

NEW PALTZ
CENTRAL SCHOOL DISTRICT

ENROLLMENT PROJECTION
2010-2019

DECEMBER 2009

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INTRODUCTION

The following enrollment projection has been prepared by FACTS at the request of the New Paltz Central School District.

Data and information from the following sources were utilized in compiling this report:

- School District
- United States Census Bureau
- New York State Department of Health
- Local Building Inspector(s)

FACTS has utilized diligent research and generally accepted formulas and procedures in preparing these projections. It must be recognized, however, that given the many variables comprising such projections, that caution must be exercised in the interpretation and application of these projections. A thorough review for accuracy of the data contained in this report should be conducted by the school district and prompt notification of any discrepancies provided to FACTS for correction.

PROJECTION METHODOLOGY

The Cohort Survival Method has been used in preparing these projections. This formula has proven to be highly reliable and is used extensively for enrollment projections for school districts in New York State.

The calculation of enrollment projections is based on the following data and procedures:

- Six years of actual district enrollment by grade
- Calculation of the survival ratios by grade level
- Projection of Kindergarten enrollment based on resident live births

The survival ratio expresses a quantitative relationship between the numerical size of a grade in a given year in comparison to the size of the next lower grade in the previous year. The number of students in a grade in a given year is divided by the number of students in the next lower grade in the previous year (i.e.; Grade 5 in 2005 divided by Grade 4 in 2004). If the quotient is greater than 1.0, the number of students has increased; conversely, if the quotient is less than 1.0, the number of students has decreased. Five years of actual survival ratios are calculated for each grade 1-12 and the five-year average is determined. This average is then applied by grade to determine the ten-year projected enrollment for each grade 1-12.

The calculation of projected kindergarten enrollment is based on the analysis of resident live birth data. A ten-year history of live birth data is collected. Each of the first five years of live birth data is compared to the actual kindergarten enrollment five years hence and the survival ratio is calculated (i.e.; 2000 live births to 2005 kindergarten enrollment, etc.). The five annual survival ratios are averaged and that average is applied to the next five years of live birth data to obtain the first five years of annual projected kindergarten enrollment (i.e.; 2005-2009 live births to project 2010-2014 kindergarten enrollments). For purposes of providing a ten-year enrollment projection, the kindergarten enrollment is projected for the last five years of the projection at the same number appearing in the fifth year.

In addition, the following factors which could potentially impact these projections are also researched and analyzed:

- Significant changes in residential construction
- Major changes in the local employment base
- Shifts in the non-public school population

The reliability of any enrollment projection must clearly be understood. Projections based on current and historical actual enrollments are the most reliable. Those based on historical live birth data are somewhat less reliable. In addition, the time frame and subset of the projections also play an important part in the reliability. Projections for the immediate future will be more reliable than those in later years, for example. Projections for the total K-12 district enrollment will also be more reliable than those for any particular grade in any given year. Therefore, these projections should be updated annually to reflect the latest live birth and actual enrollment data.

For the purposes of this study, data for the Towns of Gardiner and New Paltz, and the Village of New Paltz have been researched.

As a result of the lack of district census data, the enrollment projection based on census cannot be provided.

Annual Updates: Annual updates of original projections prepared by FACTS are limited to the collection and research of the following information:

- District census
- Live births
- District enrollment
- District non-public school enrollment

The collection of information regarding future residential construction programs are not included in the Annual Update pricing fee.

DEMOGRAPHIC DATA

POPULATION TRENDS:

Table I reflects the population data from the 1990, 2000 and 2005 estimated census as provided by the U.S. Census Bureau. The two towns and the village all experienced double digit growth between 1990 and 2000 with growth continuing at approximately the same rate between 2000 and 2005 estimated. Ulster County experienced moderate growth during the entire period. Since these trends are already reflected in the historical enrollments, no adjustments to the projection formula are necessary.

TABLE I POPULATION TRENDS						
Town/Village	1990	2000	1990-00 % Change	2005	2000-05 % Change	1990-05 % Change
Gardiner	4,278	5,238	22.44	5,673	8.30	32.61
New Paltz	5,918	6,796	14.84	7,243	6.58	22.39
New Paltz (V)	5,470	6,034	10.31	6,765	12.11	23.66
Ulster County	165,304	177,749	7.53	182,693	2.78	10.52

Source: U.S. Census Bureau

RESIDENT LIVE BIRTHS:

Table III shows the actual number of live births for a nine-year period for the Zip Codes included in this study. For purposes of this study, 2009 has been estimated at the average for 2007-08 of 147. This information has been used in calculating the ten-year projected kindergarten enrollment as shown in Table VIII.

