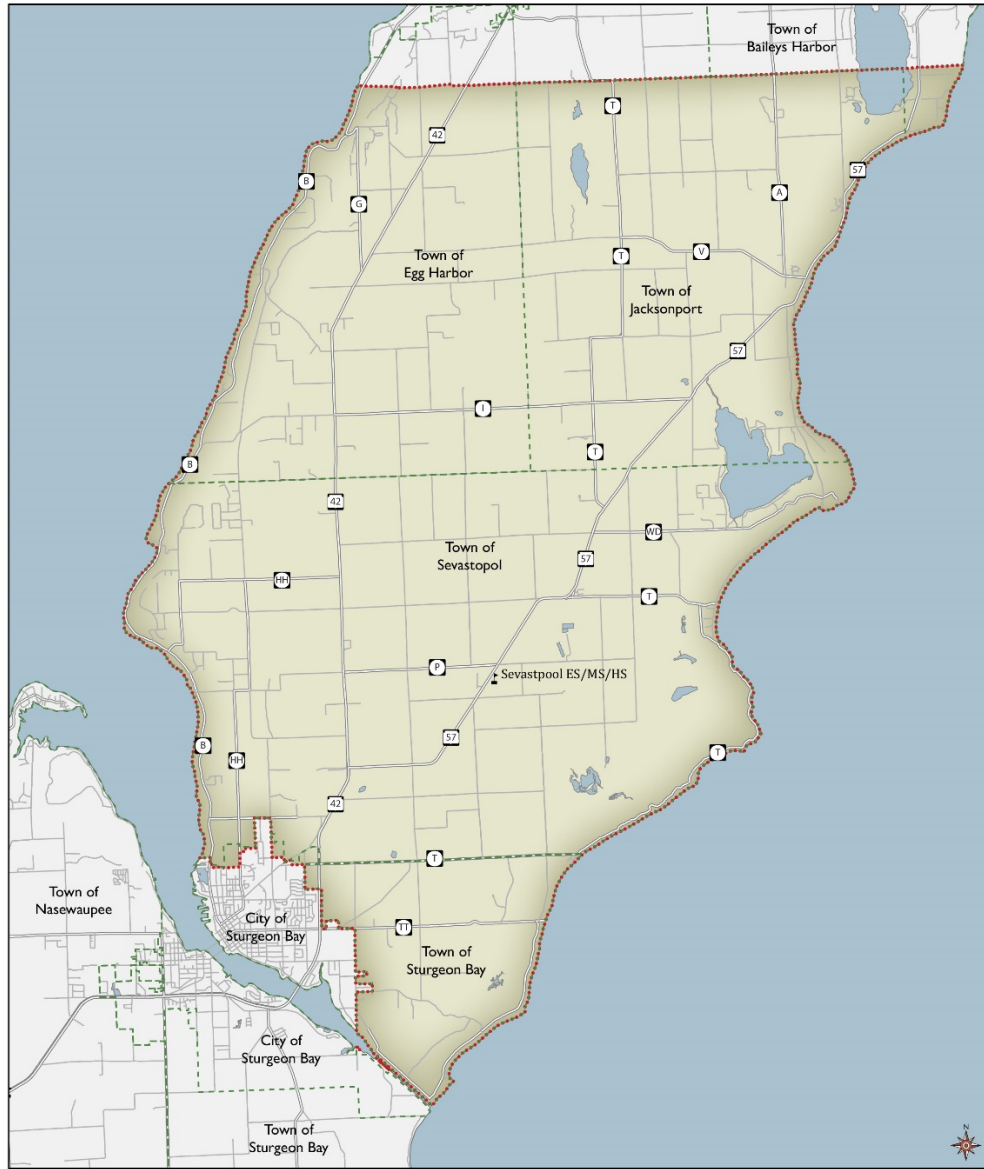


# Planning for the Schools of Tomorrow



Sevastopol School District

- ▬ Schools
- ▬ Municipalities
- ▬ School District
- ▬ Water

Prepared by the Applied Population Laboratory  
University of Wisconsin-Madison  
Department of Community & Environmental Sociology

