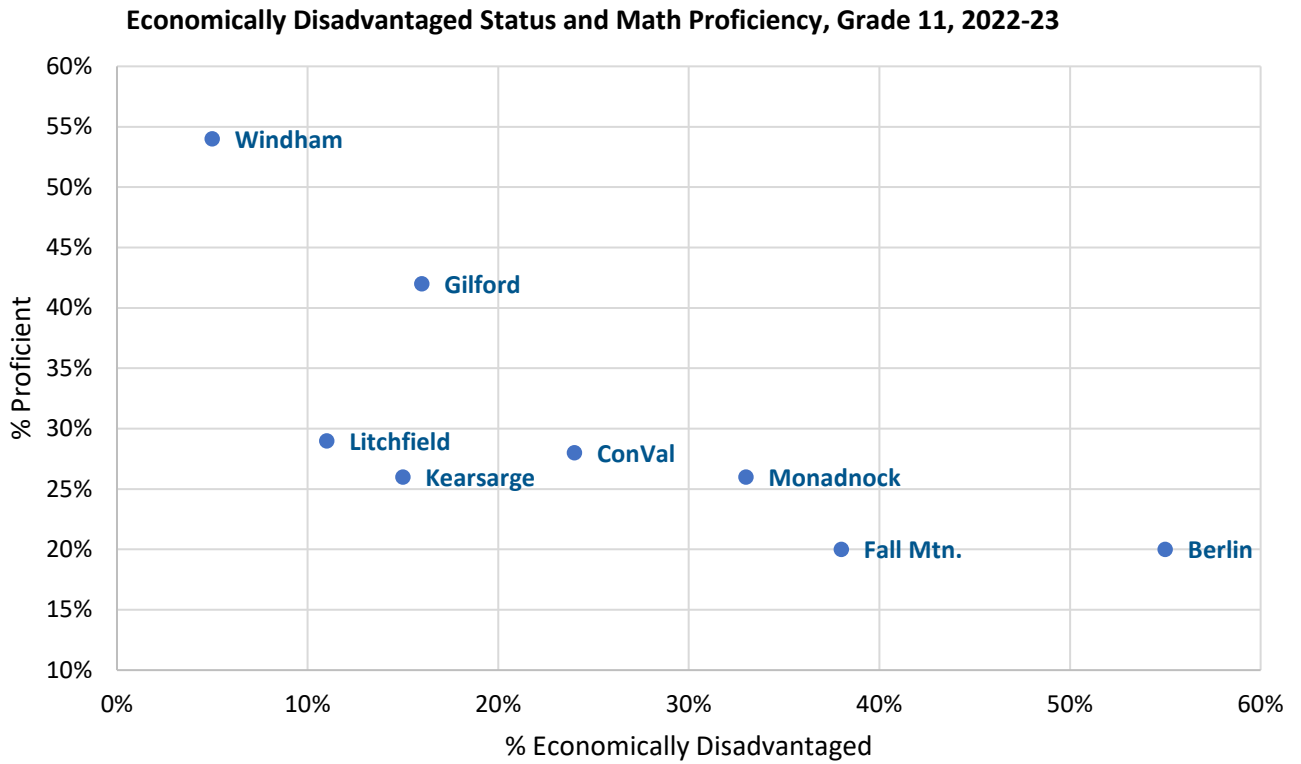


In 2022-23, 24% of ConVal students were identified as economically disadvantaged (ED). This rate was below the average ED rate of peers. Of ConVal HS students tested, 56% were proficient on the grade 11 state reading assessment. This proficiency rate was below average of peer districts.

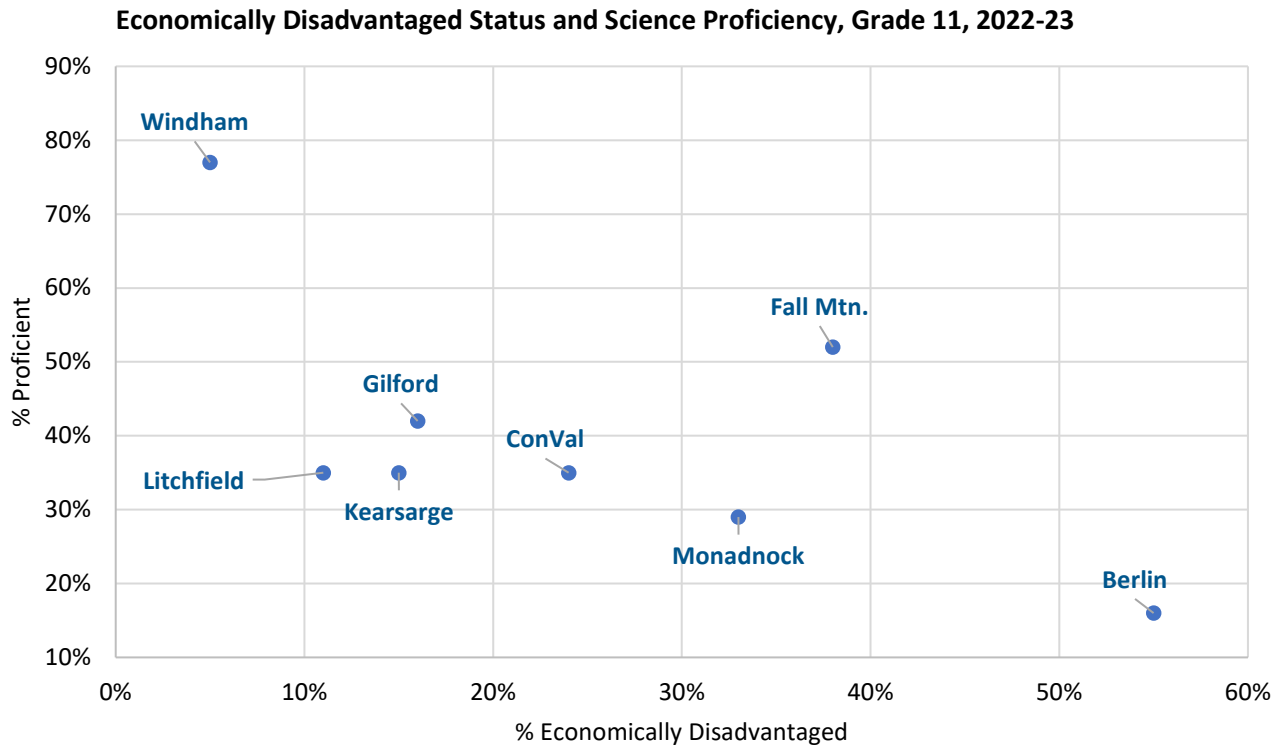
Economically Disadvantaged Status and ELA Proficiency, Grade 11, 2022-23



Of ConVal HS students tested on the grade 11 state math assessment, 28% of students were proficient. This proficiency rate was below average of peer districts.



