

# ANNUAL



# BUDGET

Supplementary Schedules and Information

# Enrollment History & Projections



# ENROLLMENT

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This section of the budget presents student enrollment history and projections. The historical review presents the previous five fiscal years, and compares the actual enrollment to the projections. Each year, the district provides the State of Connecticut with the number of enrolled students by school as of October 1. The district uses these numbers as the official count for the current fiscal year. We use our student information system, Power School, to upload electronically the enrollment data to the state's computer system. In addition, we update these numbers periodically during the school year. Student enrollment is a factor in most federal and state entitlement grants. Therefore, the Business Services Office and Technology Office maintain a record of the data so that the school district's independent auditors can perform their required testing.

The New England School Development Council (NESDEC) provides the district with enrollment projections, which they update annually. They use the cohort survival method to calculate these projections. This statistical model projects student enrollment by using historical enrollment data for each school by grade along with published birth rates. The model looks at the previous five years of enrollment progression by grade at each school, and assumes similar ratios for the future. Experience has taught us that reasonable variances between actual and projected enrollments occur for a variety of reasons. Therefore, we also consider new and resale housing rates, and non-public school enrollment data when appropriate.

Enrollment projections provide the basis for both operating and capital budget planning. These enrollment projections, developed annually, provide important data for program and budget planning, and staffing for the 2011-12 school year. Mr. Lewis Brey prepared the following report after NESDEC released Weston's updated enrollment projections in the fall of 2010. Please keep in mind that NESDEC DOES NOT provide projections for the number of pre-school special education students and their typical peers, or for the students that are placed in facilities outside the district. The district's Director of Special Education and Pupil Personnel Services calculates these numbers. The district adds both projections to arrive at the total enrollment figures.

## **Projection Methodology**

As you may know, in developing projections for member school districts, NESDEC uses the cohort survival technique, the most common method for preparing enrollment forecasts. By incorporating some appropriate modifications, NESDEC is able to consider information specific to an individual school district and consequently, avoid forecasts that are entirely formula driven.

NESDEC calculates percentages from historical data and determines reliable percentage increases or decreases between each pair of consecutive grade levels. For example, if 100 students enrolled in Grade 1 in 2009/2010, increased to 104 students in Grade 2 in 2010/2011, the percentage of survival would have been 104% or a ratio of 1.04. Such ratios are calculated between each pair of grades or years in school over several recent years.

The ratios used are the key factors in the reliability of the projections, given the validity of the data at the starting point. The strength of the ratios lies in the fact that each ratio encompasses collectively the variables that account for increases or decreases in the size of a grade enrollment as it moves on to the next grade. Each ratio represents the cumulative effect of the following factors:

1. Migration, in or out, of the schools;
2. Retention in the same grade;
3. Drop-outs, transfers, etc.;
4. Births and deaths;
5. New house construction.
6. Economic conditions

The ratios thus selected are applied to the present enrollment statistics for a pre-determined number of years.

### **Reliability of Enrollment Projections**

Enrollment projections based upon the children already in the district (the current K-12 population only) will be the most reliable. The second level of reliability encompasses those children already born into the community, but not yet old enough to be in school. The third and least reliable category is the group for which an estimate must be made to predict the number of births, thereby adding an additional variable.

Projections can serve as useful guides to school administrators for educational planning. In this regard, the projections are generally most reliable when they are closest in time to the current year. Projections six to ten years out may serve as a guide to future enrollments, and are useful for long-range facilities planning. However, they should be viewed as subject to change given the possibility for anomalies that may crop up in the underlying assumptions. Annual updates allow for the identification of any recent changes in historical trends.