## School Enrollment Projections Series Sevastopol School District

February 2018

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## Introduction

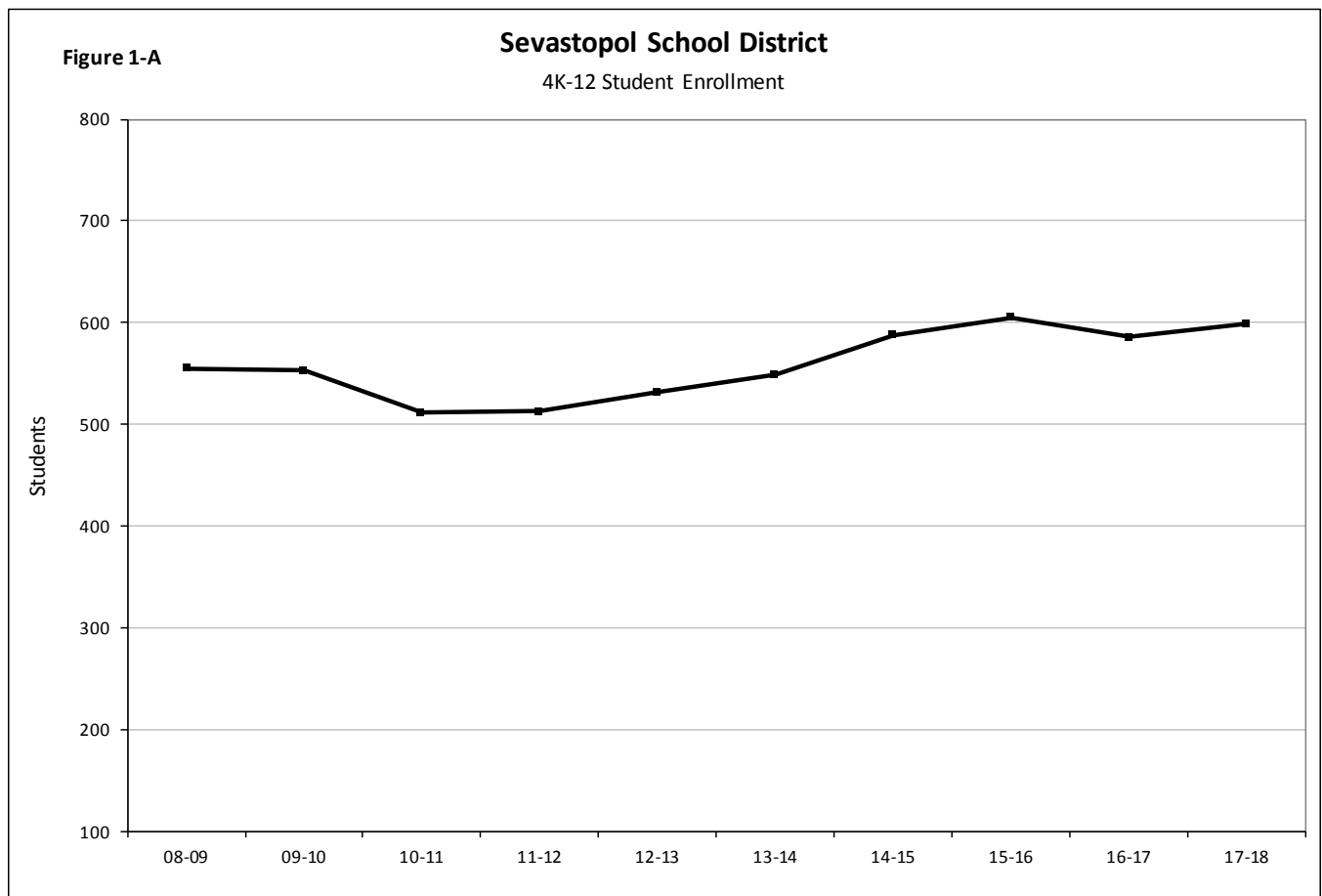
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This report offers a summary of the Enrollment Projection Analysis completed for the Sevastopol School District by the Applied Population Laboratory, University of Wisconsin-Madison. Projections (2018/19-2027/28) are provided for the district as a whole, and individually for each grade and grade grouping. The projection process uses a combination of historical enrollment data, municipal births, housing starts data, and population trends to create reasonable assumptions about future growth scenarios and the likely impact on the school district.