Of ConVal HS students tested on the grade 11 state science assessment, 35% of students were proficient. This proficiency rate was below average of peer districts.



Course Offerings

During the 2023-24 school year, schedules for special classes (art, music, physical education and wellness, and library/media) in ConVal ES did not provide equitable instructional minutes and days for all elementary students. Students in PES received more minutes in art and music than all the other ES. Students in BES/Pierce, DCS, and TES received the most minutes of PE/Health; however, Prismatic observed in some of the smaller ES that PE classes were combined across grades. Without careful planning, multigrade PE classes could result in less than optimal instruction. Students in BES/Pierce and GES received the most minutes of library/media.

Minutes Per School Year Per Special Class

School	Art	Music	PE/Health	Library/Media
AES	1,620	2,430	4,050	Position Unfilled
BES/Pierce	1,260	1,215	4,140	2,880
DCS	1,215	1,440	4,140	2,700
FES	1,440	1,395	3,960	2,610
GES	1,395	1,305	3,960	2,880
HES	1,305	1,440	3,960	2,610
PES	2,700	2,700	2,700	1,620 + sessions for projects
TES	1,440	1,260	4,140	2,520

Source: ConVal School District, 2023

The frequency of special classes varies by school. Some ES offer physical education for 5 days in a row



every other week. AES offers it every 10 days for 10 days, and PES offers it every 3 days. Frequency of special classes are shown below. Some students in the MS focus groups expressed dissatisfaction with the frequency of the special classes. As a former student at BES/Pierce stated, “you learn something for 5 days and then you don’t do it again for 2 months.”

Frequency of Special Classes

School	Art	Music	PE/Health	Library/Media
AES	Combined 10 days	Every 10 days	10 days/Every 10 days	Position Unfilled
BES/Pierce	5 days/6 wks	5 days/6 wks	5 days/Every other wk	5 days/6 wks
DCS	5 days/6 wks	5 days/6 wks	5 days/2 wks per mo	5 days/6 wks
FES	5 days/6 wks	5 days/6 wks	5 days/Every other wk	5 days/6 wks
GES	5 days/6 wks	5 days/6 wks	5 days/Every other wk	5 days/6 wks
HES	5 days/6 wks	5 days/6 wks	5 days/Every other wk	5 days/6 wks
PES	Every 3 days	Every 3 days	Every 3 days	1 Day/wk
TES	5 days/6 wks	5 days/6 wks	5 days/Every other wk	5 days/6 wks

Source: ConVal School District, 2023

Some peer districts were found to offer courses not currently offered in ConVal in middle and high schools. For instance, neither GBS nor SMS currently offer World Language courses and ConVal HS only offers Spanish and German classes. Students in MS and HS focus groups expressed an interest in more course opportunities across a variety of areas, including world languages. ConVal staff expressed in focus groups and interviews that there must be more effort to show the benefits of reconfiguration in terms of resources and programs for all students.

Some of the courses offered by peer districts at the HS that do not appear to have a comparable course in ConVal HS include:

- ◆ French I, II, III, IV, and Latin I, II, III, IV, and additional Advanced Placement courses
- ◆ Literature and the 21st Century, Social Issues Research, and Publications for English Language Arts and
- ◆ STEM Math, Business Math, Math for Life, and Mathematics for the Trades.

Special Education

In interviews, district staff noted that historically ConVal managed special education services through the student services department. As the size of the program increased, the district developed a separate department for special education in 2017. The student services department continues to work closely with the special education program but also has a specific population of special needs students for which they acquire or provide services (social workers, nurses, and school counselors). Together, these two departments provide services for students with special needs.

As of October 1, 2023, the ConVal special education program served 449 students with 45 special education teaching positions and 95 para-professionals. Approximately 22 employed or contracted staff provide special education related services. Based on a student’s individual educational needs, related services can include speech and language therapy (SLT), occupational therapy (OT), physical therapy (PT), behavioral interventions, and psychological and social work services.

There has been inconsistent growth in the special education student count since 2017-18. The counts fell below 400 three years before rebounding to 400+ students. From 2022-23 to 2023-24, the special education student count grew by 34 students (+8%). This is not a large growth and is too little data to determine a trend. However, given the historical decline in overall district enrollment since 2011-12, even slight growth takes on meaning. In an interview, the director of special education stated that families were moving to ConVal for its special education programming.

Number of Special Education Students - Child Count History

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Child Count	420	399	N/A	382	393	415	449

Source: ConVal School District, October 2023

The smaller class sizes generally in the ConVal ES can present a challenge with special education students: Smaller class sizes reduce opportunities for inclusion of special education students among a greater number of regular teachers. Related services therapies for special education students can lend themselves easily to small group work, but only if there is a sufficient number of students to do a group.

ConVal has a variety of special educational needs across all schools. As is typical in school districts, children with mild special educational needs generally spend more time in regular classes and generally need fewer specialized services and supports than children with moderate or severe special educational needs. The more services are needed, the more complex it becomes to serve the child in a regular education setting, and the less time is spent in regular education services. This promotes more blending of regular classroom and special education classroom learning. New Hampshire utilizes time-based resource and self-contained models of service delivery and the caseload rather than workload methods of caseload determination.

District data reflects there is a larger number of children with milder forms of disability such as learning disabilities than any other circumstance in ConVal schools.⁷ The next largest group is children with moderate disabilities. It is likely that students with both mild and moderate disabilities can function well in regular classrooms with supports but may need specific time in special education settings daily for specific subjects or related services. The smallest group is students with severe disabilities. Students in this group likely spend most of their day in specific special education programming but still go into regular classes as appropriate with support. AES, GES, HES, and PES have the highest number of students with mild special educational needs.