TABLE III RESIDENT LIVE BIRTHS										
Zip Code	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
12525	35	35	49	42	42	32	47	24	37	--
12561	146	111	131	118	129	119	110	124	108	--
TOTAL	181	146	180	160	171	151	157	148	145	147
* Estimated Source: New York State Department of Health										

RESIDENTIAL HOUSING UNITS:

The number of new single family housing permits issued between 2004 and 2008 for the towns and village are shown in Table III in this 2009 update.

The Town of Gardiner expects new permits to remain at recent levels. Through November of 2009 eleven permits have been issued.

The Town of New Paltz also expects new residential permits to continue at the current levels.

The Village of New Paltz also expects new permits to be minimal. There are two projects involved, Victorian Square with seventy-six apartment units and Woodland Ponds, a twelve lot subdivision with three homes built. Based on generally accepted formulas these two projects would produce an additional thirty-nine students over a two year build out. These possible additional students have not been included in the ten-year projection table.

TABLE III RESIDENTIAL HOUSING UNITS						
Town/Village	2004	2005	2006	2007	2008	5 Year Average
Gardiner	44	40	28	17	16	29
New Paltz	40	31	21	15	6	23
New Paltz (V)	5	7	1	1	31	9
Total	89	78	50	33	53	61

NON-PUBLIC SCHOOL ENROLLMENT:

Information regarding the district's historical non-public school enrollment is reflected in Table V. Attendance of district students in non-public schools has averaged 201 students for the past four years. Any significant change in these enrollments will require recalculation of the projections contained in this study.

2005	2006	2007	2008	2009	4 Yr Average
219	N/R	200	200	185	201

ENROLLMENT PROJECTIONS

HISTORICAL ENROLLMENT:

Table V depicts the district's actual enrollment by grade level for a six-year period. The grade by grade survival ratios shown in Table VII were calculated from this information.

Grade	2004	2005	2006	2007	2008	2009
Pre-Kindergarten	0	0	0	16	16	16
Kindergarten	154	167	134	154	174	140
First	143	150	170	146	172	183
Second	159	151	154	162	150	174
Total K-2	456	468	458	462	512	513
% Change	-0.87	2.63	-2.14	0.87	7.11	0.20
Third	153	158	155	161	170	147
Fourth	148	159	156	162	169	164
Fifth	180	155	167	161	164	176
Total 3-5	481	472	478	484	503	487
% Change	-7.85	-1.87	1.27	1.26	3.93	-3.18
Sixth	201	175	153	168	167	170
Seventh	218	201	176	155	172	173
Eighth	199	210	202	179	161	167
Total 6-8	618	586	531	502	500	510
% Change	-2.52	-5.18	-9.39	-5.46	-0.40	2.00
Ninth	218	202	214	204	190	175
Tenth	196	204	197	203	205	195
Eleventh	182	197	193	202	194	210
Twelfth	188	161	199	192	205	201
Total 9-12	784	764	803	801	794	781
% Change	3.16	-2.55	5.10	-0.25	-0.87	-1.64
Total Pre-K- 12	2,339	2,290	2,270	2,249	2,309	2,291
% Change	-1.56	-2.09	-0.87	-0.93	1.94	-0.78
Ungraded Sec	0	0	0	2	0	0
Grand Total	2,339	2,290	2,270	2,267	2,309	2,291
% Change	-1.56	-2.09	-0.87	-0.13	1.85	-0.78

SURVIVAL RATIOS:

The district's historical loss or gain of students from one grade level to the next grade level is reflected in Table VI. These ratios reflect the number of students in a particular grade in one year as compared to the number of students in the next higher grade in the following year. A ratio higher than 1.0 indicates a gain in students and conversely a ratio of less than 1.0 reflects a loss of students. These ratios, by grade level, were calculated individually for a five-year period and the five-year average for each grade level determined. The five-year average was then used to project future enrollments for each grade level.