## District Enrollment History

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Figure 1-A and Tables 1 and 2 show the last ten years of enrollment (head count) history in the Sevastopol School District. District 4K-12 enrollment has increased overall, from 555 students in the 2008/09 school year to 599 students in 2017/18. This is an increase of 44 students, a 7.9% increase in the number of students enrolled in the district over this ten year period.



**TABLE 1**  
**Student Enrollment**  
**Sevastopol School District**

	SCHOOL YEAR									
	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
4K	20	24	21	30	41	47	43	34	45	32
K	39	31	25	27	33	42	57	40	56	37
1	35	36	33	28	27	39	43	59	42	33
2	34	37	37	36	31	27	41	41	41	43
3	35	39	42	41	40	31	35	41	36	57
4	38	40	41	47	44	42	33	37	31	41
5	33	39	40	43	47	42	42	33	42	37
6	34	34	39	36	45	44	43	49	42	41
7	30	34	34	43	35	50	45	44	47	36
8	40	28	27	31	47	35	49	47	49	50
9	48	45	31	27	38	49	37	54	36	46
10	53	44	44	34	30	40	48	36	49	52
11	63	55	43	45	31	29	42	48	41	58
12	53	67	55	45	43	32	30	42	29	36
<b>TOTAL</b>	<b>555</b>	<b>553</b>	<b>512</b>	<b>513</b>	<b>532</b>	<b>549</b>	<b>588</b>	<b>605</b>	<b>586</b>	<b>599</b>
K-12	535	529	491	483	491	502	545	571	541	567
K-5	214	222	218	222	222	223	251	251	248	248
6-8	104	96	100	110	127	129	137	140	138	127
9-12	217	211	173	151	142	150	157	180	155	192

**TABLE 2**  
**Student Enrollment Changes**  
**Sevastopol School District**

GRADE	ABSOLUTE CHANGE			PERCENT CHANGE			AVERAGE ANNUAL PERCENT CHANGE		
	'08 to '17	'08 to '12	'13 to '17	'08 to '17	'08 to '12	'13 to '17	'08 to '17	'08 to '12	'13 to '17
4K	12	21	-15	60.0	105.0	-31.9	6.7	26.3	-8.0
K	-2	-6	-5	-5.1	-15.4	-11.9	-0.6	-3.8	-3.0
1	-2	-8	-6	-5.7	-22.9	-15.4	-0.6	-5.7	-3.8
2	9	-3	16	26.5	-8.8	59.3	2.9	-2.2	14.8
3	22	5	26	62.9	14.3	83.9	7.0	3.6	21.0
4	3	6	-1	7.9	15.8	-2.4	0.9	3.9	-0.6
5	4	14	-5	12.1	42.4	-11.9	1.3	10.6	-3.0
6	7	11	-3	20.6	32.4	-6.8	2.3	8.1	-1.7
7	6	5	-14	20.0	16.7	-28.0	2.2	4.2	-7.0
8	10	7	15	25.0	17.5	42.9	2.8	4.4	10.7
9	-2	-10	-3	-4.2	-20.8	-6.1	-0.5	-5.2	-1.5
10	-1	-23	12	-1.9	-43.4	30.0	-0.2	-10.8	7.5
11	-5	-32	29	-7.9	-50.8	100.0	-0.9	-12.7	25.0
12	-17	-10	4	-32.1	-18.9	12.5	-3.6	-4.7	3.1
<b>TOTAL</b>	<b>44</b>	<b>-23</b>	<b>50</b>	<b>7.9</b>	<b>-4.1</b>	<b>9.1</b>	<b>0.9</b>	<b>-1.0</b>	<b>2.3</b>
K-12	32	-44	65	6.0	-8.2	12.9	0.7	-2.1	3.2
K-5	34	8	25	15.9	3.7	11.2	1.8	0.9	2.8
6-8	23	23	-2	22.1	22.1	-1.6	2.5	5.5	-0.4
9-12	-25	-75	42	-11.5	-34.6	28.0	-1.3	-8.6	7.0



Figure 1-B shows enrollment history broken down by grade groupings (4K, K-5, 6-8, and 9-12). The K-5 enrollment has increased by 1.8% annually over the last ten years. Grades 6-8 enrollment has increased by 2.5% annually. Grades 9-12 enrollment on the other hand has decreased in the past ten years at a rate of 1.3% annually.