Of the elementary schools, AES, BES, GES, and PES have the highest moderate special educational needs, while AES, DES, PES, and TES have the most students with more severely impacted learning. Given the smaller school size, students with higher special education needs are given services first at their home school. They can also receive services at PES in the Intensive Learning Supports (ILS) program.

The preschool programs are regular education classrooms with special education students in the programs that are located at AES, GES, HES, and PES. The complexity of special educational needs of students across all ConVal schools can be seen below.

⁷ The terms “mild”, “moderate”, and “severe” are used here in order to simplify the special education discussion for a lay audience.

District Disability Data by School

School	SPED Students	% Moderate & Severe
AES	35	54%
BES/Pierce	14	57%
DCS	13	54%
FES	<10	50%
GES	22	45%
HES	21	19%
PES	52	54%
TES	<10	75%
ES Totals	171	50%
GBS	51	22%
SMS	76	46%
MS Totals	127	43%
CVRHS	142	35%

Source: ConVal School District, Compiled by Prismatic, October 2023

During focus groups, elementary special education teachers described their classrooms as resource programs with pull-out services as the needs of students dictate. Co-teaching with regular teachers is not used at the elementary level. Consultation services are available to help teachers implement supports in the regular classroom. The elementary level has an intensive learning program (ILS) for students who need more time with special education teachers or more intense support, such as para-professional services, while in regular or special classes. The ILS program is housed at PES.

In focus groups, MS teachers described the MS program as a resource model with successful co-teaching in the regular classroom setting. Each MS grade level has a special education teacher assigned to it. There is an intervention block in the MS schedule for student time with the special education teacher. The MS also has an ILS program and an Emotional Support Program (ESP). Both programs are set up at SMS and designed to work with CVRHS who need more support for learning or behavioral issues.

Focus group input suggested that the HS program is set up to do all the services mentioned at elementary and middle schools, but also has an executive functions class offered to students with special needs. The HS also has a special education teacher assigned to each major subject area to work with students and assist regular teachers. In addition, the HS has both the ILS and ESP programs.

The NH State Approval of Program documents required annually lists the large majority of special education programs (except ILS and ESP) as resource model programs; however, the numbers in all ConVal programs are quite low and do not generally match the caseload numbers typically found in resource programs. The ConVal director of special education indicated that even the students with the most complex needs spend a large portion of their time in regular classes.⁸ This is being accomplished with an apparently large monetary investment in paraprofessionals, 41 of which are assigned to individual students to offer 1:1 service in regular classrooms. Other paraprofessionals are assigned to specific special education classrooms (ILS, ESP) as well as supporting elementary students via the Behavioral Support (BEST) program.

⁸ As required by law.

The consulting team observed special education spaces at each of the ConVal ES. The smaller ES have a difficult time finding suitable locations for special education related services staff to work and office. Shared spaces at smaller and larger schools are not private for conferencing. They are also frequently noisy and distracting for students and staff.

Facilities

When the ConVal district was created in 1967, there were 8 elementary schools (1 in each of the towns except Sharon) and 2 high schools (1 in Antrim and 1 in Peterborough). The new school district constructed a new high school, opening the current ConVal HS in 1970-71. The previous high schools were converted into grade 1-8 facilities (Kindergarten was not mandatory at that time).

In 1985, the district commissioned a system study to help it determine future directions. That study included these conclusions:

- ◆ The ConVal area would experience somewhat more rapid growth than forecast by the New Hampshire State Planning Office, reaching a population of 17,352 by 1995.
- ◆ Among school-age residents, there would be “substantial increases” between 1985 and 1995.
- ◆ As a result, 4 elementary schools (Bennington, Dublin, Greenfield, and Temple) and the high school were projected to exceed their student capacities or had already exceeded them.⁹

Perhaps as a result of that study, the district began improving its ES facilities starting in 1987:

- ◆ AES and PES received upgrades in technology, furnishings, fixtures, and equipment.
- ◆ BES/Pierce and DCS received classroom additions to their original, historic brick schoolhouses.
- ◆ The 4 original schoolhouses of Frankestown, Greenfield, Hancock, and Temple, were replaced with new, contemporary prototype buildings in nearby locations.

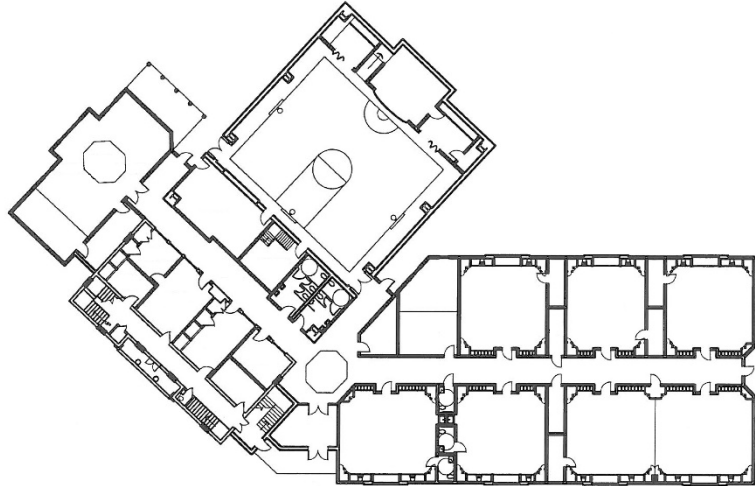
In 2006-07, the district opened SMS for grades 5-8. Located ~1,000 feet from ConVal HS, it included space for district administration. Consequently, PES shifted from serving K-8 to only serving K-4.

⁹ Schooling in the ConVal District: A Comprehensive System Study. Harvard Study Group, Cambridge, Massachusetts, October 1985.