### **Review of Enrollment – 2010-2011**

Last year, NESDEC projected a K-12 enrollment for 2010/2011 of 2506, which excludes the 39 students in the Pre-K Early Learning Center program. The actual K-12 October 1<sup>st</sup> total enrollment for 2010/2011 is 2504, a difference of 2 students fewer than projected. NESDEC's enrollment projection total from fall of 2009 came within 0.08% of the actual October 1, 2010 enrollment. Enrollment projection variances from actual grade level enrollments are, for the most part, limited to Kindergarten and Grade 2 at Hurlbutt Elementary School, Grade 3 at Weston Intermediate School, Grade 8 at Weston Middle School, and Grades 9, 10, and 12 at Weston High School. Actual enrollments in other grades are close to NESDEC's projections. These totals are noted in the individual school enrollment summaries.

At Hurlbutt Elementary School there was a decrease of 11 students under the projection (503 actual vs. 514 projected). This decrease was most notable in Kindergarten, which enrolled 19 fewer students (11.95%) than the projection. However, the difference in Kindergarten was partially offset by an increase of 8 students in Grade 2.

*The significant decline in Kindergarten enrollment at Hurlbutt is a deviation from the experience of other DRG A Districts. With the exception of one other District in DRG A, Kindergarten enrollment for 2010/2011 was either higher than projected or was on target:*

	<u>Projected</u>	<u>Actual</u>	<u>Difference</u>
District A	284	284	0
District B	352	393	+41 (+11.65%)
District C	305	351	+46 (+15.08%)
District D	292	269	-23 ( -7.87%)
District E	97	98	+1 ( +1.03%)
District F	97	108	+11 (+11.34%)
<b>Weston</b>	<b>179</b>	<b>159</b>	<b>-20 (-11.17%)</b>

At Weston Intermediate School enrollment was projected at 586 vs. the actual enrollment of 594, an increase of 8 students. The entire increase above the projection was in Grade 3.

At Weston Middle School enrollment was projected at 613 vs. the actual enrollment of 609, a decrease of 4 students. Grade 6 had the largest decrease with 4 fewer students than the NESDEC’s projection.

At Weston High School, the total 9-12 enrollment was projected at 773 vs. 777 actual enrollment – representing a variance of 4 students. However, in grades 9 and 12, there were significant variances. Grade 9 enrollment was 9 students below the projection (193 v. 202) and grade 12 was 7 students higher (192 v. 185).

**Review of NESDEC’s 2011-2012 Enrollment Projections**

NESDEC’s most recent K-12 projections indicate a decrease in student enrollment. Total K-12 projected enrollment for 2011/2012 is forecasted at 2466, a decrease of 38 students, as compared to the actual 2010/2011 enrollment of 2504, a 1.5% decrease over last year.

**Hurlbutt Elementary School—Grades PK-2**

Enrollment at this school level is projected to decrease by 28 students as compared to the current enrollment in these grades in 2010/2011 (548 current vs. 520 projected). This decrease is attributed to a lower than usual projected Kindergarten enrollment of 140 students and the projected decrease of 10 students in Grade 2.

Kindergarten enrollment remains the most difficult to forecast and is somewhat elusive to accurately project. In developing the enrollment projections for the Kindergarten class of 2011, NESDEC used a Birth-to-Kindergarten growth ratio (a factor of 1.65), which is slightly lower than the 1.70 ratio used in 2009 and 1.75 used in 2008.

*It is important to note that the trend over the past ten years, illustrated by the following chart, indicates that the in-migration/growth rate between the year of birth and Kindergarten eligibility five years later peaked in 2006 and has since been on a general decline.*

In-Migration between Year of Birth and Actual Kindergarten Enrollment

Years, Birth to K	Birth Cohort	K Enrollment	Difference
1996 to 2001	114	158	+44
1997 to 2002	114	163	+49
1998 to 2003	146	191	+45
1999 to 2004	129	184	+55
2000 to 2005	129	182	+53
2001 to 2006	138	210	+72
2002 to 2007	77	147	+70
2003 to 2008	93	153	+60
2004 to 2009	97	158	+61
2005 to 2010	105	159	+54