TABLE VI SURVIVAL RATIOS						
Grade	2005	2006	2007	2008	2009	5 Year Average
K-1	0.9740	1.0180	1.0896	1.1169	1.0517	1.0500
1-2	1.0559	1.0267	0.9529	1.0274	1.0116	1.0149
2-3	0.9937	1.0265	1.0455	1.0494	0.9800	1.0190
3-4	1.0392	0.9873	1.0452	1.0497	0.9647	1.0172
4-5	1.0473	1.0503	1.0321	1.0123	1.0414	1.0367
5-6	0.9722	0.9871	1.0060	1.0373	1.0366	1.0078
6-7	1.0000	1.0057	1.0131	1.0238	1.0359	1.0157
7-8	0.9633	1.0050	1.0170	1.0387	0.9709	0.9990
8-9	1.0151	1.0190	1.0099	1.0615	1.0870	1.0385
9-10	0.9358	0.9752	0.9486	1.0049	1.0263	0.9782
10-11	1.0051	0.9461	1.0254	0.9557	1.0244	0.9913
11-12	0.8846	1.0102	0.9948	1.0149	1.0361	0.9881

PROJECTED KINDERGARTEN ENROLLMENT:

The annual ratios were calculated for a five-year period reflecting the ratio between the actual kindergarten enrollment in each year and the number of live births in each of the preceding five years (i.e.; 2005 actual kindergarten enrollment to 2000 live births, etc.). The five-year average was calculated and applied to the most recent five years of live births to project the subsequent five years of kindergarten enrollment for each projection. Years six through ten of kindergarten enrollment were projected at the same number as the fifth projected year.

In 2007 we projected 2008 kindergarten enrollment at 147. The 2008 actual enrollment was 174, a difference of 27 students. The actual enrollment of 174 is the highest in the five years shown in the table below and the Birth/K ratio of 1.0875 is significantly higher than the other four ratios and is 23.19% higher than the previous year ratio. The 2008 kindergarten enrollment of 174 appears to be a one year aberration.

The 2009 kindergarten enrollment is 140, validating our assumption the 2008 enrollment of 174 was a one year aberration.

TABLE VII PROJECTED KINDERGARTEN ENROLLMENT - LIVE BIRTHS						
Year	Live Births	Year	K-Enroll	Birth/K Ratio	Year	Projected K-Enroll
2000	181	2005	167	0.9227		
2001	146	2006	134	0.9178		
2002	180	2007	154	0.8556		
2003	160	2008	174	1.0875		
2004	171	2009	140	0.8187		
FIVE-YEAR AVERAGE SURVIVAL RATIO				0.9204		
2005	151				2010	139
2006	157				2011	145
2007	148				2012	136
2008	145				2013	133
2009	147*				2014	135
					2015	135
					2016	135
					2017	135
					2018	135
					2019	135

* Estimated

TEN-YEAR ENROLLMENT PROJECTION:

Table IX reflects the ten-year enrollment projection based on resident live birth data.

The following Table VIII provides a summary by grade groupings of the projection comparing the projected fifth and tenth years to the base year of 2009.

There is no methodology for projecting Pre-K. For purposes in this study, Pre-K has been projected at the 2007-2008 actual of 16. The Pre-K is included in the Pre-K - 2 , Pre-K -12 and Grand Totals.