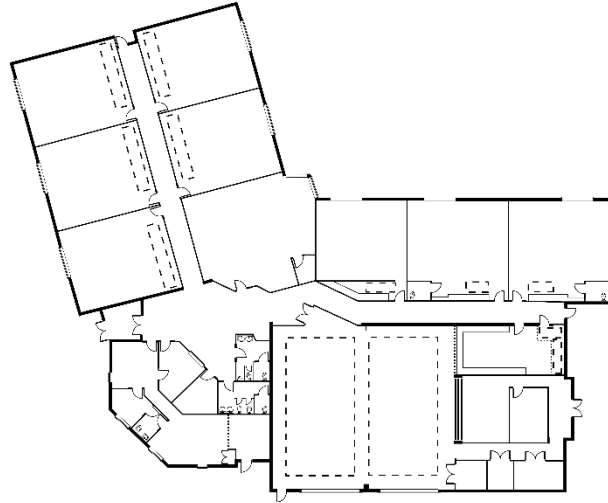
Layout of AES, with 14 spaces that could serve as classrooms



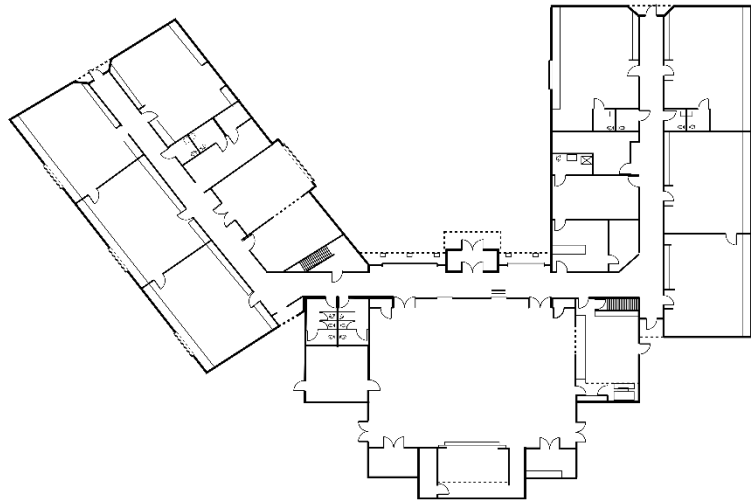
Layout of BES/Pierce, with 7 spaces that could serve as classrooms



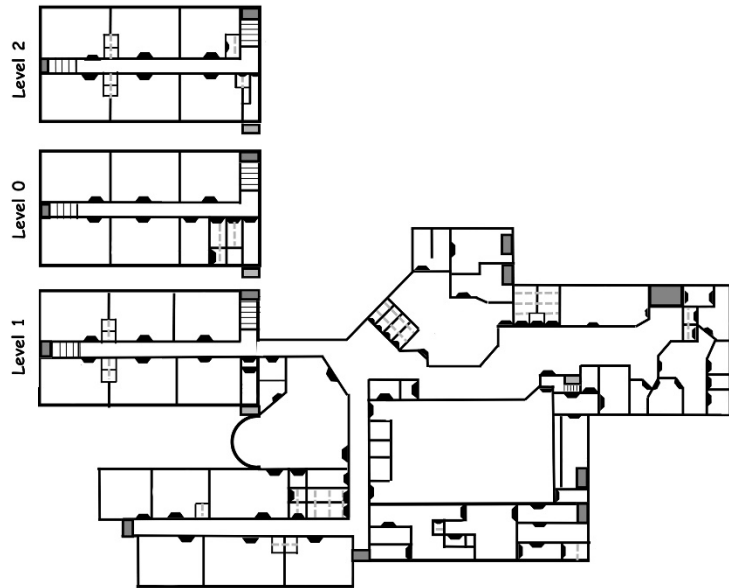
Layout of DCS, with 8 spaces designed to be classrooms



Layout of the 4 Prototype Schools - FES, GES, HES, and TES each have this design, with 8 spaces designed to be classrooms



Layout of PES, with 24 spaces that could serve as classrooms



In the elementary schools, the number of spaces that could serve as classrooms varies, from 7 in DCS to 24 in PES. Of course, not all of the classroom spaces can be used exclusively for regular education students, because ConVal must also serve special education students who may need a self-contained classroom and/or the district may need to provide a space for PreK instruction. However, the number of classrooms potentially available for regular education classes provides an upper limit for planning purposes. Actual school capacities for regular education students would be adjusted downward as class spaces are pulled from the inventory to provide space for those self-contained spaces.

In New Hampshire, two methods are available for calculating a school's student capacity:

- ◆ A calculation based on floor area per pupil as prescribed by the New Hampshire Department of Education:

Ed 321.06 Maximum Sizes for School Buildings. School building aid for new school buildings or additions to existing school buildings shall be limited to the following under RSA 198:15-b,IV, (b) (1) for: (a) Elementary schools, 120 square feet/pupil; (b) Middle schools, 140 square feet/pupil; (c) High schools, not including space in regional vocational centers, 160 square feet/pupil.

- ◆ A calculation based on maximum class size values, also prescribed by the New Hampshire Department of Education:

Ed 306.17 Class Size. (a) Class size for instructional purposes, in each school shall be: (1) Kindergarten-grade 2, 25 students or fewer per educator, provided that each school shall strive to achieve the class size of 20 students or fewer per educator; (2) Grades 3- 5, 30 students or fewer per educator, provided that each school shall strive to achieve the class size of 25 students or fewer per educator; and (3) Middle and senior high school, 30 students or fewer per educator. (b) These class size requirements may be exceeded for study halls, band and chorus, and other types of large group instruction, including but not limited to, lectures, combined group instruction, and showing of educational television and films. (c) In the interest of safety, the maximum number of students in laboratory classes in such areas as science and career and technical education shall be determined by the number of work stations and the size and design of the area. In no case shall the number of students in laboratory classes exceed 24.

In responding to the initial data request, ConVal provided conflicting capacity figures for its schools. One possible explanation for the conflicts may be the age of the facilities – some may have been built when different NHDOE rules governed the determination of student capacity. Prismatic therefore calculated the upper-limit student capacities of ConVal facilities using the current NHDOE guidance. For the elementary schools, Prismatic assumed that 3/5th of the classrooms would be used by grades K-2 and 2/5th would be used by grades 3-4. For the middle schools, Prismatic assumed that 4 GBS and 6 SMS classrooms would be used by 5th grade students. The same calculations for the secondary schools and the figures provided in the district's RFP are provided for comparison. Adjusting each elementary school down by 1 classroom to account for potential self-contained or PreK space needs, the consulting team estimates that ConVal currently has the space to accommodate 1,623 elementary students. Prismatic recognizes that nearly all elementary schools in New Hampshire tend to maintain class sizes of less than 20 students; in a review of 2021-22 class size data statewide, the average size for grade 1-2 classrooms was 16.5 and for grade 3-4 it was 17.6. Using an artificial maximum of 20 ES per classroom and subtracting 1 classroom from each facility for special education or other use, the consulting team estimates that ConVal currently has the space to accommodate 1,540 elementary students.