*Kindergarten Enrollment Projections*

NESDEC’s enrollment projections for 2011/2012, utilizing the 1.65 growth ratio forecasts Kindergarten enrollment at 140 students, which is +55 over the size of the birth cohort five years previously (85 births). *This difference in the birth to Kindergarten enrollment needs to be monitored closely through out the year, especially in light of the lower than average birth rates over the past several years.*

As in the last several years, we plan to continue our effort to gather the most accurate Kindergarten enrollment data through the following activities:

- Scheduling a late fall pre-registration for Kindergarten to help with staff planning and the number of sections needed for the fall of 2011.
- Continuing the process of contacting all area pre-school programs to obtain an accurate update on the number and ages of children enrolled in these programs.
- Sending parents of Kindergarten age children pre-registration letters, providing information on the school district website and posting information in the Weston Forum about the registration process and deadlines.
- Continuing to work closely with NESDEC to identify forecasting strategies and with appropriate town agencies to better identify 3-5 year-old children who may have moved into the community.

*Hurlbutt Elementary School (con't)*

The enrollment variances by grade level at Hurlbutt Elementary School may impact on the number of sections in Kindergarten as noted in a grade by grade size comparison, which illustrates this variance.

	Grade K	Grade 1	Grade 2	
2010-2011 (actual)	159	166	178	
2011-2012 (projected)	<u>140</u>	<u>167</u>	<u>168</u>	
Variance	-19	+1	-10	(-28 net)

*Weston Intermediate School—Grades 3—5*

Enrollment at the intermediate school level is projected to decline by 18 students in 2011-2012 (576 projected vs. 594 actual). While the enrollment in Grades 3 and 5 are projected to increase, Grade 4 will decline dramatically due to the smaller Grade 3 class moving up. This is illustrated in the following grade size distribution chart:

	Grade 3	Grade 4	Grade 5	
2010-2011 (actual)	170	217	207	
2011-2012 (projected)	<u>184</u>	<u>171</u>	<u>221</u>	
Variance	+14	-46	+14	(-18 net)

*Weston Middle School—Grades 6-8*

Enrollment at the middle school is projected to increase by 36 students (645 projected vs. 609 current). The increase is primarily attributable to a smaller grade 8 moving to Weston High School next year which is being replaced by a much larger incoming class. A grade by grade size comparison illustrates this variance.

	Grade 6	Grade 7	Grade 8	
2010-2011 (actual)	211	215	183	
2011-2012 (projected)	<u>213</u>	<u>211</u>	<u>221</u>	
Variance	+2	-4	+38	(+36 net)

*Weston High School—Grades 9-12*

Enrollment at the high school is projected to decrease by 25 students (752 projected vs. 777 current), with Grade 9, 10, and 12 projected to enroll fewer students than the current enrollment. Grade 11 is projected to increase by 13 students. For the period 2000-01 through 2010-2011 high school enrollment grew from 508 students to 777, an increase of 269 students, and a 53% growth rate for that period. A grade by grade class size comparison follows:

	Grade 9	Grade 10	Grade 11	Grade 12	
2010-2011	193	205	187	192	
2011-2012	<u>182</u>	<u>189</u>	<u>200</u>	<u>181</u>	
Variance	-11	-16	+13	-11	(-25 net)

### **General Comments (Five Year “Look-Ahead” Perspective)**

Each year, NESDEC provides the District with a five (5) year enrollment projection. *However, it is important to keep in mind that projections beyond the first few years are often less reliable given the reliance on birth rate projections and other factors.* For instance, in November, 2005, NESDEC predicted total Pre-K-12 enrollment of 2356 for 2010/2011. The actual enrollment this year as of October 1 was 2549 – a variance of +193 students (8.2%). At the K-2 level, NESDEC’s 2005 projection for this year was 449 students. The actual enrollment as of October 1, 2010 was 505 – a difference of 56 students (12.47%).