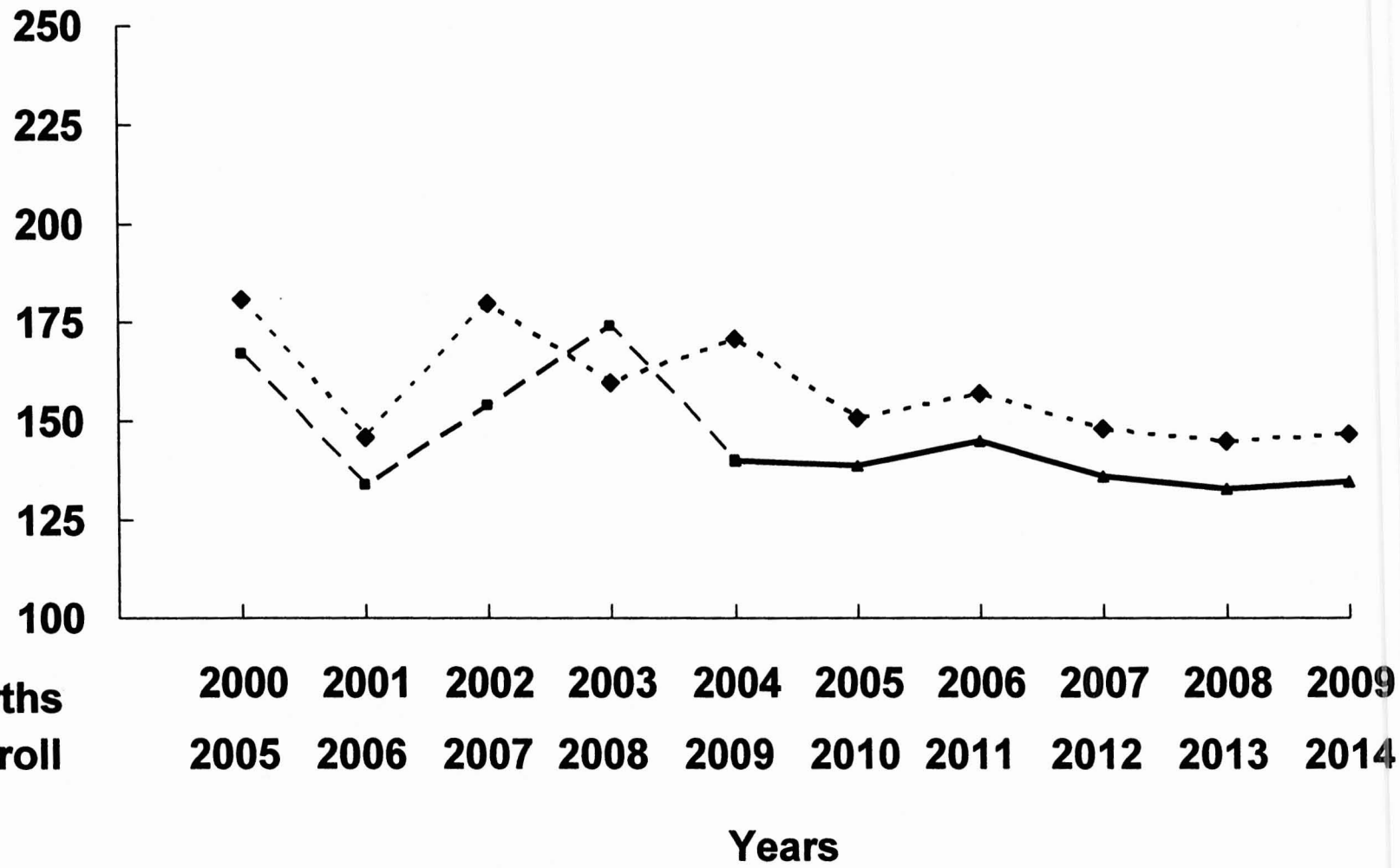
TABLE VII ENROLLMENT PROJECTION SUMMARY					
Grade Ranges	2009	2014	% Change	2019	% Change
Pre-K - 2	513	436	-15.01	437	-14.82
3-5	487	472	-3.08	453	-6.99
6-8	510	552	8.24	483	-5.30
9-12	781	710	-9.09	733	-6.07
Pre-K - 12	2,291	2,170	-5.29	2,106	-8.08

**TABLE IX
TEN-YEAR ENROLLMENT PROJECTION LIVE BIRTHS**

Grade	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Pre-Kindergarten	16	16	16	16	16	16	16	16	16	16
Kindergarten	139	145	136	133	135	135	135	135	135	135
First	147	146	152	143	140	142	142	142	142	142
Second	186	149	148	154	145	142	144	144	144	144
Total Pre-K - 2	488	456	452	446	436	435	437	437	437	437
% Change	-4.87	-6.56	-0.88	-1.33	-2.24	-0.23	0.46	0.00	0.00	0.00
Third	177	190	152	151	157	148	145	147	147	147
Fourth	150	180	193	155	154	160	151	147	150	150
Fifth	170	156	187	200	161	160	166	157	152	156
Total 3-5	497	526	532	506	472	468	462	451	449	453
% Change	2.05	5.84	1.14	-4.89	-6.72	-0.85	-1.28	-2.38	-0.44	0.89
Sixth	177	171	157	188	202	162	161	167	158	153
Seventh	173	180	174	159	191	205	165	164	170	160
Eighth	173	173	180	174	159	191	205	165	164	170
Total 6-8	523	524	511	521	552	558	531	496	492	483
% Change	2.55	0.19	-2.48	1.96	5.95	1.09	-4.84	-6.59	-0.81	-1.83
Ninth	173	180	180	187	181	165	198	213	171	170
Tenth	171	169	176	176	183	177	161	194	208	167
Eleventh	193	170	168	174	174	181	175	160	192	206
Twelfth	208	191	168	166	172	172	179	173	158	190
Total 9-12	745	710	692	703	710	695	713	740	729	733
% Change	-4.61	-4.70	-2.54	1.59	1.00	-2.11	2.59	3.79	-1.49	0.55
Total Pre-K - 12	2,253	2,216	2,187	2,176	2,170	2,156	2,143	2,124	2,107	2,106
% Change	-1.66	-1.64	-1.31	-0.50	-0.28	-0.65	-0.60	-0.89	-0.80	-0.05