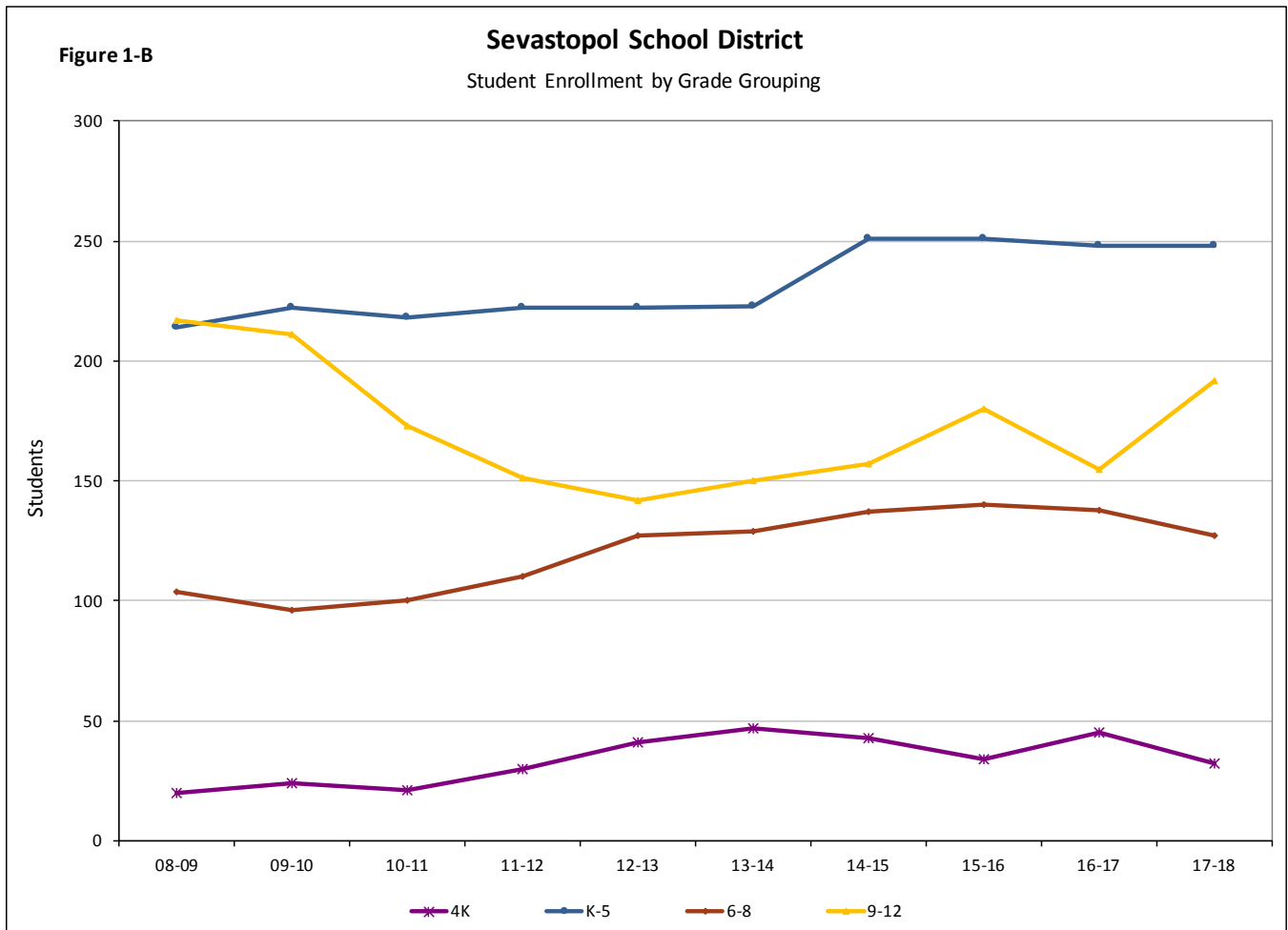