Regular Education Student Capacities of Each ConVal Facility

School	Floor Area (s.f.)	# of Classrooms	Capacity by Floor Area ¹⁰	Capacity at NHDOE Maximum	Capacity at NHDOE Recommended	Maximum Potential Capacity per NHDOE	ConVal RFP Figures
AES	33,326	14	278	378	308	278	300
BES/Pierce	21,500	7	179	189	154	154	120
DCS	18,500	8	154	216	178	154	120
FES	18,500	8	154	216	178	154	120
GES	18,500	8	154	216	178	154	120
HES	18,500	8	154	216	178	154	120
PES	53,200	24	443	540	440	443	440
TES	18,500	8	154	216	178	154	140
GBS	59,500	15	425	450	430	425	450
SMS	114,000	25	814	750	720	720	600
CVHS ¹¹	149,213	30	933	900	900	900	1,000
Total	523,239	155	3,842	4,385	3,920	3,690	3,530

Source: ConVal School District, NHDOE, and Prismatic calculations, October 2023

The consulting team completed walk-throughs of every ConVal facility in August 2023. The team found no evidence of substantial deferred maintenance or any form of neglect. The team’s observations were confirmed by district records showing a clear preventive maintenance protocol and a capital improvement plan that has been funded and followed. The consulting team verified evidence of scheduled maintenance and repair projects underway or recently completed. Reactive maintenance needs have been minimal and have been addressed without delay when necessary.

¹⁰ 120 s.f. per elementary student, 140 s.f. per middle school student, and 160 s.f. per high school student

¹¹ Excludes 34,700 square feet that are allocated to vocational-technical programs. By NHDOE rules, the Vo-Tech area may not be counted in computing the facility’s instructional capacity.

Example Elementary School Classrooms

AES Classroom



BES/Pierce Classroom



DCS Classroom



GES Classroom



Source: Photos by Prismatic, 2023.

ConVal Facilities Operating Expenses as Budgeted for 2023-24

Obj	Description	AES	BES	DCS	FES	GES	HES	PES	TES	GBS	SMS	CVHS
330	Purchased Services	\$119,331	\$64,605	\$77,018	\$70,840	\$70,521	\$64,560	\$183,333	\$72,456	\$70,521	\$182,108	\$309,404
411	Water/Sewer	\$5,077	\$1,557	\$0	\$0	\$0	\$1,420	\$7,062	\$1,260	\$9,875	\$13,640	\$30,165
421	Disposal	\$3,432	\$1,797	\$1,797	\$1,797	\$1,797	\$1,797	\$6,182	\$1,797	\$6,842	\$7,222	\$18,568
422	Snow Plowing	\$8,101	\$5,505	\$7,947	\$11,197	\$8,472	\$8,258	\$16,780	\$16,303	\$13,301	\$19,550	\$23,306
430	Repair/Maintenance	\$7,745	\$2,028	\$13,384	\$4,601	\$3,761	\$4,674	\$13,732	\$21,692	\$22,235	\$18,938	\$111,341
431	Structural Repair/Maint	\$8,000	\$5,300	\$32,000	\$5,500	\$5,500	\$5,500	\$6,100	\$5,700	\$13,190	\$12,240	\$13,600
432	Electrical Repair/Maint	\$500	\$300	\$300	\$400	\$400	\$400	\$870	\$400	\$3,900	\$6,010	\$9,899
433	Mechanical Repair/Maint	\$1,750	\$4,800	\$1,100	\$6,000	\$5,370	\$5,600	\$2,670	\$5,900	\$2,800	\$192,400	\$3,500
434	HVAC Repair/Maint	\$3,168	\$2,112	\$1,980	\$1,980	\$1,980	\$1,980	\$5,940	\$1,980	\$4,968	\$5,940	\$0
435	Safety Repair/Maint	\$3,370	\$1,940	\$1,640			\$960	\$10,020	\$960	\$10,862	\$7,893	\$15,599
610	General Supplies	\$8,855	\$3,381	\$2,480	\$2,470	\$3,864	\$3,381	\$14,007	\$2,470	\$3,864	\$19,805	\$34,535
622	Electrical	\$44,668	\$24,946	\$26,474	\$20,240	\$26,263	\$18,985	\$80,502	\$20,828	\$59,781	\$120,155	\$270,802
623	Bottled Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$1,760	\$21,200
624	Heating Oil	\$40,400	\$26,800	\$22,000	\$19,600	\$16,800	\$18,000	\$79,200	\$15,600	\$60,800	\$95,200	\$172,800
	Total	\$254,397	\$145,071	\$188,120	\$144,625	\$144,728	\$135,515	\$426,398	\$167,346	\$283,689	\$702,861	\$1,034,719

Source: ConVal School District, October 2023

The district has a capital improvement plan that covers all of its facilities. For the next 3 years (2024-25 through 2026-27, ConVal plans to spend \$7.8M on its facilities, the bulk of which is for HS classroom restorations. Of that total, \$893,00 is planned to be spent on the 8 elementary schools.

