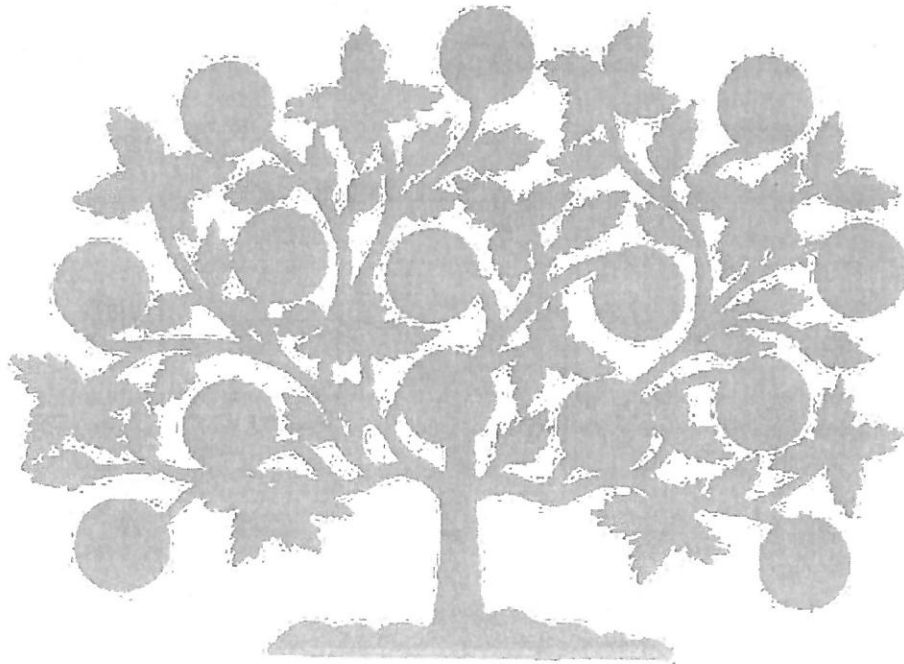


**FINAL REPORT
SHAKER REGIONAL SCHOOL DISTRICT
STUDENT ENROLLMENT PROJECTIONS
UPDATE: 2013-2022**



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January 16, 2013

TABLE OF CONTENTS

| | |
|-------------------------------------------------------------------------------------|-----------|
| OBJECTIVE | 2 |
| KEY RESULTS | 2 |
| • Projections Overview | 2 |
| • Current Enrollment | 5 |
| • Accuracy of the 2010 Projections | 5 |
| METHODOLOGY | 10 |
| • Grade Progression Ratios | 12 |
| • Cross-town Enrollment | 13 |
| • Projected Births | 14 |
| • Population Growth | 15 |
| • 2010 Census Data | 16 |
| • Using Confidence Intervals to Generate the Low- and High-Range Projections | 18 |
| PROJECTED SCHOOL ENROLLMENT: 2013 to 2022 | 19 |
| DISCUSSION: BROADER ECONOMIC CHALLENGES AND IMPLICATIONS | 24 |
| CONCLUDING REMARKS | 32 |

**SHAKER REGIONAL SCHOOL DISTRICT
STUDENT ENROLLMENT PROJECTIONS UPDATE: 2013-2022
January 16, 2013**

OBJECTIVE

This update of enrollment projections for the Shaker Regional School District provides information to enable the School Board to anticipate potential changes in student population that could affect operations or facility needs. The enrollment projection model relies on past enrollment patterns, birth rates, and population, which in turn are driven by other factors. This year our efforts significantly benefitted from the wealth of data generated by the 2010 U.S. Census, which provided insights typically not available to us (most of the results were not available when we prepared the 2010 update). At the same time, the reduction in some state services due to budget cuts created data voids—such as annual state and town-by-town population estimates and forecasts—that we had to address.

Demographic changes—within and outside of New Hampshire—continue to greatly affect the District. Given the severity of the recent recession and the sluggishness of the recovery, macro-economic conditions and trends at multiple levels played a larger role in our work than in prior years. In light of the state of these key drivers, perhaps more than at any other time since we have been developing these projections, state policy decisions could affect future enrollment. That said, we did take other factors into consideration, including state enrollment patterns, regional and local housing conditions, and the status of alternative schools.

We hope this update helps the School Board to anticipate the need or opportunity for action.

KEY RESULTS

Projections Overview

The data in Figure 1 on the following page shows that our current ten-year projections anticipate a slight increase in district enrollment through 2016 before declining in 2017. The average enrollment of 1365 students over the next 10-year period will not be significantly different than the current 1358 total. However, the enrollment by school will differ significantly, as illustrated in Figure 2 on page 4. In particular and of potentially greatest concern to the Board is the projected enrollment growth at Belmont Elementary School (BES) to levels at or exceeding the school's capacity for 8 of the next 10 years. This bubble, a result of birth rates in Belmont that spiked starting in 2007 and something we projected in our last update, will travel through the District's schools, hitting Belmont Middle School (BMS) around 2018-2019. As far as the District's other schools are concerned, we expect enrollment at Canterbury Elementary School (CES) to remain well below capacity. After an initial rise, enrollment at Belmont High School (BHS) should decline for a few years before rising again as the students in the bubble move up from BMS. We note that this pattern roughly mirrors the projections for state enrollment released this month by the US Department of Education, National Center for Education Statistics ("Projections of Education Statistics, Fortieth Edition", January 2013). We provide more details about the projection results later in the report.

FIGURE 1
SHAKER REGIONAL SCHOOL DISTRICT
TOTAL ACTUAL AND PROJECTED ENROLLMENT 2012 TO 2022
 December 2012

| YEAR | LOW-RANGE | MOST-LIKELY | HIGH-RANGE |
|-------------|-----------|-------------|------------|
| 2012 ACTUAL | 1358 | 1358 | 1358 |
| 2013 | 1291 | 1359 | 1427 |
| 2014 | 1297 | 1365 | 1433 |
| 2015 | 1303 | 1371 | 1439 |
| 2016 | 1302 | 1371 | 1440 |
| 2017 | 1291 | 1358 | 1426 |
| 2018 | 1283 | 1350 | 1419 |
| 2019 | 1286 | 1352 | 1420 |
| 2020 | 1296 | 1364 | 1433 |
| 2021 | 1305 | 1374 | 1443 |
| 2022 | 1312 | 1381 | 1450 |

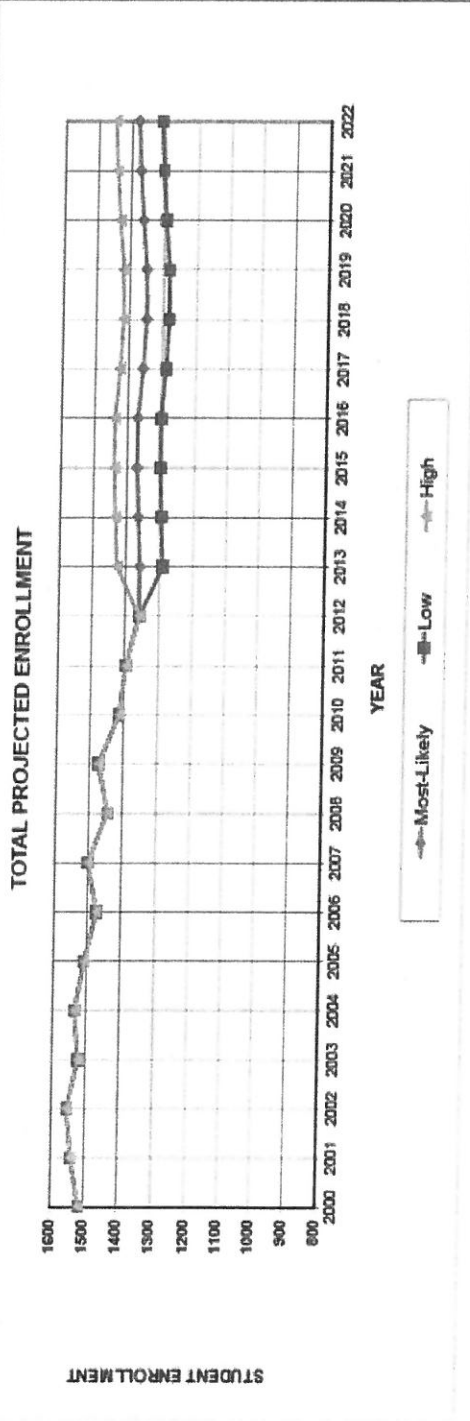
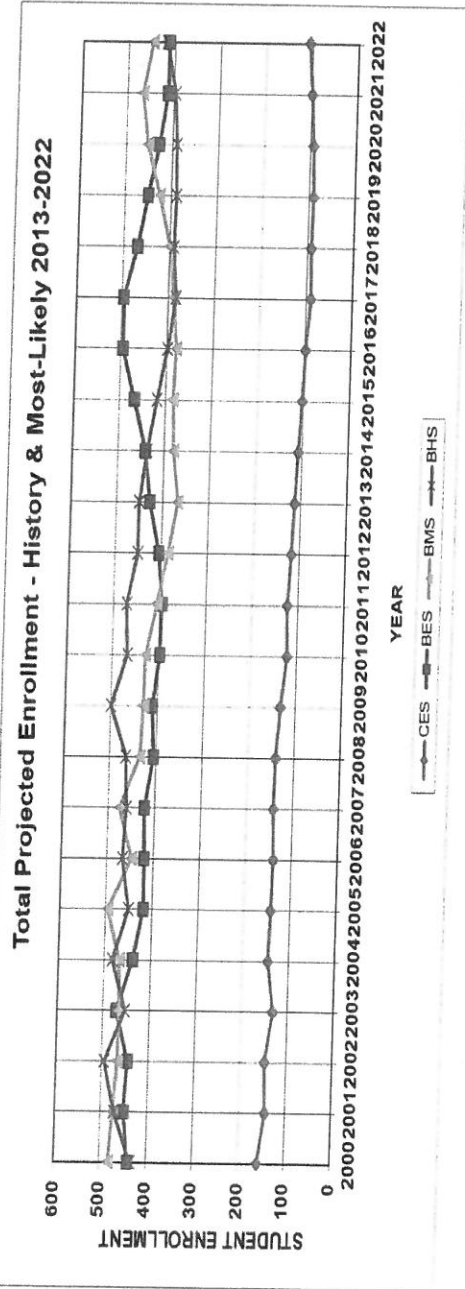


FIGURE 2
SHAKER REGIONAL SCHOOL DISTRICT
SUMMARY PROJECTED ENROLLMENT 2013 TO 2022 BY SCHOOL
 December 2012

| YEAR | LOW-RANGE | | | HIGH-RANGE | | | TOTAL |
|--------------|-----------|-----|-----|------------|-----|-----|-------|
| | BES | CES | BMS | BES | CES | BMS | |
| 2012 ACTUAL* | 405 | 117 | 385 | 405 | 117 | 385 | 1358 |
| 2013 | 407 | 107 | 349 | 449 | 119 | 385 | 1291 |
| 2014 | 419 | 103 | 360 | 463 | 113 | 398 | 1297 |
| 2015 | 445 | 97 | 364 | 491 | 107 | 402 | 1303 |
| 2016 | 471 | 93 | 360 | 521 | 103 | 398 | 1302 |
| 2017 | 472 | 86 | 369 | 522 | 95 | 407 | 1291 |
| 2018 | 447 | 87 | 378 | 494 | 97 | 418 | 1283 |
| 2019 | 428 | 86 | 403 | 473 | 95 | 445 | 1286 |
| 2020 | 407 | 88 | 430 | 449 | 98 | 476 | 1295 |
| 2021 | 391 | 94 | 444 | 433 | 104 | 490 | 1305 |
| 2022 | 391 | 101 | 425 | 433 | 111 | 469 | 1312 |
| | | | | | | | 1450 |

INDICATES EXCEEDS CORE CAPACITY
 NOTE: BES and grade 5 BMS figures do not include Canterbury students, who are included in the CES totals.



Current Enrollment

Figure 3 on the following page shows that the District's total fall 2012 enrollment of 1,358 (exclusive of pre-school students) continued the recent downward trend, reaching the lowest level this decade. The District has seen enrollment decline since the 2002-2003 school year, having dropped 7 times in the past decade. The average annual decrease overall has been just shy of 1% per year for the last 10 years. Over the last 3 years, the decline has averaged 2.6% per year, or 114 students. The total has dropped by 142 students since 2007, the start of the economic recession and housing crisis, and 193 students since 2002. The decline in enrollment mirrors what has occurred throughout the State of New Hampshire, as shown in Figure 4 on page 7.

Enrollment at BMS was at its lowest point in ten years. The school experienced greatest drop in enrollment from its peak, 111 students or more than 22 percent. Since 2010, the number of students has dropped by 43. Enrollment figures for BES, CES, and BHS were all close to their lowest totals of the decade, despite tiny upticks at BES and CES. BHS enrollment witnessed the smallest relative decline from its peak, 8.4 per cent, likely due to multiple factors including state and local drop-out prevention programs and the recession (reducing employment opportunities and hampering families' ability to pay for alternative schooling).

Figure 3 shows that this enrollment decline occurred despite population growth in Belmont and Canterbury. Indeed, even with the current slower population growth recently and above normal number of vacant homes in both towns, the District's population is more than 700 people greater than it was in 2000. Thus, as we have noted in prior reports, future population increases might not – in fact will probably not – result in proportionate increases in student enrollment.