#### **Pre-K-12 Enrollment**

Since the 2000/2001 school year, total enrollment in the Weston Public Schools has increased by 184 students, a 7.8% growth rate for that period. The forecast for the next five years, using 2011/2012 as the base year, forecasts a decline of 115 students, a 4.6% decrease in enrollment to 2396 students in 2015/2016. During the last several years, NESDEC’s forecast for future years has been revised as the overall enrollment decline has moderated.

#### **Hurlbutt Elementary School Enrollment (Grades PK-2)**

Enrollment at Grades K-2 is forecasted to decline over the next five years with a total enrollment decrease of 39 students during that period. A more significant drop of 77 students is projected to occur through 2014/2015, but an increase of 38 students is projected in 2015/2016.

#### **Weston Intermediate School Enrollment (Grades 3-5)**

Enrollment at the intermediate school for the next five years is forecasted to experience a decline of 121 students to 473 students in 2015-2016, which represents a decline of 20.37%. However, between 2015/2016 and 2018/2019, NESDEC projects enrollment at Weston Intermediate School to climb to 500 and then to 537 by 2020/2021. *It should be noted, however, that beyond 2016/2017 for Grade 3, 2017/2018 for Grade 4, and 2018/2019 for Grade 5, projections are based on an estimate of annual births.*



### Weston Middle School (Grades 6-8)

Over the next five years, enrollment at the middle school is forecasted to decrease by 80 students (12.4%) during this period, with enrollment ranging from 645 students (2011-2012) to 565 students (2015-2016). It should be noted that this projected decrease reflects the much larger Grade 8 class in 2011/2012 as opposed to the current year. Had the comparison been made to the current year enrollment, the reduction at the middle school would have been 44 students rather than 80. Further, the middle school is projected to have 657 students in 2012-2013 which would represent an increase of 48 students over the current year and an increase of 12 students over 2011/2012.

### Weston High School Enrollment (Grades 9-12)

*During the next five years enrollment at the high school is projected to increase by 100 students (12.87%) to 877 in 2015-2016.* This reverses the projected enrollment decline in previous years and is attributed to some of the larger than previously projected classes moving up into the high school. As a reference point, in 2008 NESDEC projected a five-year decline of 86 students.

### Summary Comments

Although NESDEC projections have proved consistent, reliable, and useful, we should not unduly rely on any single year's projections. Small shifts may occur each year depending upon economic conditions, in and out migrations, transfers from private/parochial schools, housing construction and other factors that cannot be anticipated with absolute precision.

As mentioned above, it is important to note that projections beyond the first few years are often less reliable given the reliance on birth rate projections and other factors. While small deviations do occur, larger deviations become more likely as NESDEC projects further out.

The charts that follow add to the school district's enrollment history and projections.