ConVal Capital Improvement Plan – Previous and Planned Expenditures

	2022-23	2023-24	2024-25	2025-26	2026-27	Total
By School						
AES	\$27,000				\$133,000	\$160,000
BES/Pierce		\$37,000	\$19,000		\$133,000	\$189,000
DCS		\$83,000		\$30,000		\$113,000
FES		\$98,000	\$123,000			\$221,000
GES		\$67,000		\$128,000		\$195,000
HES		\$58,000	\$172,000			\$230,000
PES	\$345,000	\$192,000	\$32,000			\$569,000
TES		\$109,000	123,000			\$232,000
GBS	\$27,000	\$120,000				\$147,000
SMS	\$42,000	\$339,000				\$381,000
CVHS	\$647,000	\$1,413,000	\$6,702,500	\$97,200	\$96,700	\$8,956,400
District	\$48,000	\$106,000	\$50,000			\$204,000
Total	\$1,136,000	\$2,622,000	\$7,221,500	\$255,200	\$362,700	\$11,597,400
By Trade						
AHU/Ventilation	\$27,000					\$27,000
Building Controls/HVAC		\$22,000				\$22,000
Classroom Renovations	\$36,000	\$38,000	\$5,600,000			\$5,674,000
Engineering Study	\$75,000					\$75,000
Fields	\$29,000	\$75,000				\$104,000
Flooring	\$27,000	\$80,000	\$72,000			\$179,000
Hallway Renovations	\$205,000					\$205,000
Infrastructure (Erate)			\$28,000			\$28,000
Infrastructure/LHT Reno			\$1,102,500			\$1,102,500
Mechanical	\$196,000	\$189,000	\$369,000	\$128,000	\$266,000	\$1,148,000
Parking Lots		2,112,000				\$2,112,000
Roofing	\$316,000			\$97,200	\$96,700	\$509,900
Vehicles	\$48,000	\$106,000	\$50,000			\$204,000
Windows/Doors	\$177,000			\$30,000		\$207,000
Total	\$1,136,000	\$2,622,000	\$7,221,500	\$255,200	\$362,700	\$11,597,400

Source: ConVal School District, October 2023

In comparison with peer districts, recent spending on maintenance and plant operations in ConVal has been comparable. However, what is lost in that basic comparison is that the peers are spending roughly an equal percentage of their budgets on less than half the number of schools that ConVal is. In other

words, if the peer districts and ConVal each had \$1,000 budgets overall, the peer districts spent 9.6%, or \$96, on their maintenance and plant operations in 2021-22, while ConVal spent 8.3% or \$83. In the peer districts, with an average of 5 schools, that resulted in \$19.20 per school. In ConVal, with 11 schools, that resulted in \$7.82 per school.

District	Enrollment 2021-22	Percent of Spending on Plant Operations				# of Schools
		2018-19	2019-20	2020-21	2021-22	2023-24
Berlin	1,063	8.8%	7.2%	8.7%	12.2%	2
Fall Mountain Regional	1,448	9.4%	8.9%	9.8%	9.3%	9
Gilford	1,127	11.7%	10.8%	12.0%	11.1%	3
Kearsarge	1,730	11.1%	10.6%	10.9%	9.6%	7
Litchfield	1,230	9.6%	9.2%	8.7%	9.1%	3
Monadnock Regional	1,615	7.5%	7.7%	7.8%	7.5%	6
Windham	3,032	6.0%	9.0%	7.1%	8.2%	4
Peer Average	1,606	9.2%	9.1%	9.3%	9.6%	5
ConVal	2,062	9.5%	9.8%	8.3%	8.3%	11

Source: ConVal School District, October 2023

Operational Services

Food Services

The ConVal food services program is currently provided by a food services management company (FSMC). The change from an internally operated program to an externally operated one occurred in 2015-16, because, as noted in committee and board meeting minutes, the district was seeking to save ~\$250k from no longer having to pay benefits for food service workers. Once outsourced, salaries and benefits would become the responsibility of the FSMC and FSMCs frequently minimize their operating costs by not offering their employees benefits.

The contract with the FSMC includes these items:

- ◆ ConVal pays an administrative and management fee of \$7,500 monthly for 10 months each year.
- ◆ ConVal pays all direct operating costs.
- ◆ ConVal receives all food service program revenues which includes federal/state reimbursement, meal payments, a la carte monies, and funds from grants such as the Fresh Fruit and Vegetable program.
- ◆ If expenses exceed revenue, ConVal pays a subsidy to the FSMC.

In January 2016, committee reports showed that the FSMC reported a decline in revenues due to a loss in catering and lower student enrollment. In May 2016, the district noted that it would have to dip into its general funds to cover losses in the food service program. With the exception of 2021-22, the food service program does not earn enough revenue to cover expenses and requires district subsidies from the general fund. COVID impacted the revenues from 2020 through 2022, with the easing some USDA restrictions and federal subsidies.

ConVal Food Service Program Revenues and Expenses

	2018-19	2019-20	2020-21	2021-22	2022-23
Total Revenues	\$926,310	\$951,717	\$615,008	\$1,435,691	\$1,033,512
Total Expenses	\$1,104,187	\$1,052,713	\$809,954	\$1,375,135	\$1,237,010
Revenues - Expenses	(\$177,877)	(\$100,996)	(\$194,019)	\$60,556	(\$203,498)

Source: ConVal School District, Compiled by Prismatic, October 2023

The consulting team observed kitchens and meal service in all schools. As currently configured, only 1 of the 8 ES kitchens has onsite cooking: PES. GBS prepares meals for AES, while SMS prepares meals for all the other ES, which are then transported to the schools.

PES has a full production kitchen and larger enrollment, so meals are prepared on site. It is the only ES with a full production kitchen, added in a construction project 10 years ago. Breakfast is put in brown paper bags that students take back to their classrooms to eat, a practice that started during COVID. Lunch is prepared and served in bulk from a steam table. There are 3 entrée choices – two cold and one hot. Students eat in the lunchroom.

For AES, staff at GBS portions unitized meals into milk crates and heated bags organized by teacher then delivers them just before breakfast serving time and just before each of the 2 lunch serving times. The meals are put on tables in the lunchroom. Each teacher distributes to their students and completes the roster. AES students get a choice of one hot entrée and two cold entrees. Because AES and GBS are co-located, staff wheels over the carts of food. No delivery van is needed.

The remaining 6 ES receive their food from SMS via a van driven by food service staff. The district provides the vans and pays for the maintenance and operating expenses. Staff puts individual breakfast meals into white plastic bags (similar to grocery store bags) and delivers them with the lunch delivery for distribution the next morning. For lunch, students have a choice of 1 hot entrée and 1 cold entrée. Cold lunch meal items are put in white plastic bags; hot items are put in individual containers, heat sealed, then put into white bags. School staff distribute meals because the FSMC has stated it cannot find sufficient staffing for the task.