Accuracy of the 2010 Projections

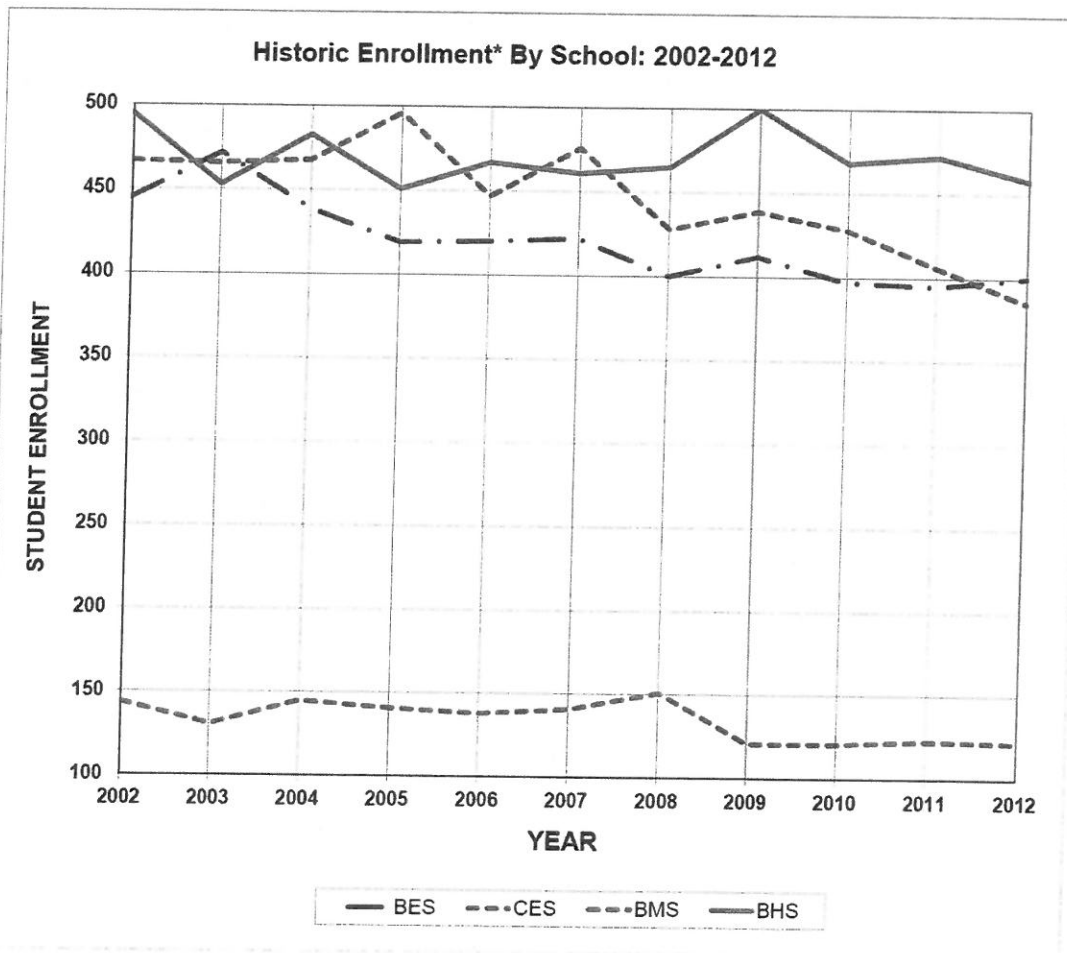
Figure 5 (page 8) documents the fact that both sets of projections from our 2010 update, while anticipating a continuation of the District's enrollment decline, underestimated the size of the drop. The projections were more accurate for 2011 than they were for 2012, with the low-range estimates being closer, over by just 2 students in 2011 and 20 for 2012, when enrollment dipped by the third greatest number in the past ten years. This pattern applied to enrollment in each of the District's schools except BMS. We were most accurate in forecasting BHS enrollment and least accurate in projecting figures for CES.

Figure 6 (page 9) shows that since 2003 our average variance (projected less actual enrollment) remains fairly small, generally within 2-4%. The outlier is CES, where we over-estimated enrollment in six of the nine updates. Since CES is such a small school and Canterbury is much smaller than Belmont, even slight projection inaccuracies appear more significant on a percentage basis. Overall, we underestimated the enrollment decline for the District as a whole and for CES and BHS in particular, whereas we overestimated the drop for BES and BHS.

Because our overall methodology has remained consistent over the years and relies heavily on historic enrollment (although birth rates and population are also factors, we generally don't anticipate dramatic swings from year to year), when actual enrollment varies significantly from our projections we try to identify an explanation. Each year we look at factors within and outside the District that might contribute to the variances. This year is no exception. The challenge of precisely forecasting enrollment, particularly when operational implications exist, justifies these regular updates, as annual District enrollment is always somewhat unpredictable.

FIGURE 3
SHAKER REGIONAL SCHOOL DISTRICT
HISTORIC ENROLLMENT BY SCHOOL AND POPULATION: 2002-2012
 December 2012

| YEAR | ENROLLMENT* | | | | | CHANGE | CUM CHANGE | DISTRICT POPULATION | CUM POP CHANGE |
|------|-------------|-----|-----|-----|-------|--------|------------|---------------------|----------------|
| | BES | CES | BMS | BHS | TOTAL | | | | |
| 2012 | 400 | 122 | 385 | 458 | 1358 | -38 | -193 | 9799 | 726 |
| 2011 | 395 | 123 | 406 | 472 | 1396 | -18 | -155 | 9703 | 630 |
| 2010 | 397 | 121 | 428 | 468 | 1414 | -58 | -137 | 9708 | 635 |
| 2009 | 412 | 121 | 439 | 500 | 1472 | 28 | -79 | 9553 | 480 |
| 2008 | 400 | 151 | 428 | 465 | 1444 | -56 | -107 | 9431 | 358 |
| 2007 | 422 | 141 | 476 | 461 | 1500 | 28 | -51 | 9425 | 352 |
| 2006 | 420 | 138 | 447 | 467 | 1472 | -35 | -79 | 9406 | 333 |
| 2005 | 419 | 141 | 496 | 451 | 1507 | -28 | -44 | 9441 | 368 |
| 2004 | 439 | 145 | 468 | 483 | 1535 | 13 | -16 | 9355 | 282 |
| 2003 | 472 | 131 | 466 | 453 | 1522 | -29 | -29 | 9230 | 157 |
| 2002 | 445 | 144 | 467 | 495 | 1551 | | | 9073 | |



*Does not include pre-school students

*We included all Canterbury students in the CES figures, although a small number may attend BES or BMS each year..

FIGURE 4

State Totals - Public School Fall Enrollments: 1996-7 to 2011-12

| | 96-97 | 97-98 | 98-99 | 99-00 | 00-01 | 01-02 | 02-03 | 03-04 | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 | 09-10 | 10-11 | 11-12 |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Public District Schools | | | | | | | | | | | | | | | | |
| Pre-school | 1,540 | 1,576 | 1,585 | 1,696 | 1,677 | 1,830 | 1,923 | 2,221 | 2,360 | 2,525 | 2,531 | 2,614 | 2,534 | 2,987 | 3,095 | 3,165 |
| Kindergarten | 8,552 | 8,744 | 8,809 | 9,032 | 9,160 | 9,599 | 9,757 | 9,989 | 10,116 | 10,360 | 10,370 | 10,479 | 10,566 | 11,968 | 11,910 | 11,873 |
| Readiness | 938 | 874 | 729 | 613 | 454 | 432 | 352 | 293 | 260 | 210 | 193 | 246 | 223 | 182 | 114 | 66 |
| Grade 1 | 17,164 | 16,403 | 16,409 | 15,818 | 15,624 | 15,443 | 15,196 | 15,071 | 15,009 | 14,733 | 14,639 | 14,332 | 14,169 | 13,925 | 13,908 | 13,540 |
| Grade 2 | 16,507 | 16,820 | 16,241 | 16,206 | 15,587 | 15,563 | 15,319 | 14,951 | 14,978 | 14,940 | 14,603 | 14,404 | 14,196 | 14,171 | 13,836 | 13,788 |
| Grade 3 | 16,401 | 16,504 | 16,858 | 16,372 | 16,372 | 15,776 | 15,748 | 15,403 | 15,019 | 14,976 | 14,941 | 14,598 | 14,431 | 14,199 | 14,107 | 13,815 |
| Grade 4 | 16,378 | 16,421 | 16,662 | 16,948 | 16,344 | 16,612 | 15,939 | 15,810 | 15,495 | 15,147 | 15,065 | 14,999 | 14,582 | 14,512 | 14,189 | 14,107 |
| Grade 5 | 16,121 | 16,502 | 16,600 | 16,910 | 17,167 | 16,722 | 16,769 | 16,045 | 15,950 | 15,627 | 15,274 | 15,186 | 14,996 | 14,642 | 14,500 | 14,150 |
| Grade 6 | 16,379 | 16,208 | 16,822 | 16,818 | 17,171 | 17,422 | 16,889 | 16,889 | 16,200 | 16,093 | 15,758 | 15,307 | 15,160 | 15,048 | 14,685 | 14,453 |
| Grade 7 | 15,736 | 16,532 | 16,497 | 16,922 | 16,893 | 17,314 | 17,667 | 17,156 | 17,009 | 16,356 | 16,295 | 15,794 | 15,429 | 15,277 | 15,029 | 14,678 |
| Grade 8 | 15,518 | 15,728 | 16,561 | 16,508 | 16,874 | 17,111 | 17,421 | 17,703 | 17,035 | 16,429 | 16,295 | 15,794 | 15,429 | 15,277 | 15,029 | 14,678 |
| Grade 9 | 14,962 | 15,200 | 15,388 | 16,317 | 16,315 | 16,513 | 16,825 | 17,131 | 17,302 | 17,035 | 16,935 | 16,235 | 15,929 | 15,714 | 15,374 | 15,107 |
| Grade 10 | 13,433 | 14,009 | 14,070 | 14,235 | 15,047 | 15,188 | 15,524 | 15,659 | 16,012 | 16,224 | 16,935 | 15,655 | 15,092 | 15,042 | 14,678 | 14,064 |
| Grade 11 | 12,103 | 12,562 | 13,215 | 13,372 | 13,508 | 14,304 | 14,419 | 14,894 | 14,765 | 15,203 | 15,474 | 14,736 | 14,747 | 14,279 | 14,115 | 13,830 |
| Grade 12 | 10,468 | 10,991 | 11,451 | 11,986 | 12,206 | 12,541 | 13,499 | 13,618 | 13,893 | 13,996 | 14,430 | 14,775 | 14,390 | 14,390 | 13,793 | 13,616 |
| Spec Ed Elem | 518 | 547 | 422 | 487 | 524 | 446 | 431 | 348 | 368 | 377 | - | - | - | - | 0 | 0 |
| Ungraded Elem | 82 | 80 | 96 | 1 | 4 | 11 | 1 | - | 7 | - | - | - | - | - | 0 | 0 |
| Spec Ed Sec | 94 | 49 | 111 | 56 | 185 | 132 | 65 | 128 | 183 | 135 | - | - | - | - | 0 | 0 |
| Ungraded Sec | 91 | 64 | 28 | 39 | 54 | 58 | 71 | 23 | 55 | 28 | - | - | - | - | 0 | 0 |
| Post Graduate | 4 | 5 | 8 | 9 | 5 | 19 | 18 | 17 | 17 | 33 | 20 | 41 | 22 | 20 | 21 | 20 |
| Totals | 192,969 | 195,919 | 196,570 | 200,363 | 201,568 | 203,072 | 203,715 | 203,359 | 202,223 | 200,975 | 198,645 | 195,658 | 192,811 | 191,802 | 188,595 | 185,278 |
| Percent change | 1.5% | 1.5% | 1.4% | 0.9% | 0.6% | 0.7% | 0.3% | -0.2% | -0.6% | -0.6% | -1.2% | -1.5% | -1.5% | -0.5% | -1.7% | -1.8% |
| NH Population* | 1,160,768 | 1,173,239 | 1,185,823 | 1,201,134 | 1,239,882 | 1,255,517 | 1,269,089 | 1,279,840 | 1,290,121 | 1,298,492 | 1,308,389 | 1,312,540 | 1,315,906 | 1,316,470 | 1,318,184 | 1,318,184 |
| Percent change | 1.1% | 1.1% | 1.1% | 1.3% | 3.2% | 1.3% | 1.1% | 0.8% | 0.6% | 0.6% | 0.8% | 0.3% | 0.3% | 0.0% | 0.1% | 0.0% |

*Population figures for 2000 through 2011 are estimates for July 1 of each year.

Source: NH Dept. of Education, Division of Program Support, Bureau of Data Management

US Census Bureau, Population Division (December 1999; September 2011; December 2012)

FIGURE 5
SHAKER REGIONAL SCHOOL DISTRICT
COMPARISON OF PROJECTED AND ACTUAL ENROLLMENT BY SCHOOL AND GRADE: 2011 AND 2012
 December 2012

| School/Grade | Actual Enrollment | | Projected Enrollment | | | | Projected less Actual Enrollment | | | |
|-------------------------------------|-------------------|------------|----------------------|------------|------------|------------|----------------------------------|-----------|------------|-----------|
| | 2011 | 2012 | Low Range | | High Range | | Low Range | | High Range | |
| | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 | 2011 | 2012 |
| School District Total | | | | | | | | | | |
| All Schools and Grades | 1396 | 1358 | 1398 | 1379 | 1416 | 1415 | 2 | 21 | 20 | 57 |
| Belmont Elementary School | | | | | | | | | | |
| Kindergarten | 73 | 76 | 72 | 90 | 72 | 89 | -1 | 14 | -1 | 13 |
| Readiness | 15 | 16 | | | | | | | | |
| Grade 1 | 81 | 75 | | | | | | | | |
| Grade 1' | 98 | 91 | 87 | 83 | 89 | 94 | -9 | 2 | -7 | 3 |
| Grade 2 | 80 | 76 | 82 | 70 | 83 | 73 | 2 | -6 | 3 | -3 |
| Grade 3 | 74 | 83 | 74 | 81 | 76 | 84 | 0 | -2 | 2 | 1 |
| Grade 4 | 72 | 74 | 74 | 75 | 75 | 78 | 2 | 1 | 3 | 4 |
| TOTALS | 395 | 400 | 389 | 409 | 395 | 418 | -6 | 9 | 0 | 18 |
| Canterbury Elementary School | | | | | | | | | | |
| Kindergarten | 19 | 17 | 21 | 19 | 27 | 25 | 2 | 2 | 8 | 8 |
| Readiness | 5 | 6 | | | | | | | | |
| Grade 1 | 17 | 22 | | | | | | | | |
| Grade 1' | 22 | 28 | 18 | 27 | 19 | 37 | -4 | -1 | -3 | 9 |
| Grade 2 | 20 | 15 | 18 | 15 | 17 | 15 | -2 | 0 | -3 | 0 |
| Grade 3 | 23 | 17 | 26 | 19 | 26 | 18 | 3 | 2 | 3 | 1 |
| Grade 4 | 22 | 23 | 25 | 26 | 25 | 25 | 3 | 3 | 3 | 2 |
| Grade 5 | 17 | 22 | 19 | 25 | 17 | 22 | 2 | 3 | 0 | 0 |
| TOTALS | 123 | 122 | 127 | 131 | 131 | 142 | 4 | 9 | 8 | 20 |
| Belmont Middle School | | | | | | | | | | |
| Grade 5 | 74 | 71 | 74 | 72 | 78 | 77 | 0 | 1 | 4 | 6 |
| Grade 6 | 98 | 96 | 102 | 95 | 101 | 97 | 4 | -1 | 3 | 1 |
| Grade 7 | 115 | 98 | 115 | 101 | 116 | 101 | 0 | 3 | 1 | 3 |
| Grade 8 | 119 | 120 | 120 | 114 | 124 | 118 | 1 | -6 | 5 | -2 |
| TOTALS | 406 | 385 | 411 | 382 | 419 | 393 | 5 | -3 | 13 | 8 |
| Belmont High School | | | | | | | | | | |
| Grade 9 | 130 | 131 | 118 | 130 | 117 | 133 | -12 | -1 | -13 | 2 |
| Grade 10 | 114 | 118 | 114 | 113 | 112 | 111 | 0 | -5 | -2 | -7 |
| Grade 11 | 111 | 97 | 117 | 100 | 120 | 101 | 6 | 3 | 9 | 4 |
| Grade 12 | 117 | 105 | 121 | 115 | 122 | 117 | 4 | 10 | 5 | 12 |
| TOTALS | 472 | 451 | 470 | 458 | 471 | 462 | -2 | 7 | -1 | 11 |