Live Births vs Kindergarten Enrollment Comparison Baseline Projection

-◆- Births -■- K Enroll Actual -▲- K Enroll Projected



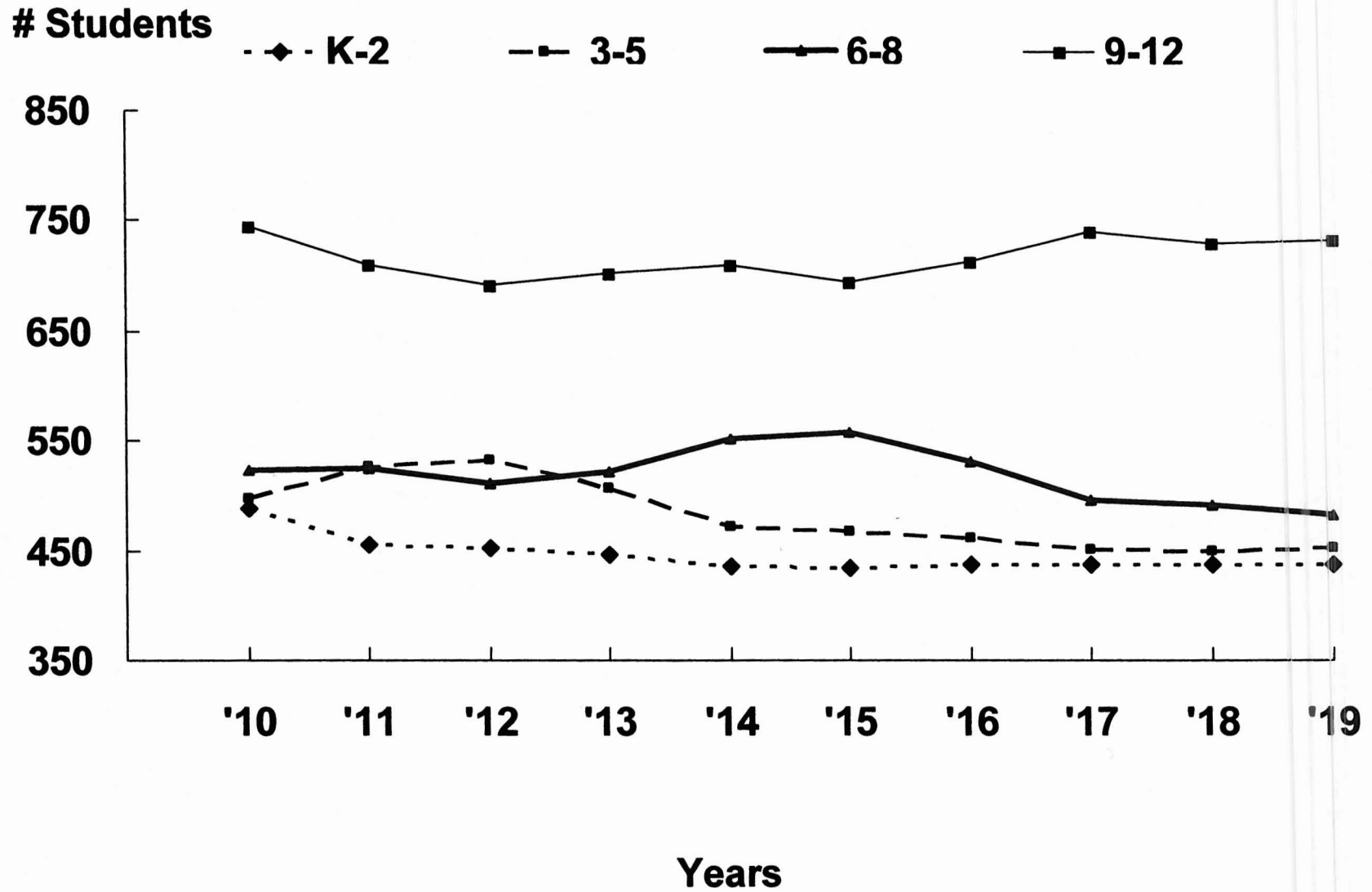
Births
Enroll

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Years

Enrollment Projection Breakdown

Baseline Projection



K-12 Enrollment Projection Based on Live Births

Students