Prior to COVID, FSMC staff brought food to the ES in steam table pans then served students from a heated steam table. Food was served on plastic trays. Using white plastic bags for meal distribution started during COVID and, to date, the previous method of meal service has not been resumed. The FSMC stated their intent is to return to this bulk method of serving once they are able to find staff.

The 2 middle schools and the high school prepare food on site and offer a wide variety of food choices at both breakfast and lunch as well as numerous ala carte items. They each have an attractive fresh fruit and vegetable self-serve bar that contains numerous choices for students.

Secondary Salad Bar



Elementary Plastic Bag Lunches



Source: Photos by Prismatic, 2023

With the exception of 2020-21 which was influenced by COVID, breakfast and lunch participation in the ES has been fairly low over the years. Overall, breakfast participation has not exceeded 22% and lunch participation has not exceeded 48%. In 2022-23, AES and FES had the highest breakfast participation rates (>30%), while BES/Pierce, FES, PES, and TES had the highest lunch participation rates (>50%).

Average Daily Breakfast Participation Over Time

School	11/2016	11/2017	11/2018	11/2019	11/2020	11/2021	9/2022	6/2023
AES	10%	6%	7%	8%	15%	56%	24%	34%
BES/Pierce	15%	25%	14%	21%	18%	24%	14%	17%
DCS	25%	22%	27%	24%	20%	30%	6%	16%
FES	13%	10%	14%	11%	10%	30%	20%	36%
GES	15%	13%	15%	15%	13%	28%	14%	23%
HES	15%	23%	6%	12%	6%	45%	9%	13%
PES	18%	18%	13%	28%	34%	60%	20%	15%
TES	16%	7%	9%	17%	24%	43%	18%	35%
Total	16%	15%	12%	19%	22%	46%	18%	22%

Source: Participation data from claims submitted to NHDOE

Average Daily Lunch Participation Over Time

School	11/2016	11/2017	11/2018	11/2019	11/2020	11/2021	9/2022	6/2023
AES	43%	41%	30%	38%	30%	70%	29%	41%
BES/Pierce	50%	52%	34%	45%	40%	59%	27%	54%
DCS	47%	30%	51%	41%	53%	51%	45%	42%
FES	47%	48%	29%	43%	34%	53%	24%	55%
GES	42%	38%	33%	45%	38%	50%	30%	37%
HES	44%	43%	31%	47%	31%	59%	32%	38%
PES	52%	50%	36%	46%	34%	65%	34%	58%
TES	44%	47%	45%	54%	51%	59%	36%	52%
Total	47%	42%	35%	44%	36%	61%	32%	48%

Source: Participation data from claims submitted to NHDOE

Technology

The learning environment of today must make effective use of technology because the students of today will be the digital citizens of tomorrow. There are few careers that do not require the use of some kind of technology. At the collegiate level, even traditional institutions routinely require some online learning. In 2021, ~60% of postsecondary students took at least some courses online, a figure that was a healthy 36% in 2019 prior to COVID.¹² Even Dartmouth requires some online coursework before freshmen begin classes.

ConVal employs a number of commendable practices in its embrace of technology:

- ◆ District staff are issued laptops (or in a few cases desktops) on a 5-year replacement cycle, a practice begun in 2019. Both the existence of a replacement plan and the 5-year cycle are best practices. The district's tendency to purchase laptops is also a best practice.
- ◆ The district has minimum specifications for staff and student equipment that are reasonably high and likely sufficient for most work activities.
- ◆ The district began a 1:1 blended learning program prior to COVID that started by issuing Chromebooks to incoming 5th and 9th graders each year. When COVID hit, ConVal purchased Chromebooks for elementary students.
- ◆ Devices for students in grades 1-12 are no more than 4 years old, also a best practice. To continue at this level, ConVal has purchased ~500 Chromebooks each year since 2020-21.
- ◆ The district provides Internet access at good speeds. Both SMS and the HS have 3Gb bandwidth while both Antrim schools have 1Gb bandwidth. Dublin and Peterborough schools have 100MB access, while the rest have 50MB access.

In observations of technology usage in ConVal ES, the consulting team found generally equitable deployment of technology and generally equitable classroom usage of technology. Prismatic observed various ES students routinely using Chromebooks for learning tasks. In observations of 57 occupied ES classrooms, Prismatic found that 86% were actively using some form of technology at the time of

¹² <https://www.forbes.com/advisor/education/online-learning-stats/>

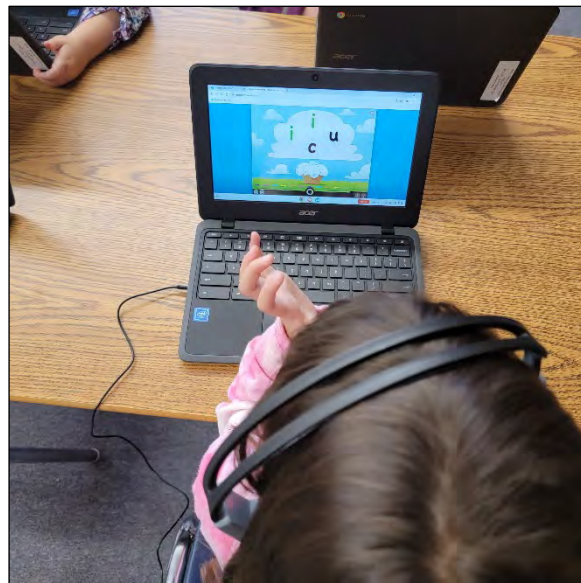
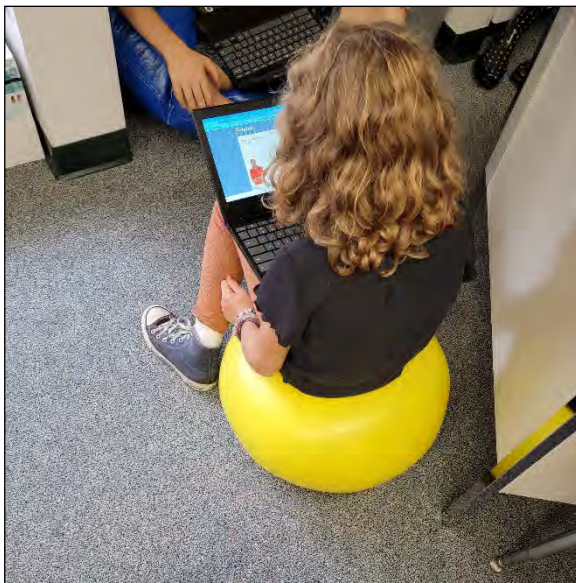
observation. All had technology readily available and the consulting team verified that it appeared to have been in recent use.