FIGURE 6
SHAKER REGIONAL SCHOOL DISTRICT
COMPARISON OF PROJECTED AND ACTUAL ENROLLMENT BY SCHOOL
FOR FORECASTS MADE FROM 2003 TO 2010
 December 2012

| | TOTAL ENROLLMENT | | | | | | | | |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|
| | '10 Forecast ('12) | '10 Forecast ('11) | '08 Forecast ('10) | '08 Forecast ('09) | '07 Forecast | '06 Forecast | '05 Forecast | '04 Forecast | '03 Forecast |
| PROJECTED | | | | | | | | | |
| LOW | 1379 | 1398 | 1391 | 1446 | 1447 | 1451 | 1483 | 1497 | 1530 |
| HIGH | 1415 | 1416 | 1424 | 1465 | 1472 | 1450 | 1497 | | |
| ACTUAL | 1358 | 1396 | 1414 | 1472 | 1444 | 1500 | 1472 | 1507 | 1535 |
| PROJECTED LESS ACTUAL | | | | | | | | | |
| LOW | 21 | 2 | -23 | -26 | 3 | -49 | 11 | -10 | -5 |
| HIGH | 57 | 20 | 10 | -7 | 28 | -50 | 25 | | |
| NET SIX-YEAR DIFFERENCE | 26 | | | | | | | | |

| | BELMONT ELEMENTARY SCHOOL | | | | | | | | |
|-------------------------|---------------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|
| | '10 Forecast ('12) | '10 Forecast ('11) | '08 Forecast ('10) | '08 Forecast ('09) | '07 Forecast | '06 Forecast | '05 Forecast | '04 Forecast | '03 Forecast |
| PROJECTED | | | | | | | | | |
| LOW | 409 | 389 | 385 | 394 | 393 | 395 | 427 | 417 | 437 |
| HIGH | 418 | 395 | 393 | 399 | 396 | 396 | 438 | | |
| ACTUAL | 400 | 395 | 397 | 412 | 400 | 422 | 420 | 419 | 439 |
| PROJECTED LESS ACTUAL | | | | | | | | | |
| LOW | 9 | -6 | -12 | -18 | -7 | -27 | 7 | -2 | -2 |
| HIGH | 18 | 0 | -4 | -13 | -4 | -26 | 18 | | |
| NET SIX-YEAR DIFFERENCE | -15 | | | | | | | | |

| | CANTERBURY ELEMENTARY SCHOOL | | | | | | | | |
|-------------------------|------------------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|
| | '10 Forecast ('12) | '10 Forecast ('11) | '08 Forecast ('10) | '08 Forecast ('09) | '07 Forecast | '06 Forecast | '05 Forecast | '04 Forecast | '03 Forecast |
| PROJECTED | | | | | | | | | |
| LOW | 130 | 127 | 148 | 146 | 140 | 128 | 131 | 141 | 157 |
| HIGH | 141 | 131 | 158 | 154 | 149 | 126 | 131 | | |
| ACTUAL | 122 | 123 | 121 | 121 | 151 | 141 | 138 | 141 | 145 |
| PROJECTED LESS ACTUAL | | | | | | | | | |
| LOW | 8 | 4 | 27 | 25 | -11 | -13 | -7 | 0 | 12 |
| HIGH | 19 | 8 | 37 | 33 | -2 | -15 | -7 | | |
| NET SIX-YEAR DIFFERENCE | 39 | | | | | | | | |

| | BELMONT MIDDLE SCHOOL | | | | | | | | |
|-------------------------|-----------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|
| | '10 Forecast ('12) | '10 Forecast ('11) | '08 Forecast ('10) | '08 Forecast ('09) | '07 Forecast | '06 Forecast | '05 Forecast | '04 Forecast | '03 Forecast |
| PROJECTED | | | | | | | | | |
| LOW | 382 | 412 | 416 | 413 | 456 | 467 | 463 | 474 | 480 |
| HIGH | 393 | 419 | 427 | 419 | 468 | 471 | 464 | | |
| ACTUAL | 385 | 406 | 428 | 439 | 428 | 476 | 447 | 496 | 468 |
| PROJECTED LESS ACTUAL | | | | | | | | | |
| LOW | -3 | 6 | -12 | -26 | 28 | -9 | 16 | -22 | 12 |
| HIGH | 8 | 13 | -1 | -20 | 40 | -5 | 17 | | |
| NET SIX-YEAR DIFFERENCE | 12 | | | | | | | | |

| | BELMONT HIGH SCHOOL | | | | | | | | |
|-------------------------|---------------------|--------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|
| | '10 Forecast ('12) | '10 Forecast ('11) | '08 Forecast ('10) | '08 Forecast ('09) | '07 Forecast | '06 Forecast | '05 Forecast | '04 Forecast | '03 Forecast |
| PROJECTED | | | | | | | | | |
| LOW | 458 | 470 | 442 | 493 | 458 | 461 | 462 | 465 | 456 |
| HIGH | 462 | 472 | 446 | 493 | 459 | 457 | 464 | | |
| ACTUAL | 451 | 472 | 468 | 500 | 465 | 461 | 467 | 451 | 483 |
| PROJECTED LESS ACTUAL | | | | | | | | | |
| LOW | 7 | -2 | -26 | -7 | -7 | 0 | -5 | 14 | -27 |
| HIGH | 11 | 0 | -22 | -7 | -6 | -4 | -3 | | |
| NET SIX-YEAR DIFFERENCE | -9 | | | | | | | | |

NOTES:

1. To calculate the average difference, we averaged the projected-less-actual differences for the high and low projections for the years in which we made them.
2. The enrollment figures do not include pre-K.
3. For elementary school enrollment, we included students in the school where they lived, regardless of where they attended.

Given the extensive 2010 Census data and the potentially significant implications of the recession/recovery on New Hampshire, we spent considerable additional effort looking at population, housing, economic, and demographic data, as well as analyses of the recession's impact on the state and region and the role of key policy decisions in its aftermath. We discuss these in a fair amount of depth later in the report.

As we did two years ago, we also looked at alternative schooling. Figure 7 on the following page provides information on the number of students attending private school or schooled at home over the past 5 years. This population reached its peak of 114 students in the 2009-2010 school year. The total dropped dramatically – by 20 students – in the 2010-2011 school year and again – by about half as much – in the 2011-2012 school year. This decline is likely due to the impacts of the recession, as the greatest changes occurred in private school enrollment. During this period, after a sizeable increase (32 to 42 students) from 2008-2009 to 2009-2010, the number of home schooled children has only slightly decreased. As in past years, in both absolute and relative terms, Canterbury outpaces Belmont in the number of students who are home schooled or attend private schools.

While the total of private- and home-schooled students declined by 9 in the 2011-2012 school year, it actually rose slightly in the current school year. Therefore, this population of students played a minor role in explaining the variance between our projections and actual enrollment. What appears mostly like as a key cause is the fact that the number of families with school-age children who left Belmont and Canterbury during the past two years exceeded the number who moved in.

Given the severity of the recession and the fact that the state is witnessing a slow, but relatively steady recovery, we do not expect the total number of students in alternative schools to significantly drop in the near term. As the economy recovers further, however, the number of students attending private school will likely increase. In absolute terms, the middle and high school grades have the most students in alternative schooling. Tracking these students will help anticipate potential space issues. Even though the number of Belmont students in alternative schooling is fairly small, since BES faces the greatest capacity issues, the District should also monitor these students.

METHODOLOGY

In preparing our enrollment projections, we considered several factors that directly and indirectly impact student enrollment. These factors include current and historic enrollments, the aging populations in both towns, birth rates, and the economic downturn and housing crisis.

As we discuss later in the report, we used a slightly different approach than we have in prior years to produce a range of future enrollment estimates. In prior years, we made different assumptions about key enrollment drivers (population and birth rates) to produce the low- and high-range projections. This year, our analysis produced a single set of assumptions regarding these drivers leading to what we refer to as the most-likely set of projections. To produce a range of potential future enrollments, we applied a confidence interval around these numbers.

Figure 7
Shaker Regional School District
Private and Home-School Students: 2008-2013
 December 2012

| Year/Grade | Students Attending Private Schools | | | | | | | | | | | | Totals | | | | |
|--------------------------------------------------------------|------------------------------------|---|---|----|----|----|----|----|----|----|----|----|--------|----|-----|-----|------|
| | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | 12 | K-4 | 5-8 | 9-12 |
| 2008-2009 | 1 | 5 | 4 | 8 | 8 | 6 | 6 | 4 | 4 | 6 | 5 | 13 | 7 | 26 | 20 | 31 | 77 |
| 2009-2010 | 1 | 1 | 5 | 3 | 7 | 7 | 6 | 8 | 7 | 9 | 4 | 4 | 10 | 17 | 28 | 27 | 72 |
| 2010-2011 | 3 | 0 | 1 | 4 | 2 | 8 | 6 | 4 | 6 | 7 | 5 | 4 | 5 | 10 | 24 | 21 | 55 |
| 2011-2012 | 1 | 3 | 0 | 1 | 3 | 2 | 8 | 4 | 4 | 4 | 6 | 7 | 4 | 8 | 18 | 21 | 47 |
| 2012-2013 | 4 | 0 | 3 | 1 | 2 | 2 | 3 | 7 | 4 | 7 | 6 | 7 | 4 | 10 | 16 | 24 | 50 |
| Home-Schooled Students | | | | | | | | | | | | | | | | | |
| 2008-2009 | 0 | 0 | 4 | 3 | 1 | 4 | 2 | 3 | 6 | 8 | 0 | 1 | 0 | 8 | 15 | 9 | 32 |
| 2009-2010 | 0 | 3 | 0 | 6 | 3 | 3 | 8 | 3 | 3 | 5 | 5 | 2 | 1 | 12 | 17 | 13 | 42 |
| 2010-2011 | 0 | 3 | 2 | 0 | 7 | 2 | 2 | 7 | 1 | 6 | 1 | 7 | 1 | 12 | 12 | 15 | 39 |
| 2011-2012 | 0 | 0 | 3 | 2 | 0 | 7 | 2 | 2 | 7 | 1 | 6 | 1 | 7 | 5 | 18 | 15 | 38 |
| 2012-2013 | 0 | 2 | 1 | 2 | 1 | 2 | 6 | 2 | 4 | 9 | 2 | 4 | 2 | 6 | 14 | 17 | 37 |
| District Totals of Private and Home-Schooled Students | | | | | | | | | | | | | | | | | |
| 2008-2009 | 1 | 5 | 8 | 11 | 9 | 10 | 8 | 7 | 10 | 14 | 5 | 14 | 7 | 34 | 35 | 40 | 109 |
| 2009-2010 | 1 | 4 | 5 | 9 | 10 | 10 | 14 | 11 | 10 | 14 | 9 | 6 | 11 | 29 | 45 | 40 | 114 |
| 2010-2011 | 3 | 3 | 3 | 4 | 9 | 10 | 8 | 11 | 7 | 13 | 6 | 11 | 6 | 22 | 36 | 36 | 94 |
| 2011-2012 | 1 | 3 | 3 | 3 | 3 | 9 | 10 | 6 | 11 | 5 | 12 | 8 | 11 | 13 | 36 | 36 | 85 |
| 2012-2013 | 4 | 2 | 4 | 3 | 3 | 4 | 8 | 9 | 8 | 16 | 8 | 11 | 6 | 16 | 30 | 41 | 87 |

Grade Progression Ratios

As in the past, the most significant component of our analysis is the grade progression ratio. This ratio is the percent of students in each grade in a school that advance to the next grade the following year. For example, to determine how many 6th grade students in BMS will advance to the 7th grade, we look at past progression ratios. A ratio of 1 implies that the number of students in 7th grade this year is the same as the number in last year's 6th grade. The table below highlights this example.

Grade Progression Ratio Calculation for Example

| 6th Grade Class | | 7th Grade Class | | Ratio |
|-----------------|-----|-----------------|-----|-------|
| 07/08 | 101 | 08/09 | 100 | 0.99 |
| 08/09 | 112 | 09/10 | 113 | 1.01 |
| 09/10 | 124 | 10/11 | 122 | 0.98 |

Average 0.99

A grade progression ratio greater than 1 implies that students are moving into the district, or are moving from home or private schools to public schools. Conversely, a grade progression ratio less than 1 suggests that student are leaving, either for another school or dropping out completely. We review grade progression ratios over an extended period. For the update of the enrollment projections, we calculated the ratios for 3, 5, and 7 year periods.