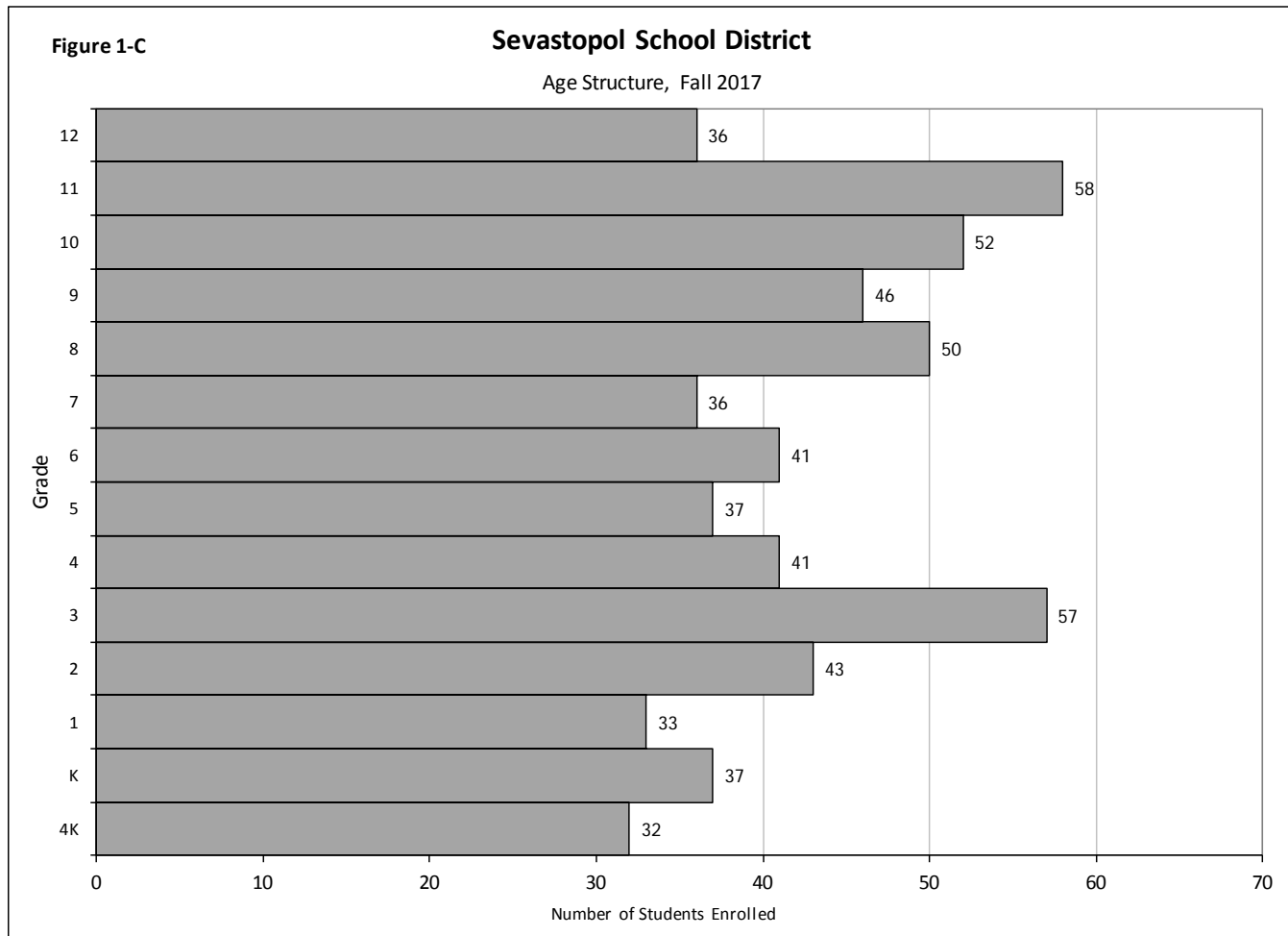