Observed Classroom Technology Use

School	# of Occupied Classrooms	# of OC where Students Observed Using Technology	# of OC where Teachers Observed Using Technology
AES	10	4	5
DCS	9	6	9
FES	7	1	7
GES	7	3	5
HES	9	1	8
PES	15	8	12
Total	57	23	46

Source: Prismatic observations, 2023.

Example Elementary School Technology Use



Source: Photos by Prismatic, 2023

Transportation

ConVal provides student transportation via a contracted vendor. The current contractor, STA (Student Transportation of American), has been the district’s transportation provider since 2007. In 2021, they won a new 6-year contract to provide transportation services including:

- ◆ 77-passenger buses and some 82-passenger buses for regular routes
- ◆ 20- and 29-passenger vans for special education transport and other special needs
- ◆ 6-passenger mini-vans

- ◆ career center/vo-tech busing
- ◆ summer school busing
- ◆ field trip and athletic trip busing
- ◆ late bus service from the high school and middle schools.

The current contract provides for 77 passenger buses and 20 and 29 passenger vans, all at the same price, \$65,270.51 in 2023-24. Bus and van prices increase by ~3% for each year of the contract. The number of “live hours” transporting students and daily mileage limits are not specified in the contract, but it can be assumed that the cost per bus is based upon the customary working day for ConVal buses used for years, 6:00-9:00 am and 1:30-4:30 pm, or 6 operational hours per day. In 2022-23 regular education transportation expenditures were \$1,076,407. There were 1,135 assigned riders on these routes from a student population of about 2,000. On a per pupil basis, regular education busing costs were \$948.38. On a per mile basis, assuming each route travelled 100 miles per day (a likely conservative estimate), 180 days of busing and 21 regular routes, costs were \$2.85 per mile.

When the current contract began, it was expected that there would be 38 routes (in-district and out-of-district) and more than 50 bus drivers, including daily drivers, spare drivers, and trips only drivers. Today, there are 23 routes and STA reports it is down 22 drivers from expected driver levels. Nationally, the school bus driver pool is down everywhere for a number of reasons – the challenges and stresses of transporting school children, the difficulties in getting a CDL to drive a school bus, the availability of other driving jobs that do not have the same stresses as school bus driving, and the generally tight labor market and low unemployment rate that provides many other, non-driving job opportunities.

In response to the bus driver shortage, STA was able to reduce the number of ConVal in-district, regular education bus routes from 21 in 2022-23 to 19 for 2023-24. This resulted in some routes becoming longer and carrying more students. Due to the size of ConVal, about 250 square miles (roughly 10 miles wide x 25 miles long), many of its bus routes are long, especially those servicing the outlying towns of Dublin, Frankestown, Hancock, and Temple. ConVal route buses typically travel ~110 miles per day. Some, such as the 5 routes that have late runs at 4:30 pm, travel farther. This results in route mileage of nearly 20,000 miles per year, not counting summer work. The national average for annual school bus mileage is about 12,000 miles per year.¹³ ConVal bus mileage would be even higher if not for the central location of the STA bus yard, just a quarter mile north of CVHS on Rt 202. STA’s lease of this property affords reduced “deadhead mileage” (no students on board), quicker response to district needs than if the bus yard was located outside the district, and reduced labor time and total mileage.

Busing is currently provided for students living more than 1 mile from school, unless there are safety concerns along the potential walking route, in which case they also are eligible for busing. ConVal has used a 2-tier busing system for as far back as people remember. This entails having the 1st tier of buses deliver MS/HS students to school around 7:15 am. The 2nd tier of buses carries ES students, with morning pick-ups starting around 7:45 am and students are dropped off by 8:30 am. Similarly, in the afternoon, the 1st tier of busing is for MS/HS students at about 2:15 pm. Elementary students are picked up between 3:15 and 3:30 pm, and the last drop off is made by about 4:30 pm. STA runs 5 late buses at 4:30 pm for those MS/HS students who stay after school for sports or activities.

¹³ American School Bus Council

HS Afternoon Bus and Car Rider Lines



Good Separation of Bus and Car Rider Traffic at PES



Source: Photos by Prismatic, 2023

Although there is no NHDOE regulation regarding length of bus run nor a written district policy that restricts bus ride time, the expectation has grown that in-district bus runs will be less than 1 hour. Currently, among the 19 2023-24 MS/HS bus runs, only 4 are scheduled to last longer than 60 minutes from the first morning pick-up to the last school drop-off. Six MS/HS runs are shorter than 50 minutes. Among the 19 ES bus runs, none are longer than 60 minutes in the morning; 15 are shorter than 50 minutes.

The bus contractor has an experienced terminal manager, bus driver trainer, and crew that know the ConVal area well, but they do not use routing software. Nevertheless, their local knowledge will serve the district well if it chooses to analyze new options for how transportation services can be provided.

In the area of special education transportation, ConVal has several bus routes that travel 30-40 miles outside the district. These routes carry just a few students to out-of-district placements, but the number of students has nearly doubled between 2022-23 and 2023-24. The district has not explored options for using parent contracts (reimbursing the parents for providing their own transportation) or combining special education routes with neighboring districts in order to save funds and, more importantly, free a credentialed bus driver for other duties. In addition, ConVal has not fully explored options for transporting special education students on regular bus routes, although it does transport some in this manner. Typically, those situations need to be assessed on a student-by-student basis, but each placement onto a regular education bus route can result in substantial resource and time savings.

The consulting team observed bus operations at most district schools and visited each school to assess traffic routing around the campuses. In those observations and the analysis of transportation data, the consulting team found no equity issues among the schools. Ride times were not excessive in some schools compared to others. The number of students assigned to each bus did not vary substantially among the schools.