Our most-likely projection used the 7-year grade progression ratio for several reasons. First, over the last 3 years, we have seen many more students move out of the district. After reviewing the data presented in Figure 7, we knew that the movement of students out of the District's schools was not due to an increase in alternative schooling (home schooling or private schools). Rather, a significant number of families moved out of both Canterbury and Belmont, with the economy as the most likely reason. Thus, we used a longer period to average the ratios, as we believe that it is more likely to be representative of what they will be in the future.

One should note that the first-grade data includes Readiness Class. Thus, the grade projection ratio is higher than 1, as it includes two classes. Likewise, the grade 2 progression ratio is less than one since students in the Readiness Class do not move on to grade 2.

The projections include Kindergarten based upon historic trends. We did not assume mandatory kindergarten, nor did we include any pre-school students.

The chart at the top of the following page shows the 3, 5 and 7-year grade progression ratios calculated from historic enrollment data.

Historic Grade Progression Ratios

| Canterbury Elementary | K | 1 | 2 | 3 | 4 | 5 |
|-----------------------|------|------|------|------|------|------|
| 3 year | 0.48 | 1.46 | 0.85 | 0.90 | 0.97 | 0.96 |
| 5 year | 0.55 | 1.40 | 0.81 | 0.96 | 0.99 | 0.95 |
| 7 year | 0.69 | 1.43 | 0.78 | 0.96 | 0.98 | 0.90 |
| Belmont Elementary | K | 1 | 2 | 3 | 4 | |
| 3 year | 1.07 | 1.31 | 0.79 | 1.00 | 1.00 | |
| 5 year | 1.11 | 1.30 | 0.80 | 1.00 | 1.00 | |
| 7 year | 1.11 | 1.32 | 0.81 | 1.01 | 1.01 | |
| Belmont Middle School | 5 | 6 | 7 | 8 | | |
| 3 year | 1.10 | 1.10 | 0.99 | 0.99 | | |
| 5 year | 1.06 | 1.06 | 0.99 | 1.00 | | |
| 7 year | 1.03 | 1.03 | 1.00 | 1.01 | | |
| Belmont High School | 9 | 10 | 11 | 12 | | |
| 3 year | 1.15 | 0.93 | 0.85 | 0.94 | | |
| 5 year | 1.11 | 0.95 | 0.87 | 0.96 | | |
| 7 year | 1.10 | 0.94 | 0.86 | 0.97 | | |

The Kindergarten progression ratio is based a weighted average of the births for the prior 5-year period. The weighted births were determined by a factor of 75% of births 5 years ago and 25% for births 6 years ago. This approach reflects the fact that a student turning 5 by September 30 will enroll in school in that year, whereas students turning 5 later in the year will not enroll until the following year.

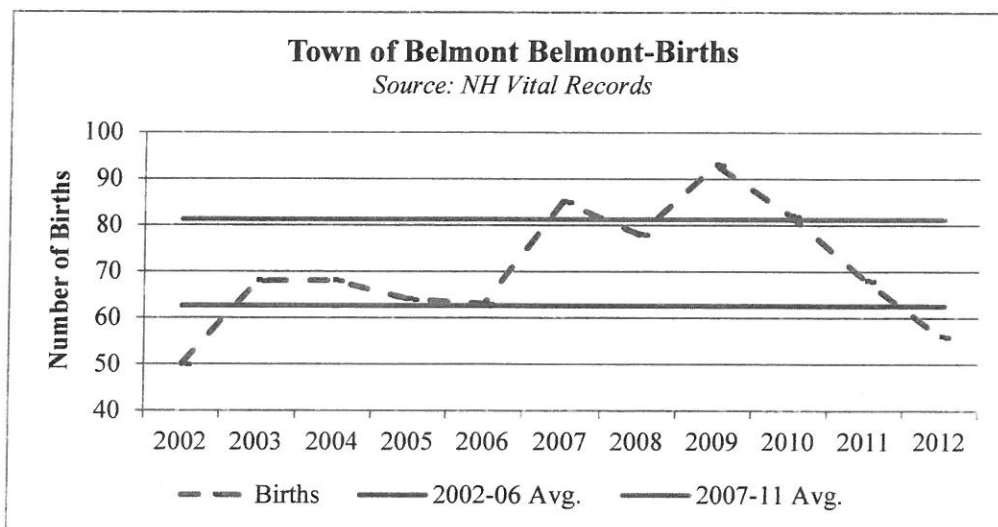
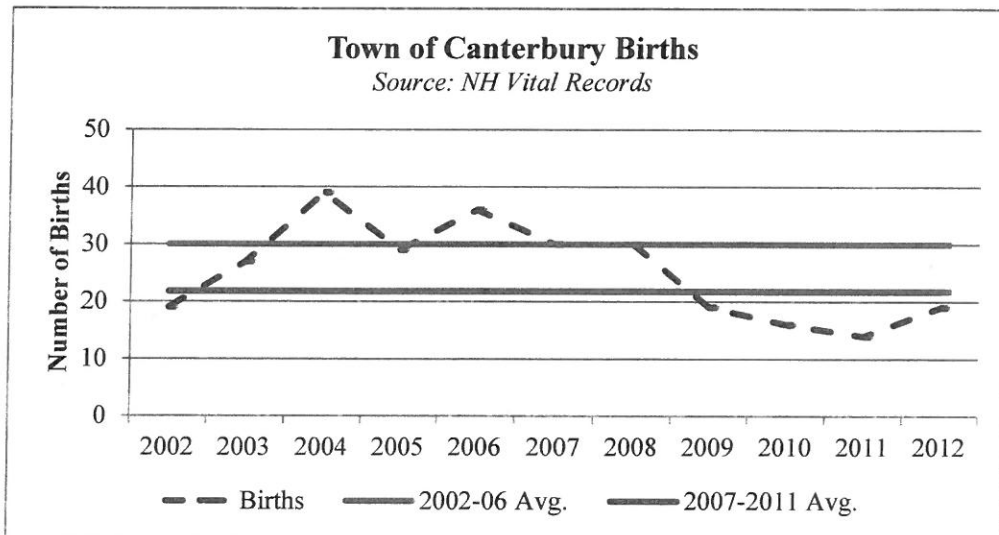
Cross-town Enrollment

Every year a handful or so of Canterbury elementary age students attend either BES or BMS. This year, 3 students from Canterbury attending BES, one in each of grade 1, 2, and 3. Additionally, 5 students from Canterbury attended the 5th grade at BMS. Belmont residents also crossed over town and sent 8 students to CES. We ignore the cross-town enrollments in making the projections. The primary reason is that the core methodology involved projecting the number of students in the District's schools by town. The process starts with births, which we track by town. Another reason is the unpredictable nature of this practice and the assumed right of the District to restrict it to avoid overcrowding. Therefore, in generating the projections, we assumed that all students attend the schools they should attend given the town in which they reside. Historically, we have seen more Canterbury students attending school in Belmont. This year we saw the number of Belmont students attending CES increase from 5 to 8. Thus our projections for CES may be slightly lower than actual as we excluded the Belmont students. Further, given the projected increase in BES, the District might encourage more students from Belmont to attend CES.

Projected Births

Estimating the number of students entering the school system requires an estimate of the births in each town. Indeed, historic and projected births play an important part in the projections. A review of historic birth data by town suggests a significant difference in the direction of the enrollment in the two elementary schools. Between 2002 and 2006, Canterbury averaged 30 births a year according to data from the NH Vital Records Network. Over the next 5 years, from 2007 to 2011, the average number of births declined to 21 per year. Births in Belmont demonstrated just the opposite pattern: Belmont births averaged 63 per year from 2002 through 2006 but jumped up to an average of 81 per year from 2007 through 2011. This cohort is just now moving into BES. This spike in births has essentially created a bubble that will have a significant impact on BES enrollment in the first half of our projection period and BMS after that.

The following charts highlight the number of births in each town over the last 10 years.



The birth rate in 2000 for Belmont was 11.5 per thousand persons. Between 2000 and 2006, the birth rate showed a steady decline to 8.7 before increasing to a peak of 12.8 in 2009. The 2010 data indicates a birth rate of 11.1. This is higher than the state's 9.8 per thousand birth rate reported by the 2010 Census. In 2011 Belmont's birth rate declined to 9.3 per thousand. Canterbury's birth rate was as low as 7 per thousand in 2011, but has increased in 2012 to 8.0. In projecting births from 2012 to 2017 (the last year in which children born will enter one of the elementary schools during the projection period, which ends in 2022), we have assumed a 9.3 per thousand birth rate for both Belmont and Canterbury.

Both towns showed a decline in the number of in births in 2010 and 2011. The 2012 data is an estimate based on the most recent data available as of November 2012.

In projecting births by town, we have considered many factors, chief of which is the demographic characteristics of both towns. Since our last report, the US Census Bureau has produced a new Census count for 2010.

Population Growth

The US Census reports that the population of Belmont increased from 6,716 in 2000 to 7,356 in 2010. The State of New Hampshire estimated 2011 population for Belmont is 7,343. This represents an annual increase of 0.8% from 2000 to 2010. The report also shows that the average age in Belmont increased from 38 years in 2000 to 42 in 2010. The birth rate declined from 10.7 per thousand in 2000 to 9.3 in 2011.

Canterbury's population increased from 1,979 persons in 2000 to 2,252 in 2010 and an estimated 2,360 in 2011, or a 1.56% growth rate. The median age of a resident in Canterbury increased from 42 to 47 years old. Canterbury's birth rate declined from 11.6 per thousand in 2000 to approximately 7.0 in 2010. Some of the decline is most likely due to the economic recession, but much of the decline is due to the aging population. Statewide, according to the US National Vital Statistic Report, New Hampshire's birth rate was 9.8 in 2010 with a median age at 41 years.

In projecting population, we used the growth in population from 2000 to 2011 at .8% and 1.56% respectively for Belmont and Canterbury. We used a birth rate of 9.3 per thousand for both towns. Thus, we estimated the average number of births in Belmont from 2013 to 2017 at 70. For Canterbury, the estimated number of births for this period averages 23.

Historically, New Hampshire's Office of Energy and Planning (OEP) has projected population by county and town over a ten-year period. In the past we have relied on that set of population growth projections and used the individual town's birth rates. That was not possible this year, as the OEP is currently not forecasting population by town and the data are not available. Thus our estimates are based on what we know using the past 10 years of data.

In projecting each town's population, we used an annual growth rate of 0.8% for Belmont and 1.56% for Canterbury. This is based on the average annual growth from 2000 to 2011. The U.S. Census Bureau breaks out population by county on an annual basis. Both Merrimack and Belknap counties experienced an annual growth of approximately 1.2% from 2000 to 2006. From 2006 to 2011, both counties showed an average decline of approximately -0.02%. Given

the deep recession starting in 2007, we think that using the growth over the whole period is more reflective of what will occur as we emerge out of the recession.

2010 Census Data

The Decennial Census is a rich source of information that quantifies the demographic make-up of the District's two communities. The following summary highlights the population changes that have occurred in both towns, their respective counties, and the State of New Hampshire as a whole.

- The majority of the growth in New Hampshire and our communities came from the people aged 45 and older.
- Statewide, the percent of the population age 45 and over increased from 35.7% to 44.2%.
- Statewide, the percent of the population between ages 5 and 19 decreased from 21.7% to 19.4%
- Statewide, the only growth in school-aged children occurred in 15 to 19 year old cohort.
- The population of young people in the child-bearing years, ages 20 to 44, declined.
- The number of children under age 5 actually declined over the ten-year period, with the only exception occurring in the Town of Belmont, that had a 13% increase over this period.
- Canterbury showed the largest population increase for those aged 65 and over.
- The total number of households increased faster than the number of those with children.
- Although the number of children per family household did not change significantly, the number of families with children under 18 did significantly drop.
- In Belmont, the percent of family households with children declined from 50% to 40%.
- In Canterbury, the percent of family households with children under 18 dropped from 45% to 34%.

The tables below present data for 2000, 2010, and the change over the ten-year period.

| Family Household Changes | 2000 | 2010 | 2000-10 |
|----------------------------|------------|------------|----------|
| | NH-Total | NH-Total | % Change |
| Total Family Households | 323,651 | 344,197 | 6.3% |
| Avg. Persons Per Household | 3.0 | 3.0 | -2.3% |
| % Households w child <18 | 48.9% | 43.1% | -5.8% |
| | 2000 | 2010 | 2000-10 |
| | Belmont | Belmont | % Change |
| Total Family Households | 1,868 | 2,069 | 10.8% |
| Avg. Persons Per Household | 2.95 | 2.87 | -2.7% |
| % Households w child <18 | 49.7% | 40.4% | -18.7% |
| | 2000 | 2010 | 2000-10 |
| | Canterbury | Canterbury | % Change |
| Total Family Households | 590 | 692 | 17.3% |
| Avg. Persons Per Household | 2.91 | 2.87 | -1.4% |
| % Households w child <18 | 44.9% | 34.2% | -10.7% |

Population Changes

| | 2000 NH-Total | 2010 NH-Total | 2000-10 % Change | | | |
|-----------|-------------------|-------------------|---------------------|--------------------|--------------------|---------------------|
| Total pop | 1,235,786 | 1,316,470 | 6.5% | | | |
| < 5 yrs | 75,685 | 69,806 | -7.8% | | | |
| 5 - 9 yrs | 88,537 | 77,756 | -12.2% | | | |
| 10-14 yrs | 93,255 | 84,620 | -9.3% | | | |
| 15-19 yrs | 86,688 | 93,620 | 8.0% | | | |
| 20-44 | 450,006 | 408,196 | -9.3% | | | |
| 45-64 | 293,645 | 404,204 | 37.7% | | | |
| 65& | 147,970 | 178,268 | 20.5% | | | |
| Area | 2000 Belknap | 2010 Belknap | 2000-10 % Change | 2000 Belmont | 2010 Belmont | 2000-10 % Change |
| Total pop | 56,325 | 60,088 | 6.7% | 6,716 | 7,356 | 9.5% |
| < 5 yrs | 3,003 | 3,047 | 1.5% | 360 | 409 | 13.6% |
| 5 - 9 yrs | 3,770 | 3,296 | -12.6% | 465 | 399 | -14.2% |
| 10-14 yrs | 4,079 | 3,688 | -9.6% | 549 | 494 | -10.0% |
| 15-19 yrs | 3,721 | 3,742 | 0.6% | 478 | 477 | -0.2% |
| 20-44 | 18,362 | 16,567 | -9.8% | 2,369 | 2,208 | -6.8% |
| 45-64 | 14,894 | 19,691 | 32.2% | 1,731 | 2,379 | 37.4% |
| 65& | 8,496 | 10,057 | 18.4% | 764 | 990 | 29.6% |
| Area | 2000 Merrimack | 2010 Merrimack | 2000-10 % Change | 2000 Canterbury | 2010 Canterbury | 2000-10 % Change |
| Total pop | 136,225 | 146,445 | 7.5% | 1,979 | 2,352 | 18.8% |
| < 5 yrs | 8,112 | 7,562 | -6.8% | 108 | 100 | -7.4% |
| 5 - 9 yrs | 9,621 | 8,601 | -10.6% | 132 | 131 | -0.8% |
| 10-14 yrs | 10,374 | 9,446 | -8.9% | 154 | 177 | 14.9% |
| 15-19 yrs | 9,670 | 10,630 | 9.9% | 127 | 131 | 3.1% |
| 20-44 | 48,893 | 44,764 | -8.4% | 565 | 557 | -1.4% |
| 45-64 | 32,632 | 45,434 | 39.2% | 688 | 923 | 34.2% |
| 65& | 16,923 | 20,008 | 18.2% | 205 | 333 | 62.4% |

Source: US Census, 2000 & 2010

In addition to the data on population and family size, the 2010 Census also shows the effects of the housing crisis and recession. Specifically, the total number of housing units increased from 2000 to 2010 at a higher rate than those that are occupied, indicating an increase in vacancy rates. After adjusting for seasonal vacancy, the vacancy rate for Belmont and the State as a whole was more than 5%. It was over 3% in Canterbury. Accordingly, in Belmont, there were 179 vacant housing units and 31 in Canterbury.