**ENROLLMENT HISTORY  
PROJECTIONS vs ACTUALS**

Grade	2006-07			2007-08			2008-09			2009-10			2010-11		
	Proj	Actual	Diff.	Proj	Actual	Diff.	Proj	Actual	Diff.	Proj	Actual	Diff.	Proj	Actual	Diff.
K	193	210	17	117	147	30	153	168	15	170	158	-12	179	159	-20
1	193	194	1	224	220	-4	156	160	4	179	171	-8	165	166	1
2	199	200	1	202	191	-11	227	218	-9	160	160	0	170	178	8
<b>Primary</b>	<b>585</b>	<b>604</b>	<b>19</b>	<b>543</b>	<b>558</b>	<b>15</b>	<b>536</b>	<b>546</b>	<b>10</b>	<b>509</b>	<b>489</b>	<b>-20</b>	<b>514</b>	<b>503</b>	<b>-11</b>
3	213	210	-3	198	196	-2	188	203	15	220	215	-5	162	170	8
4	178	174	-4	213	213	0	199	195	-4	204	204	0	217	217	0
5	193	186	-7	176	170	-6	210	212	2	191	209	18	207	207	0
<b>Intermediate</b>	<b>584</b>	<b>570</b>	<b>-14</b>	<b>587</b>	<b>579</b>	<b>-8</b>	<b>597</b>	<b>610</b>	<b>13</b>	<b>615</b>	<b>628</b>	<b>13</b>	<b>586</b>	<b>594</b>	<b>8</b>
6	207	208	1	187	187	0	171	182	11	218	217	-1	215	211	-4
7	195	191	-4	201	203	2	181	188	7	178	181	3	213	215	2
8	201	201	0	191	192	1	204	205	1	189	202	13	185	183	-2
<b>Middle</b>	<b>603</b>	<b>600</b>	<b>-3</b>	<b>579</b>	<b>582</b>	<b>3</b>	<b>556</b>	<b>575</b>	<b>19</b>	<b>585</b>	<b>600</b>	<b>15</b>	<b>613</b>	<b>609</b>	<b>-4</b>
9	226	225	-1	195	200	5	190	195	5	204	208	4	202	193	-9
10	203	208	5	221	219	-2	195	200	5	192	192	0	203	205	2
11	202	199	-3	205	199	-6	212	214	2	194	195	1	183	187	4
12	163	169	6	197	189	-8	193	200	7	212	207	-5	185	192	7
<b>Senior</b>	<b>794</b>	<b>801</b>	<b>7</b>	<b>818</b>	<b>807</b>	<b>-11</b>	<b>790</b>	<b>809</b>	<b>19</b>	<b>802</b>	<b>802</b>	<b>0</b>	<b>773</b>	<b>777</b>	<b>4</b>
Pre-K	38	40	2	34	39	5	47	50	3	53	39	-14	39	45	6
Outplaced	22	27	5	25	28	3	24	22	-2	21	20	-1	20	21	1
<b>Total</b>	<b>2,626</b>	<b>2,642</b>	<b>16</b>	<b>2,587</b>	<b>2,593</b>	<b>7</b>	<b>2,550</b>	<b>2,612</b>	<b>62</b>	<b>2,585</b>	<b>2,578</b>	<b>-7</b>	<b>2,545</b>	<b>2,549</b>	<b>4</b>

**Change                      67                      -49                      19                      -34                      -29**

**WESTON PUBLIC SCHOOLS  
WESTON, CONNECTICUT**

**ENROLLMENT PROJECTIONS  
2011-12 TO 2015-16**

	2011-12	2012-13	2013-2014	2014-2015	2015-2016
<b>Grade</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
K	140	119	114	149	152
1	167	147	125	120	156
2	168	169	149	127	126
<b>Primary</b>	<b>475</b>	<b>435</b>	<b>388</b>	<b>396</b>	<b>434</b>
3	184	172	173	152	134
4	171	186	174	175	156
5	221	175	191	179	180
<b>Intermediate</b>	<b>576</b>	<b>533</b>	<b>538</b>	<b>506</b>	<b>470</b>
6	213	227	180	196	184
7	211	213	227	180	196
8	221	216	218	232	184
<b>Middle</b>	<b>645</b>	<b>656</b>	<b>625</b>	<b>608</b>	<b>564</b>
9	182	219	214	216	230
10	189	180	217	212	214
11	200	186	177	213	210
12	181	193	179	170	206
<b>Senior</b>	<b>752</b>	<b>778</b>	<b>787</b>	<b>811</b>	<b>860</b>
Pre-School	45	46	46	47	47
Out-Placed	18	18	18	18	18
<b>Total</b>	<b>2,511</b>	<b>2,466</b>	<b>2,402</b>	<b>2,386</b>	<b>2,393</b>
<b>Projected Change</b>	<b>-38</b>	<b>-45</b>	<b>-64</b>	<b>-16</b>	<b>7</b>

*Note: The NESDEC enrollment projections report that was presented to the Board of Education in November includes students placed in out-of-district facilities by grade. This report reduces the enrollment projections by grade level for these students, and reports them on a separate line entitled "Out-placed."*

The NESDEC's forecasted numbers have been adjusted for 3 students that will exit the program on June 30, 2011.