The table at the top of the next page presents housing data for 2000, 2010, and the changes over the decade.

Housing Units

| | 2000 | 2010 | 2000-10 |
|------------------------|------------|------------|----------|
| | NH-Total | NH-Total | % Change |
| Housing Units | 547,024 | 614,754 | 12.4% |
| Occupied Units | 474,606 | 518,973 | 9.3% |
| Vacant non-Seasonal | 16,005 | 31,871 | 99.1% |
| % Non-Seasonal Vacancy | 2.9% | 5.2% | |
| | 2000 | 2010 | 2000-10 |
| | Belmont | Belmont | % Change |
| Housing Units | 3,113 | 3,615 | 16.1% |
| Occupied Units | 2,641 | 2,941 | 11.4% |
| Vacant non-Seasonal | 121 | 179 | 47.9% |
| % Non-Seasonal Vacancy | 3.9% | 5.0% | |
| | 2000 | 2010 | 2000-10 |
| | Canterbury | Canterbury | % Change |
| Housing Units | 838 | 1002 | 19.6% |
| Occupied Units | 749 | 913 | 21.9% |
| Vacant non-Seasonal | 12 | 31 | 158.3% |
| % Non-Seasonal Vacancy | 1.4% | 3.1% | |

Source: US Census, 2000 & 2010

Using Confidence Intervals to Generate the Low- and High-Range Projections

We generated our low-range and high-range forecasts at levels 5% below and 5% above our most-likely projection. This percent reflects the range of our past error rate in projecting enrollment. There is, however, a more significant reason for using this range: we are in a period of tremendous change and are just now emerging from the deepest recession since the great depression of the 1930's.

We know the recession has significantly affected enrollment. The school district tracks school exits and, when possible, the reason for the exit (exit data for the past three years appears in the table at the top of the following page). For the last 3 years, we know that in all but the high school the major reason for an exit was a family's move out of the District. A compilation of the data shows that Belmont has a significantly larger percent moving out than Canterbury does. We also know that the school's enrollment did not fall to the extent the exits would indicate, because families with school-age children did move into the District. What we don't know is the number of families moving in and the demographics of those families. We know that housing permits are historically low. However, we don't know how fast the vacant units will be occupied. Given these and other uncertainties, we believe using the confidence interval is the most informative method of projecting high and low enrollment around our most likely forecast.

Exit Data for 2010 to 2013

| EXITS | | | | | | | EXITS | School | % |
|-----------|----|----|----|----|-------|------------|------------|------------|-------|
| CES | K | 1 | 2 | 3 | 4 | 5 | Total | Population | Exits |
| 2010-2011 | 2 | 0 | 1 | 1 | 1 | 1 | 6 | 121 | 5% |
| 2011-2012 | 3 | 3 | 1 | 1 | 1 | 0 | 9 | 123 | 7% |
| 2012-2013 | 2 | 1 | 0 | 0 | 1 | 0 | 4 | 117 | 3% |
| BES | K | 1 | 2 | 3 | 4 | EXITS | School | % | |
| | | | | | | Total | Population | Exits | |
| 2010-2011 | 8 | 12 | 6 | 6 | 6 | 38 | 397 | 9.6% | |
| 2011-2012 | 19 | 13 | 14 | 15 | 8 | 69 | 395 | 17.5% | |
| 2012-2013 | 10 | 7 | 12 | 7 | 4 | 40 | 405 | 9.9% | |
| BMS | 5 | 6 | 7 | 8 | EXITS | School | % | | |
| | | | | | Total | Population | Exits | | |
| 2010-2011 | 4 | 6 | 9 | 6 | 25 | 428 | 5.8% | | |
| 2011-2012 | 10 | 11 | 16 | 23 | 60 | 406 | 14.8% | | |
| 2012-2013 | 6 | 4 | 9 | 4 | 23 | 385 | 6.0% | | |
| BHS | 9 | 10 | 11 | 12 | EXITS | School | % | | |
| | | | | | Total | Population | Exits | | |
| 2010-2011 | 11 | 12 | 11 | 10 | 44 | 468 | 9.4% | | |
| 2011-2012 | 22 | 9 | 13 | 3 | 47 | 472 | 10.0% | | |
| 2012-2013 | 6 | 4 | 9 | 4 | 23 | 385 | 6.0% | | |

PROJECTED SCHOOL ENROLLMENT: 2013 to 2022

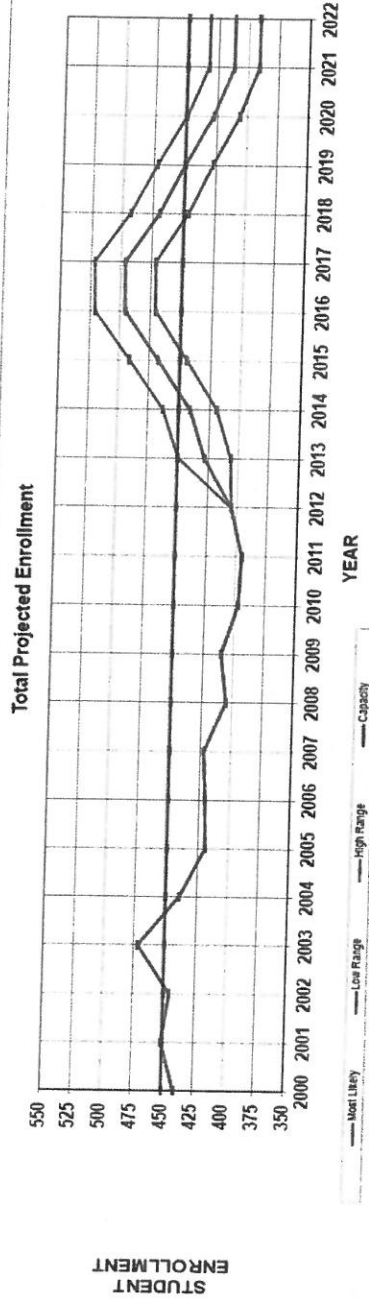
This year's projections for the District as a whole can best be described as a slight wave, rising in 2013 to 2016 and then falling in 2017 and 2018, with another slight increase in 2020 to 2022. Total enrollment will peak in 2016 and decline to a low point in 2018. We do not expect total enrollment to be significantly different from the current level of 1358. In fact, total enrollment will probably average 1364 for the entire 10-year period.

Each of the schools in the District will exhibit a different pattern. Figures 8 through 11 on pages 20 to 23 present the projections by school and grade. We highlight the results by school below.

- **BES:** the most-likely projection shows a significant enrollment increase—to a level exceeding the school's capacity—over the next 5 years to a high of 497 in 2017 (see Figure 8 on the next page). The increase stems largely from the spike in births from 2007 through 2011. The average number of births in Belmont between 2002 and 2006 was 63 with a high of 68. Between 2007 and 2011, the number averaged 81 with a high of 93. These children will now flow through BES. The most-likely projection indicates that BES will exceed the 450-student capacity from 2015 through 2018 before declining. The low-range estimate shows capacity exceeded for only 2 years, whereas the high-range estimate indicates near- or over-capacity for 8 of the next 10 years. The initial high births followed by the more recent low births in Belmont create a wave pattern in our forecast. Given the aging population and fewer households with children, we anticipate that the period of over-capacity enrollment at BES will be temporary.

FIGURE 8
SHAKER REGIONAL SCHOOL DISTRICT
BELMONT ELEMENTARY SCHOOL
ENROLLMENT PROJECTIONS BY GRADE: 2013 TO 2022
 December 2012

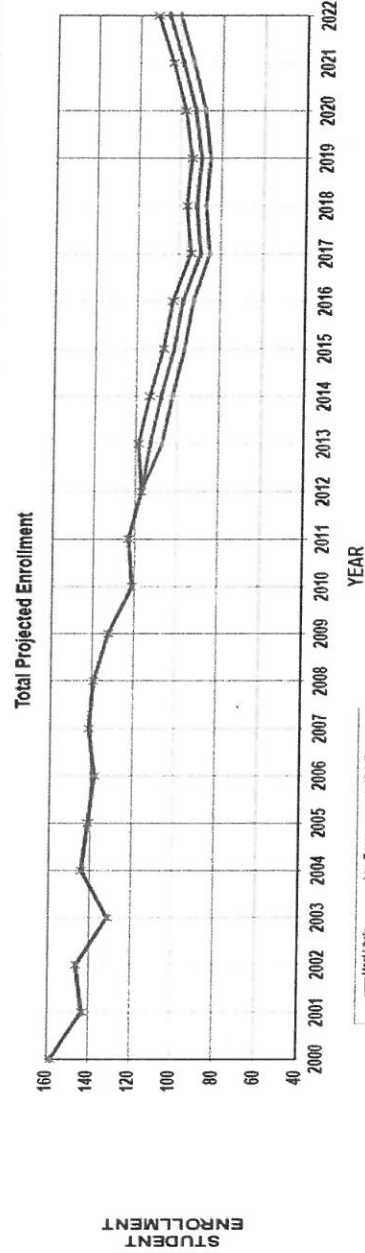
| Year | LOW-RANGE PROJECTIONS | | | | | | | | | | MOST-LIKELY PROJECTIONS | | | | | | | | | | HIGH-RANGE PROJECTIONS | | | | | | | | | |
|-------------|-----------------------|-----|-----|-----|-----|------------------|------------------|----|-----|-----|-------------------------|-----|------------------|------------------|-----|-----|-----|-----|-----|------------------|------------------------|----------|--|--|--|--|--|--|--|--|
| | K | 1* | 2 | 3 | 4 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | K | 1* | 2 | 3 | 4 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | K | 1* | 2 | 3 | 4 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | CAPACITY | | | | | | | | |
| 2013 ACTUAL | 78 | 82 | 76 | 83 | 74 | 406 | 409 | 78 | 92 | 78 | 83 | 74 | 405 | 405 | 78 | 92 | 78 | 83 | 74 | 405 | 418 | 450 | | | | | | | | |
| 2014 | 83 | 96 | 71 | 75 | 80 | 407 | 432 | 87 | 103 | 75 | 79 | 84 | 428 | 428 | 91 | 108 | 79 | 83 | 86 | 449 | 444 | 450 | | | | | | | | |
| 2015 | 84 | 109 | 79 | 71 | 76 | 419 | 456 | 88 | 115 | 83 | 75 | 80 | 441 | 441 | 92 | 121 | 87 | 79 | 84 | 463 | 468 | 450 | | | | | | | | |
| 2016 | 88 | 124 | 89 | 80 | 72 | 445 | 489 | 98 | 116 | 94 | 84 | 76 | 468 | 468 | 103 | 122 | 99 | 88 | 80 | 491 | 503 | 450 | | | | | | | | |
| 2017 | 75 | 117 | 100 | 90 | 90 | 471 | 506 | 93 | 130 | 94 | 94 | 85 | 486 | 486 | 98 | 137 | 99 | 89 | 89 | 521 | 522 | 450 | | | | | | | | |
| 2018 | 62 | 99 | 95 | 101 | 91 | 447 | 498 | 85 | 104 | 100 | 106 | 96 | 471 | 471 | 83 | 129 | 110 | 100 | 100 | 522 | 517 | 450 | | | | | | | | |
| 2019 | 68 | 82 | 80 | 96 | 102 | 428 | 486 | 72 | 86 | 84 | 101 | 107 | 450 | 450 | 76 | 90 | 88 | 106 | 111 | 495 | 515 | 450 | | | | | | | | |
| 2020 | 73 | 90 | 66 | 81 | 97 | 407 | 479 | 77 | 95 | 69 | 85 | 102 | 428 | 428 | 81 | 100 | 72 | 89 | 107 | 449 | 484 | 450 | | | | | | | | |
| 2021 | 74 | 96 | 73 | 67 | 82 | 391 | 479 | 78 | 101 | 77 | 70 | 86 | 412 | 412 | 82 | 106 | 81 | 74 | 90 | 433 | 450 | 450 | | | | | | | | |
| 2022 | 74 | 96 | 78 | 74 | 67 | 391 | 479 | 78 | 103 | 82 | 78 | 71 | 412 | 412 | 82 | 108 | 86 | 82 | 75 | 433 | 450 | 450 | | | | | | | | |



NOTES: 2012 ACTUAL ENROLLMENT DOES NOT INCLUDE CANTERBURY STUDENTS WHO ATTEND BES. FIRST GRADE INCLUDES READINESS.
 INDICATES EXCEEDS CORE CAPACITY

FIGURE 9
SHAKER REGIONAL SCHOOL DISTRICT
CANTERBURY ELEMENTARY SCHOOL
ENROLLMENT PROJECTIONS BY GRADE: 2013 TO 2022
 December 2012

| Year | LOW-RANGE PROJECTIONS | | | | | | | | | | MOST-LIKELY PROJECTIONS | | | | | | | | | | HIGH-RANGE PROJECTIONS | | | | | | | | | | CAPACITY | | | | | |
|--------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|----|----|-----|-----|----|-------|------------|------------|-------|------------------------|-----|----|-----|----|----|-------|------------|------------|-------|----------|-----|-----|-----|-----|-----|
| | Grade | Grade | Grade | Grade | Grade | Grade | Grade | Grade | Grade | Grade | K | 1* | 2 | 3 | 4 | 5 | TOTAL | '10 UPDATE | '12 UPDATE | TOTAL | K | 1* | 2 | 3 | 4 | 5 | TOTAL | '10 UPDATE | '12 UPDATE | TOTAL | | | | | | |
| 2012 ACTUAL* | 15 | 27 | 13 | 17 | 23 | 22 | 117 | 130 | 15 | 27 | 13 | 17 | 23 | 22 | 117 | 15 | 27 | 13 | 17 | 23 | 22 | 117 | 15 | 27 | 13 | 17 | 23 | 22 | 117 | 141 | 141 | 141 | 250 | | | |
| 2013 | 20 | 20 | 11 | 16 | 20 | 107 | 125 | 21 | 21 | 21 | 12 | 17 | 21 | 113 | 22 | 22 | 22 | 12 | 15 | 108 | 22 | 22 | 22 | 13 | 18 | 22 | 119 | 141 | 141 | 141 | 250 | | | | | |
| 2014 | 14 | 29 | 15 | 19 | 11 | 44 | 103 | 15 | 30 | 16 | 20 | 12 | 15 | 108 | 16 | 32 | 17 | 21 | 13 | 16 | 113 | 16 | 32 | 17 | 21 | 13 | 16 | 113 | 136 | 136 | 136 | 250 | | | | |
| 2015 | 11 | 20 | 21 | 15 | 19 | 10 | 97 | 106 | 12 | 21 | 22 | 16 | 20 | 11 | 102 | 13 | 22 | 23 | 17 | 21 | 12 | 107 | 13 | 22 | 23 | 17 | 21 | 12 | 107 | 132 | 132 | 132 | 250 | | | |
| 2016 | 10 | 15 | 15 | 22 | 14 | 17 | 93 | 106 | 10 | 16 | 16 | 16 | 23 | 15 | 18 | 98 | 11 | 17 | 17 | 17 | 24 | 16 | 19 | 103 | 11 | 17 | 17 | 17 | 24 | 16 | 19 | 103 | 134 | 134 | 134 | 250 |
| 2017 | 11 | 13 | 12 | 15 | 20 | 13 | 86 | 103 | 12 | 14 | 13 | 16 | 21 | 14 | 90 | 13 | 15 | 14 | 17 | 22 | 15 | 95 | 13 | 15 | 14 | 17 | 22 | 15 | 95 | 130 | 130 | 130 | 250 | | | |
| 2018 | 16 | 16 | 16 | 10 | 11 | 14 | 19 | 87 | 101 | 17 | 17 | 13 | 11 | 12 | 15 | 20 | 92 | 18 | 18 | 12 | 13 | 16 | 21 | 97 | 18 | 18 | 12 | 13 | 16 | 21 | 97 | 128 | 128 | 128 | 250 | |
| 2019 | 16 | 22 | 12 | 10 | 11 | 13 | 86 | 99 | 17 | 23 | 13 | 11 | 12 | 14 | 90 | 18 | 24 | 14 | 12 | 13 | 15 | 95 | 18 | 24 | 14 | 12 | 13 | 15 | 95 | 127 | 127 | 127 | 250 | | | |
| 2020 | 16 | 23 | 17 | 12 | 10 | 10 | 88 | 103 | 17 | 24 | 16 | 13 | 10 | 11 | 93 | 18 | 25 | 19 | 14 | 11 | 12 | 98 | 18 | 25 | 19 | 14 | 11 | 12 | 98 | 133 | 133 | 133 | 250 | | | |
| 2021 | 17 | 23 | 17 | 16 | 12 | 9 | 94 | 18 | 24 | 18 | 17 | 13 | 9 | 99 | 19 | 25 | 19 | 18 | 14 | 9 | 104 | 19 | 25 | 20 | 18 | 14 | 9 | 104 | 133 | 133 | 133 | 250 | | | | |
| 2022 | 17 | 23 | 18 | 16 | 16 | 10 | 101 | 18 | 24 | 19 | 17 | 17 | 11 | 106 | 19 | 25 | 20 | 18 | 14 | 9 | 111 | 19 | 25 | 20 | 18 | 14 | 9 | 111 | 133 | 133 | 133 | 250 | | | | |



NOTES: 2012 ACTUAL ENROLLMENT DOES NOT INCLUDE BELMONT STUDENTS WHO ATTEND CES. FIRST GRADE INCLUDES READINESS.

FIGURE 10
SHAKER REGIONAL SCHOOL DISTRICT
BELMONT MIDDLE SCHOOL
ENROLLMENT PROJECTIONS BY GRADE: 2013 TO 2022
 December 2012

| Year | LOW-RANGE PROJECTIONS | | | | | | | | | | MOST-LIKELY PROJECTIONS | | | | | HIGH-RANGE PROJECTIONS | | | | | | | | | |
|--------------|-----------------------|---------|---------|---------|------------------|------------------|---------|---------|---------|---------|-------------------------|---------|---------|---------|---------|------------------------|------------------|---------|---------|---------|---------|------------------|------------------|----------|--|
| | Grade 5 | Grade 6 | Grade 7 | Grade 8 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | Grade 5 | Grade 6 | Grade 7 | Grade 8 | '12 UPDATE TOTAL | Grade 5 | Grade 6 | Grade 7 | Grade 8 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | Grade 5 | Grade 6 | Grade 7 | Grade 8 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | CAPACITY | |
| 2012 ACTUAL* | 71 | 96 | 98 | 120 | 385 | 382 | 71 | 96 | 98 | 120 | 385 | 71 | 96 | 98 | 120 | 385 | 393 | 71 | 96 | 98 | 120 | 385 | 393 | 450 | |
| 2013 | 72 | 91 | 91 | 94 | 349 | 367 | 76 | 96 | 96 | 99 | 367 | 80 | 101 | 101 | 104 | 385 | 380 | 80 | 101 | 101 | 104 | 385 | 380 | 450 | |
| 2014 | 82 | 95 | 91 | 92 | 360 | 373 | 86 | 100 | 96 | 97 | 379 | 90 | 105 | 101 | 102 | 398 | 392 | 90 | 105 | 101 | 102 | 398 | 392 | 450 | |
| 2015 | 78 | 99 | 95 | 92 | 364 | 366 | 82 | 104 | 100 | 97 | 383 | 86 | 109 | 105 | 102 | 402 | 390 | 86 | 109 | 105 | 102 | 402 | 390 | 450 | |
| 2016 | 74 | 91 | 99 | 96 | 360 | 357 | 78 | 96 | 104 | 101 | 379 | 82 | 101 | 109 | 106 | 398 | 386 | 82 | 101 | 109 | 106 | 398 | 386 | 450 | |
| 2017 | 84 | 94 | 91 | 100 | 369 | 372 | 88 | 99 | 96 | 105 | 388 | 92 | 104 | 101 | 110 | 407 | 412 | 92 | 104 | 101 | 110 | 407 | 412 | 450 | |
| 2018 | 93 | 100 | 94 | 92 | 379 | 386 | 98 | 105 | 99 | 97 | 398 | 103 | 110 | 104 | 102 | 419 | 434 | 103 | 110 | 104 | 102 | 419 | 434 | 450 | |
| 2019 | 94 | 115 | 100 | 95 | 404 | 424 | 99 | 121 | 105 | 100 | 424 | 104 | 127 | 110 | 105 | 446 | 482 | 104 | 127 | 110 | 105 | 446 | 482 | 450 | |
| 2020 | 105 | 110 | 110 | 101 | 430 | 443 | 110 | 116 | 121 | 106 | 453 | 116 | 122 | 127 | 111 | 476 | 503 | 116 | 122 | 127 | 111 | 476 | 503 | 450 | |
| 2021 | 100 | 119 | 110 | 116 | 445 | | 105 | 125 | 116 | 122 | 467 | 110 | 131 | 122 | 128 | 491 | | 110 | 131 | 122 | 128 | 491 | | 450 | |
| 2022 | 84 | 111 | 119 | 111 | 425 | | 88 | 117 | 125 | 117 | 447 | 92 | 123 | 131 | 123 | 469 | | 92 | 123 | 131 | 123 | 469 | | 450 | |

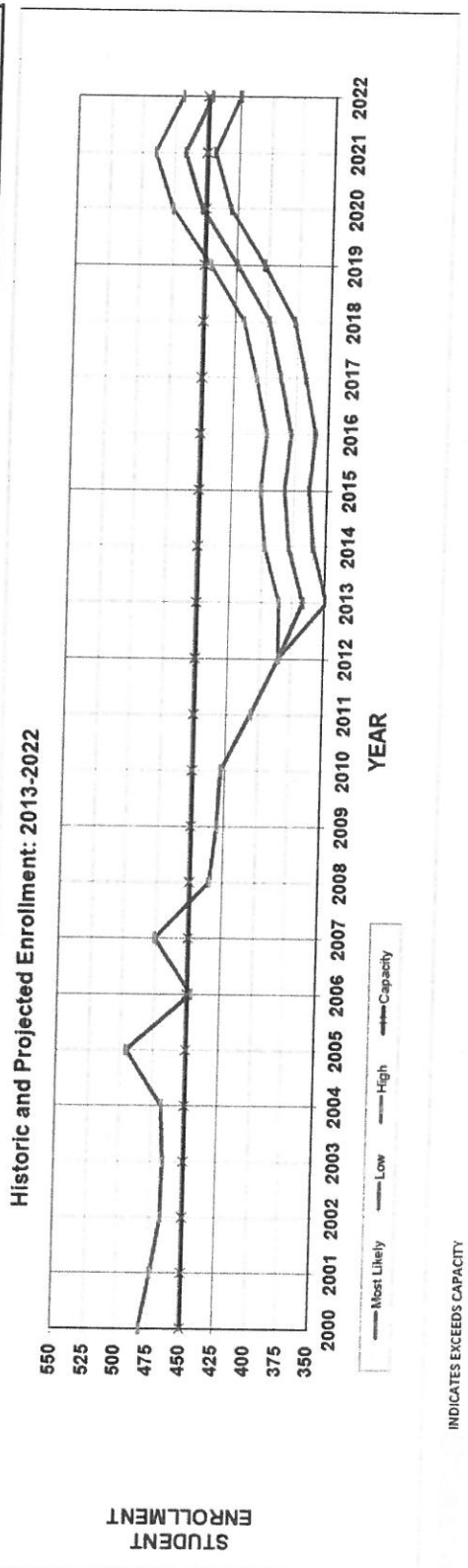
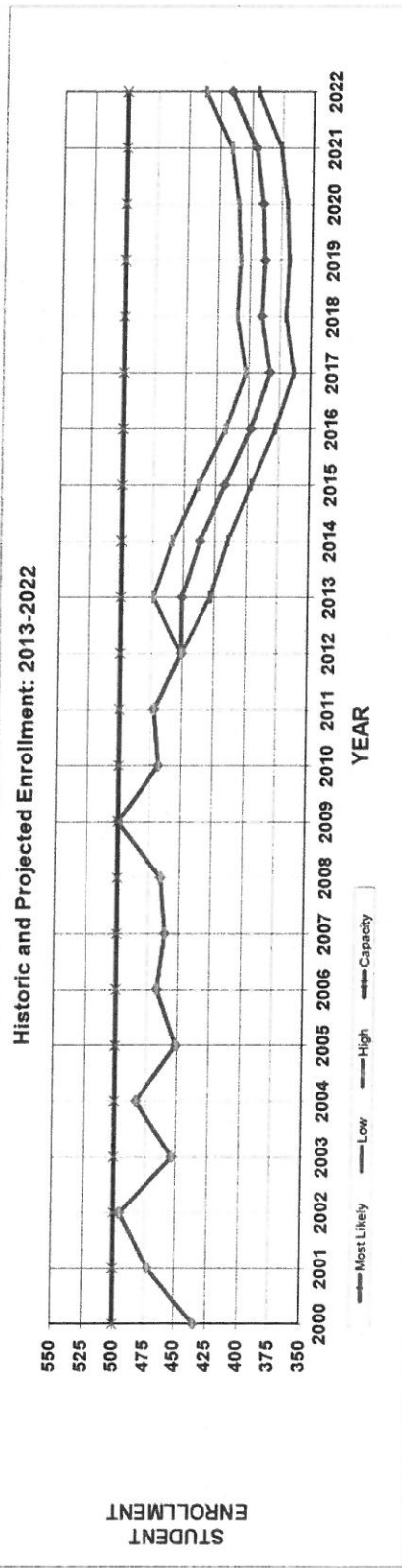


FIGURE 11
SHAKER REGIONAL SCHOOL DISTRICT
BELMONT HIGH SCHOOL
ENROLLMENT PROJECTIONS BY GRADE: 2013 TO 2022
 December 2012

| Year | LOW-RANGE PROJECTIONS | | | | | | MOST-LIKELY PROJECTIONS | | | | | | HIGH-RANGE PROJECTIONS | | | | | | |
|--------------|-----------------------|----------|----------|----------|------------------|------------------|-------------------------|----------|----------|----------|------------------|------------------|------------------------|----------|----------|----------|------------------|------------------|----------|
| | Grade 9 | Grade 10 | Grade 11 | Grade 12 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | Grade 9 | Grade 10 | Grade 11 | Grade 12 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | Grade 9 | Grade 10 | Grade 11 | Grade 12 | '12 UPDATE TOTAL | '10 UPDATE TOTAL | CAPACITY |
| 2012 ACTUAL* | 131 | 118 | 97 | 105 | 451 | 451 | 131 | 118 | 97 | 105 | 451 | 451 | 131 | 118 | 97 | 105 | 451 | 462 | 500 |
| 2013 | 125 | 117 | 97 | 89 | 428 | 445 | 132 | 123 | 102 | 94 | 451 | 451 | 139 | 129 | 107 | 99 | 474 | 451 | 500 |
| 2014 | 104 | 118 | 101 | 93 | 415 | 433 | 109 | 124 | 106 | 98 | 437 | 437 | 114 | 130 | 111 | 103 | 459 | 441 | 500 |
| 2015 | 102 | 96 | 102 | 98 | 397 | 415 | 107 | 101 | 107 | 103 | 418 | 418 | 112 | 106 | 112 | 108 | 439 | 429 | 500 |
| 2016 | 101 | 95 | 84 | 99 | 378 | 394 | 106 | 100 | 88 | 104 | 398 | 398 | 111 | 105 | 92 | 109 | 418 | 409 | 500 |
| 2017 | 105 | 96 | 82 | 81 | 364 | 381 | 111 | 101 | 85 | 85 | 383 | 383 | 117 | 106 | 90 | 89 | 402 | 399 | 500 |
| 2018 | 110 | 99 | 82 | 80 | 371 | 371 | 116 | 104 | 86 | 84 | 390 | 390 | 122 | 109 | 90 | 88 | 410 | 404 | 500 |
| 2019 | 101 | 104 | 86 | 79 | 369 | 369 | 106 | 109 | 90 | 83 | 388 | 388 | 111 | 114 | 95 | 87 | 407 | 399 | 500 |
| 2020 | 105 | 94 | 89 | 83 | 371 | 371 | 110 | 99 | 94 | 87 | 390 | 390 | 116 | 104 | 99 | 91 | 410 | 408 | 500 |
| 2021 | 110 | 98 | 82 | 86 | 376 | 376 | 116 | 103 | 86 | 91 | 396 | 396 | 122 | 108 | 90 | 96 | 416 | 416 | 500 |
| 2022 | 127 | 105 | 85 | 79 | 395 | 395 | 134 | 110 | 89 | 83 | 416 | 416 | 141 | 116 | 93 | 87 | 437 | 437 | 500 |



Indicates exceeds capacity

- CES: As can be seen in Figure 9 on page 21, total enrollment will decline significantly and fall below 100 by 2017. This is largely due to the decline in the number of births. Between 2002 and 2006, the average number of births was 30. The average declined to 22 over the next 5 years and hit a low of 14 in 2011. The projection does show a slight enrollment increase at the end of the forecast period. Canterbury's population is older than Belmont's and has a smaller percent of family households with children under 18. The most likely projections do not consider those Belmont families that may choose to enroll their elementary-age children in CES where there are projected smaller classes. Thus, our estimate may understate what the actual enrollment might be. Given the significant number of older residents, it is possible that there will be a generational shift before the end of our forecast. This would be reflected in the high-range projections.
- BMS: Figure 10 on page 22 shows that total enrollment will decline through 2016 before significantly increasing and exceeding capacity near the end of the projection period. The most-likely forecast shows a steady increase from 2015 through 2022, peaking in 2021. The increase is driven by the large enrollment increase likely to occur in BES over the next 5 years. Our high-range forecast indicates that capacity will be reached by 2019, whereas the low-range forecast does not show enrollment exceeding capacity at any point over the next ten years.
- BHS: As shown in Figure 11 (page 23), enrollment is expected to decline from the current total of 451 in 2013 to a low of 388 in 2019 before slightly increasing in the following years. After 2013, at no time will BHS enrollment rise to its current level. It will remain below capacity for the full forecast period. Between 2008 and 2012, BMS enrollment dropped from 435 to 385 students. This 11.5% decline will now be felt in the high school. Reviewing historic progression ratios, we know that historically there has been a 10% increase in the 9th grade enrollment over the 8th grade middle school population. However, the jump that occurs in the 9th grade is followed by a 5% decline in the 10th grade, a 14% decline in 11th grade enrollment, and a 3 to 4% decline in the 12th.

Despite the time and effort invested in these projections, they should be considered in the proper context. As discussed in the next section, the state, region, and nation are going through an unsteady and tenuous recovery from the worst recession in 70-80 years. Major economic uncertainties exist, which are driving some demographic patterns. How states adjust to changing conditions from policy and investment perspectives will have a potentially significant impact on how they recover and what their economies and societies look like when the process is over. Within this context, having potentially two schools in the District exceeding capacity calls for close monitoring and thoughtful decision making.

DISCUSSION: BROADER ECONOMIC CHALLENGES AND IMPLICATIONS

The unprecedented depth and sluggish recovery from the nation's recent recession have had a profound impact on the nation. It has prompted a drop in birth rates and forced analysts to examine the fundamental structure of our economy and the implications for the future—including for public education. While a large number of jobs go unfilled due to a lack of qualified applicants, some experts have candidly noted that many of the lost jobs will not return—that workers have to be retrained—thanks to myriad factors ranging from technological advances to outsourcing overseas and corporate relocations.

The impacts of these changes vary from one region to another. They most certainly affect New England and New Hampshire in particular. And these impacts will affect future enrollment in the Shaker Regional School District. This is not a new finding: in past reports we have discussed macro-level demographic trends, especially as they help drive the number of school-age children living in Belmont and Canterbury.

As discussed earlier in the paper, demographic trends continue to heavily influence school enrollment. And this State has certainly witnessed some changes on that front, illustrated for example in a 2012 report out of the University of New Hampshire's Carsey Institute entitled, "New Hampshire Demographic Trends in the Twenty-First Century." The report notes that both natural population increases and in-migration have been declining for decades, the latter dramatically so in the past decade. Indeed, over the last four years the state has experience a net out-migration of residents, reversing a two-decade-old pattern of net in-migration. While some of this is due to depressed housing demand freezing people in place, in the future relative economic opportunity will play a major role. Despite the steady increase in the average age of the state's population, the report notes that it is possible that the aging of current cohorts in the state combined with in-migration of women in child-bearing age could boost birth rates by the end of the decade—too late to impact the current enrollment projection updates, but something to watch down the road. Key questions: will birth rates rebound and that in-migration occur?

The issues that various experts have concerned themselves with over the past couple of years are broader than pure demographics, encompassing fundamental tenants of the state's economic and policy framework, which could dramatically affect migration patterns—into and out of the state. In short, several envision a transformational shift in the world New Hampshire faces, in its ability to keep on attracting skilled professionals, workers, and their families and holding onto those now in the state—an ability that has been sorely tested and found wanting over the past several years. It is an ability that can be influenced—positively or negatively—by public policy. The over-riding question is whether the state's policy makers will understand and rise to the challenge. The jury is very much still out on this question. The future is extremely uncertain.

In the following pages we will focus upon New Hampshire's standing in the region, and in particular in relation to Massachusetts—which traditionally has been the primary source of immigrants to the state—and Vermont and Maine—our northern neighbors who are also our economic competitors. This focus is not unique. Indeed, it has been on the minds of economic and policy experts for some time—in studies, reports, roundtable discussions, and conferences. Recent examples include the September 2012 report from the New Hampshire Center for Public Policy Studies, "From Tailwind to Headwind: New Hampshire's Shifting Economic Trends;" an article in the November 2012 issue of *Business New Hampshire* magazine, "Economic Roundtable: Rethinking NH's Economy—Lagging in the recovery, NH may face a grim future;" the December conference of the New England Economic Partnership, at which the state's atypical sub-par recovery and job growth were highlighted; and an article in the January 2013 issue of *Business New Hampshire* magazine, "Threats to NH's High-Tech Ecosystem."

These and similar analyses follow two lines of reasoning. The first takes us down the path of changing demographic and economic factors solely within the state, touching on migration patterns, natural population changes, our aging population, workforce changes, educational attainment, overall economic output and growth, etc. "From Tailwind to Headwind" identifies three policy imperatives for New Hampshire to successfully adapt to new economic realities:

increase labor productivity, expand the workforce, and promote capital investment—three areas where most would say the state has lagged the rest of the country. The paper and other analyses suggest the state implement a multi-faceted set of policies and investments that

1. build workforce capacity (increasing funding for post-secondary education and worker training) as well as the state's infrastructure (from transportation to broadband),
2. address the state's cost of living, including affordable housing, and
3. improve the business climate (from business taxes, electric rates, and capital resources to marketing and providing incentives to attract new businesses to the state).

A review of recent trends in New Hampshire and adjacent states illustrates where the state lies regionally. It also identifies areas where policy makers must focus their attention—echoing the recommendations of previously cited expert analyses. In some cases, the data merely highlight differences between us and our neighbors. In others, the need for action is more apparent. In this review we focus primarily on how the state compares with Massachusetts, Maine, and Vermont.

Figures 12, 13, and 14 on the following three pages highlight recent trends in bankruptcies, housing prices, and building permits. In these figures we used a simple coding regimen to highlight New Hampshire's *relative* status: green indicates the state is in a fairly good position (at least in relation to the target states), yellow indicates a more tenuous position—mixed at best with our neighbors, and red highlights areas of concern—where the state appears to be lagging. The judgments are admittedly subjective, but we present the data, so Board members can draw their own conclusions. We also use green and red across the states to denote low or high points in the indicators.

Business and consumer bankruptcies (Figure 12 on the next page) reached a peak in 2010 (NH's peak occurred one quarter before the rest of the region and country), which we used as a starting point for analysis. As a side note (and not shown in the Figure), New Hampshire's peak, as a ratio of bankruptcies at the beginning of 2006—when they hit a low point across the region (and the nation as a whole)—was the second highest in the region, after Maine. By the end of 2011 (one quarter earlier for Vermont), the filings across the region and the rest of the country hit a low, but then started increasing again. While the rise has been less in New Hampshire than elsewhere, it is only slightly better than in Massachusetts and the number of filings is still relatively higher than in Vermont (in relation to the 2010 peak). The yellow highlight indicates that New Hampshire's position is somewhat precarious, as it is still seeing a significant number of filings and it's position is not much better (or worse) than the targeted comparison states. Another note of caution is that the ratio of bankruptcies to population as of June 2012 was higher in New Hampshire than it was in the comparison states. In the past, New Hampshire has rebounded quicker than its neighbors. Not this time.

Figure 13 on page 28 shows the trends in housing prices from their peak (which occurred at different times between 2006 and 2008) to the most recent reporting period. The parallels between New Hampshire and Massachusetts are interesting: both states saw their prices reach a peak (albeit at very different levels) during the same period (in early 2006, well before the other states), their prices have continued to fall since then, and they are roughly at the same relative position to the peak (down 16-19%). The significant difference in home prices between the two states should make New Hampshire attractive to Massachusetts residents—which it has been for decades. However, their significant drop has hampered people's efforts to sell their homes and move. Vermont stands out in the region: its housing prices reached a peak later (along with

Figure 12
TOTAL AND INDEX OF BANKRUPTCIES (NUMBER OF BUSINESS AND CONSUMER FILINGS, NOT SEASONALLY ADJUSTED)
 December 2012

| QUARTER ENDING | US | NE | ME | MA | NH* | VT | US | NE | ME | MA | NH* | VT |
|------------------------|---------|--------|-------|-------|-------|-----|--------|--------|--------|--------|-------|--------|
| June 2010 | 422,061 | 13,938 | 1,186 | 6,312 | 1,450 | 455 | 100.00 | 100.00 | 100.00 | 100.00 | 95.60 | 100.00 |
| September 2010 | 412,390 | 13,060 | 1,065 | 5,907 | 1,418 | 384 | 97.7 | 93.7 | 89.8 | 93.6 | 93.5 | 84.4 |
| December 2010 | 370,090 | 12,091 | 964 | 5,547 | 1,270 | 359 | 87.7 | 86.7 | 81.3 | 87.9 | 83.8 | 78.9 |
| March 2011 | 366,178 | 11,239 | 900 | 4,864 | 1,381 | 289 | 86.8 | 80.6 | 75.9 | 77.4 | 91.1 | 63.5 |
| June 2011 | 379,790 | 12,701 | 1,051 | 5,811 | 1,330 | 344 | 90.0 | 91.1 | 88.6 | 92.1 | 87.7 | 75.6 |
| September 2011 | 348,635 | 10,791 | 920 | 4,961 | 1,147 | 251 | 82.5 | 77.4 | 77.6 | 78.6 | 75.7 | 53.2 |
| December 2011 | 313,775 | 9,575 | 741 | 4,461 | 1,080 | 256 | 74.3 | 58.7 | 62.5 | 70.7 | 71.1 | 56.3 |
| March 2012 | 322,973 | 10,070 | 745 | 4,593 | 1,103 | 274 | 76.5 | 72.2 | 62.8 | 72.8 | 72.8 | 60.2 |
| June 2012 | 325,693 | 10,516 | 901 | 4,777 | 1,097 | 302 | 77.2 | 75.4 | 76.0 | 75.7 | 72.4 | 66.4 |
| June 2012 % of Minimum | | | | | | | 104% | 110% | 122% | 107% | 102% | 120% |

*Bankruptcies reached their peak in New Hampshire during the quarter ending March 2010, totalling 1,516.

Source: American Bankruptcy Institute

Figure 13
HOME PRICE INDEX (INDEX, FIRST QUARTER 1980 = 100)
NOT SEASONALLY ADJUSTED
 December 2012

| Quarter Ending | US | NE | ME | MA | NH | VT |
|------------------------|--------|--------|--------|--------|--------|--------|
| March 2006 | 365.7 | 591.77 | 496.98 | 724.21 | 482.53 | 430.88 |
| June 2006 | 369.69 | 589.7 | 494.04 | 715.54 | 480.4 | 440.18 |
| December 2006 | 376.6 | 592.01 | 504.61 | 712.76 | 481.44 | 449.58 |
| March 2007 | 378.13 | 592.04 | 508.67 | 707.41 | 479.86 | 452.92 |
| December 2007 | 373.41 | 579.37 | 509.02 | 685.51 | 469.13 | 451.83 |
| March 2008 | 371.22 | 579.14 | 511.95 | 682.64 | 469.6 | 458.31 |
| December 2008 | 349.33 | 548.73 | 490.09 | 648.72 | 441.46 | 450 |
| December 2009 | 332.82 | 525.19 | 468.92 | 625.44 | 415.65 | 440.29 |
| December 2010 | 327.48 | 523.64 | 469.13 | 625.82 | 412.61 | 442.15 |
| June 2011 | 313.76 | 507.09 | 453.83 | 611.95 | 396.19 | 435.1 |
| December 2011 | 318.02 | 512.98 | 461.39 | 616.68 | 401.99 | 442.43 |
| March 2012 | 314.05 | 507.45 | 457.25 | 613.12 | 395.7 | 442.08 |
| June 2012 | 311.82 | 502.18 | 448.69 | 609.97 | 392.07 | 438.92 |
| June 2012 as % of Peak | 82% | 85% | 88% | 84% | 81% | 96% |

Source: Federal Housing Finance Agency.

Figure 14
TOTAL AND INDEX OF HOUSING PERMITS AUTHORIZED (INDEX, THROUGH AUGUST 2005 AND 2005 TOTAL = 100)
(HOUSING UNITS, SEASONALLY ADJUSTED)

December 2012

| TIME PERIOD | US | NE | ME | MA | NH | VT | US | NE | ME | MA | NH | VT |
|-------------------------------------|-----------|--------|-------|--------|-------|-------|--------|--------|--------|--------|--------|--------|
| Through August 2005 | 1,430,000 | 37,333 | 5,730 | 15,464 | 5,103 | 1,979 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| TOTAL 2005 | 2,162,000 | 56,801 | 8,690 | 23,149 | 7,644 | 2,915 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Through August 2006 | 1,312,000 | 34,002 | 5,082 | 14,474 | 4,077 | 2,062 | 91.7 | 91.1 | 88.7 | 93.6 | 79.9 | 104.2 |
| TOTAL 2006 | 1,846,000 | 48,247 | 7,269 | 20,525 | 5,882 | 2,864 | 129.1 | 129.2 | 126.9 | 132.7 | 115.3 | 144.7 |
| Through August 2007 | 989,000 | 26,681 | 4,230 | 11,042 | 3,098 | 1,413 | 69.2 | 71.5 | 73.8 | 71.4 | 60.7 | 71.4 |
| TOTAL 2007 | 1,391,000 | 36,524 | 5,798 | 14,983 | 4,358 | 1,952 | 97.3 | 97.8 | 101.2 | 96.9 | 85.4 | 98.6 |
| Through August 2008 | 671,000 | 17,819 | 2,559 | 7,218 | 2,309 | 982 | 46.9 | 47.7 | 44.7 | 46.7 | 45.2 | 49.6 |
| TOTAL 2008 | 896,000 | 24,027 | 3,529 | 9,320 | 3,217 | 1,362 | 62.7 | 64.4 | 61.6 | 60.3 | 63.0 | 68.8 |
| Through August 2009 | 375,000 | 11,412 | 1,709 | 4,936 | 1,279 | 645 | 26.0 | 30.6 | 29.8 | 31.9 | 27.1 | 37.2 |
| TOTAL 2009 | 582,000 | 17,428 | 2,721 | 7,316 | 2,030 | 1,140 | 40.7 | 46.7 | 47.5 | 47.3 | 39.8 | 57.6 |
| Through August 2010 | 410,000 | 13,872 | 2,146 | 5,746 | 2,096 | 1,081 | 28.7 | 37.2 | 37.5 | 37.2 | 41.1 | 54.6 |
| TOTAL 2010 | 604,000 | 20,534 | 3,174 | 8,639 | 2,942 | 1,572 | 42.2 | 55.0 | 55.4 | 55.9 | 57.7 | 79.4 |
| Through August 2011 | 400,000 | 10,698 | 1,440 | 4,344 | 1,653 | 770 | 28.0 | 37.1 | 37.1 | 37.1 | 32.4 | 38.9 |
| TOTAL 2011 | 624,000 | 16,824 | 2,237 | 7,238 | 2,364 | 1,215 | 43.6 | 45.1 | 39.0 | 46.8 | 46.3 | 61.4 |
| Through August 2012 | 503,000 | 15,660 | 1,828 | 7,305 | 1,676 | 865 | 35.2 | 41.9 | 31.9 | 47.2 | 32.8 | 43.7 |
| Through August 2012 as % of Minimum | | | | | | | 134% | 146% | 127% | 168% | 131% | 134% |

Source: U.S. Census Bureau.

Maine's), and they dropped far less than in any of the other states (standing at 96% of their peak as of last June). Granted, Vermont's home prices are lower than in the other states, but that also makes them more affordable. The lack of affordable housing has been cited by experts as an obstacle to keeping college graduates and attracting young workers to New Hampshire. Therefore, it is a key factor influencing the state's economic development.

Trends in building permits are presented in Figure 14 on the previous page. Having hit a peak in 2005, the number of permits has dropped precipitously. New Hampshire and Vermont hit bottom first (in 2009), a milestone the rest of the region didn't hit until two years later. The problem is that New Hampshire almost matches Maine for the weakest recovery in permits and finds itself relatively far behind Vermont and Massachusetts, which leads the region by far in the ratio of current permits to its peak. The demographic trends mentioned earlier provide one reason for the relative strength of Massachusetts' recovery: New Hampshire's net out migration for the past four years resulted from far fewer people moving into the state and an increase in New Hampshire residents leaving. This difference in building activity also has significant economic implications, as housing construction is a powerful driver of economic activity.

Based upon the information in these three tables, New Hampshire is not in a very secure position. The so-called "New Hampshire advantage" has not appeared to be as potent a factor over the past several years as it once was.

Figure 15 on the following page presents comparative data on a wide range of economic and related indicators. To help readers gain an overview of New Hampshire's status, we used the same color scheme as in the previous figures, but only applied them to the state's data. We should note that the indicators came from various sources that used different criteria in evaluating and ranking the states, so inconsistencies do appear. The indicators that show the state in relatively good position are largely not surprising: the low unemployment rate (which could also be a problem in attracting new business – a lack of available workers), high quality of life, business friendliness, absence of an individual income tax, and the lack of a general state sales tax. On the other hand, the table reveals far more "red flags" than we would expect.

- The state has turned in a sub-par performance in employment growth over the past year—overall, in key sectors, initial unemployment filings, and even in changes in the unemployment rate.
- New Hampshire has experienced slower growth in personal income and wage disbursements.
- The state ranks lower in such "cost of doing business" indicators as workforce (development and training), infrastructure, transportation, technology, and innovation; it is also in the "caution" zone in education, the cost of living, and the cost of business. In one key area of doing business, the state is at a distinct disadvantage compared with Maine and Vermont in industrial electric rates – a factor identified by some experts as an economic development constraint.
- Taxes are an area where—much to some people's surprise—New Hampshire doesn't fair well: it has high business and property taxes and relatively high unemployment insurance rates. The state's reliance on the property tax – which also affects business – has been cited by some experts as a potential barrier to economic development, especially if the state shifts more costs to communities, whose primary/only means of raising revenue is the property tax.

Figure 15
A 2012 Comparative Snapshot of Economic Indicators

December 2012

| New England Economic Indicators, Third Quarter 2012, Federal Reserve Bank of Boston (data available as of September 27, 2012) | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-----------|-----------|--------|-----------|
| | US | NE | ME | MA | NH | VT |
| Non-agricultural employment: percent change August 2011-August 2012 | 1.4% | 0.6% | -0.2% | 1.3% | | 1.2% |
| Professional and business services (approximate percentages)* | +<4% | +<3% | -2% | +5% | | +>5% |
| Education and health* | +>2% | +1% | +1% | +<0.5% | | +>3% |
| Unemployment rate: August 2012 | 8.1% | 7.3% | 7.6% | 6.3% | | 7.6% |
| Absolute percent change in unemployment rate from August 2011 | -1.0% | -0.5% | 0.1% | -0.9% | | -0.3% |
| Initial unemployment claims: percent change August 2011-August 2012* | ->9% | ->15% | ->4% | -<24% | | -19% |
| Manufacturing employment: percent change August 2011-August 2012* | +>1.5% | -0.25% | -<0.5% | +<1.0% | | ->0.5% |
| Manufacturing earnings: percent change August 2011-August 2012* | +<2% | -0.5% | +2% | +<1% | | +>6% |
| Manufacturing hours: percent change August 2011-August 2012 | NA | -0.5% | +1% | -<0.5% | ->1% | -<4% |
| Total personal income: percent change 2nd Quarter 2011-2nd Quarter 2012* | +3% | +2.75% | +3% | +3.5% | | +>2.75% |
| Wage and salary disbursements: percent change: 2nd Quarter 2011-2nd Quarter 2012* | +>3% | +<2.5% | +>0.5% | +3.25% | | +<2% |
| Merchandise Exports: percent change August 2011-August 2012 | 5.6% | -10.7% | -14.2% | -17.9% | -14.6% | 2.7% |
| Value of residential construction contracts: percent change August 2011-August 2012 | +30% | +50% | ->5% | +<50% | +50% | -35% |
| <i>*Percentages read off a bar chart</i> | | | | | | |
| Cost of Doing Business: CNBC.com (Copyright 2012) | | | | | | |
| State rankings | | | ME | MA | NH | VT |
| Overall | | | 40 | 6 | 17 | 44 |
| Cost of business | | | 26 | 41 | 37 | 42 |
| Workforce | | | 44 | 31 | 30 | 37 |
| Quality of life | | | 6 | 10 | 2 | 3 |
| Economy | | | 34 | 15 | 10 | 21 |
| Infrastructure and transportation | | | 48 | 29 | 45 | 49 |
| Technology and innovation | | | 40 | 3 | 23 | 40 |
| Education | | | 9 | 4 | 7 | 4 |
| Business friendliness | | | 32 | 15 | 8 | 34 |
| Access to capital | | | 30 | 20 | 2 | 32 |
| Cost of living | | | 39 | 41 | 40 | 42 |
| Average Retail Price of Electricity for Commercial and Industrial Customers | | | | | | |
| | | | ME | MA | NH | VT |
| Commercial (Cents/KWH) | | | | | | |
| September 2012 | | | 11.57 | 14.34 | 13.16 | 14.26 |
| Percent change from September 2011 | | | -1.6% | -6.8% | -4.9% | 1.9% |
| Industrial (Cents/KWH) | | | | | | |
| September 2012 | | | 7.48 | 13.25 | 11.93 | 9.83 |
| Percent change from September 2011 | | | -12.1% | -5.2% | -5.3% | 0.5% |
| <i>Source: U.S. Energy Information Administration, Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report.</i> | | | | | | |
| 2013 State Business Tax Climate Index: Tax Foundation Background Paper Number 64, October 2012 | | | | | | |
| 2013 State Business Tax Climate Index Ranks and Component Tax Ranks | | | ME | MA | NH | VT |
| Overall rank* | | | 30 | 22 | 7 | 47 |
| Corporate tax rank | | | 41 | 33 | 48 | 43 |
| Individual income tax rank | | | 27 | 15 | 9 | 47 |
| Sales tax rank | | | 10 | 17 | 1 | 14 |
| Unemployment insurance tax rank | | | 32 | 49 | 42 | 22 |
| Property tax rank | | | 39 | 47 | 43 | 48 |
| <i>*Maine's ranking improved 7 places and Massachusetts's improved by one place from 2012.</i> | | | | | | |
| Total State and Local Business Taxes - State by State Estimates for Fiscal Year 2011 (Council on State Taxation - Ernst & Young, July 2012) | | | | | | |
| | US | | ME | MA | NH | VT |
| State and local business taxes as a share of private sector Gross State Product | 5.0% | | 6.9% | 4.3% | 4.6% | 7.3% |
| Debt of Graduates from State University Systems: CNN Money: October 18, 2012 | | | | | | |
| | | | ME | MA | NH | VT |
| Percent of students graduating with debt | | | 71 | 65 | | 63 |
| Average debt per student | | | \$ 26,000 | \$ 27,200 | | \$ 28,300 |

- Lastly, the percentage of graduates from the state’s university system with debt and the fact that they have the greatest amount of debt in the country place New Hampshire at a distinct disadvantage in attracting college students to the state and keeping them here after they graduate. This challenge has been raised by many experts as having serious implications for the state’s economic future.

If these comparative figures had been filled out using data from 10-15 years ago, they would probably have contained far more green than they do today. The bottom line, as highlighted in many pieces beyond the work cited earlier, is that the economic environment in which New Hampshire finds itself has changed and the state has changed demographically. It faces serious challenges—which not only have internal implications, but also can greatly affect how the state fares in comparison with its neighbors, who—we might add—will likely attempt to adapt to the changing conditions. How the state meets these challenges will have a dramatic impact on its future, and ultimately on future enrollment in the Shaker Regional School District. We cannot remember a time since we have been preparing the enrollment projections when policy and investment decisions by the state loom so large. Indeed, this is one of the primary reasons why we modified our projection methods this year.

We hope this discussion helps Board members better understand some of the key forces at play at the state and regional levels so they can put the enrollment projections into a context that will inform their decision making. To say we are in uncertain times is an understatement. We do note, however, that Steve Norton, the Executive Director of the New Hampshire Center for Public Policy Studies and one of the authors of “From Tailwind to Headwind: New Hampshire’s Shifting Economic Trends” (cited earlier), recently presented their findings to the legislature. This is an important first step, although no one yet knows where it will lead. So, proceed with caution.

CONCLUDING REMARKS

Within our scope and budget, we have tried to do the best job we could to project the District’s enrollment over the next ten years. We’ve highlighted the key drivers of enrollment, dug into the trends within Belmont and Canterbury over the past ten years, and discussed significant broader demographic and economic trends and realities that will undoubtedly affect the district in the near term and perhaps longer. Because of the current uncertainties and the potential implications of a new bubble of students entering BES and later BMS during this projection period and another potential bubble—under certain circumstances—further down the road, we think the District’s undertaking regular enrollment updates represents a sound investment. They provide the School Board and District Administration with periodic check-ups and fresh insights to help identify potential challenges and put them in a useful context for decision making. We appreciate the opportunity to participate in this process with you.