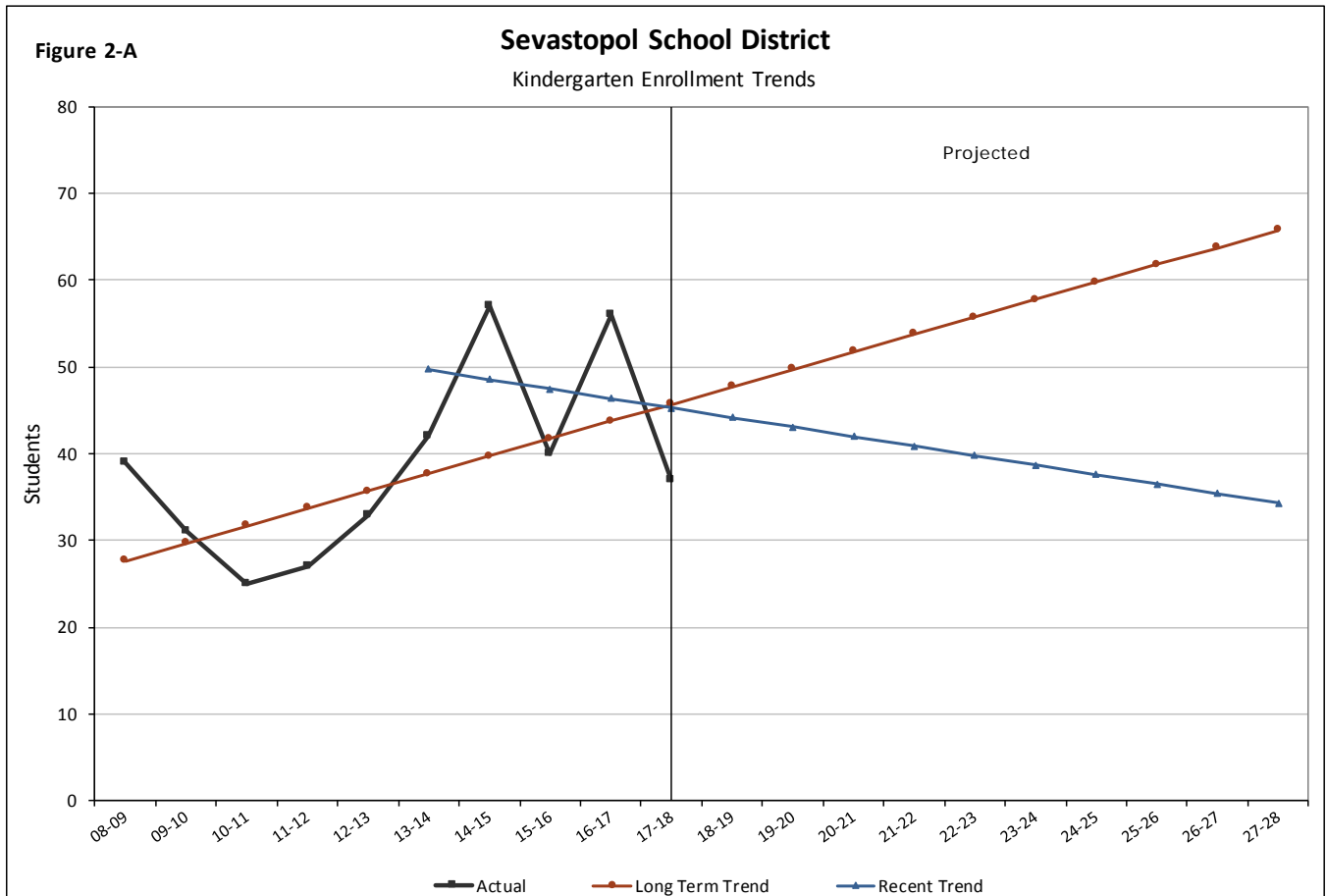
Figure 1-C shows the age structure in the fall of 2017 of the student population with the number of four year old kindergarteners at the bottom and the number of 12<sup>th</sup> graders at the top. 3<sup>rd</sup> graders are the largest of the elementary grades, 8<sup>th</sup> graders have the largest class in the middle school, and 11<sup>th</sup> graders are the largest of the high school grades.



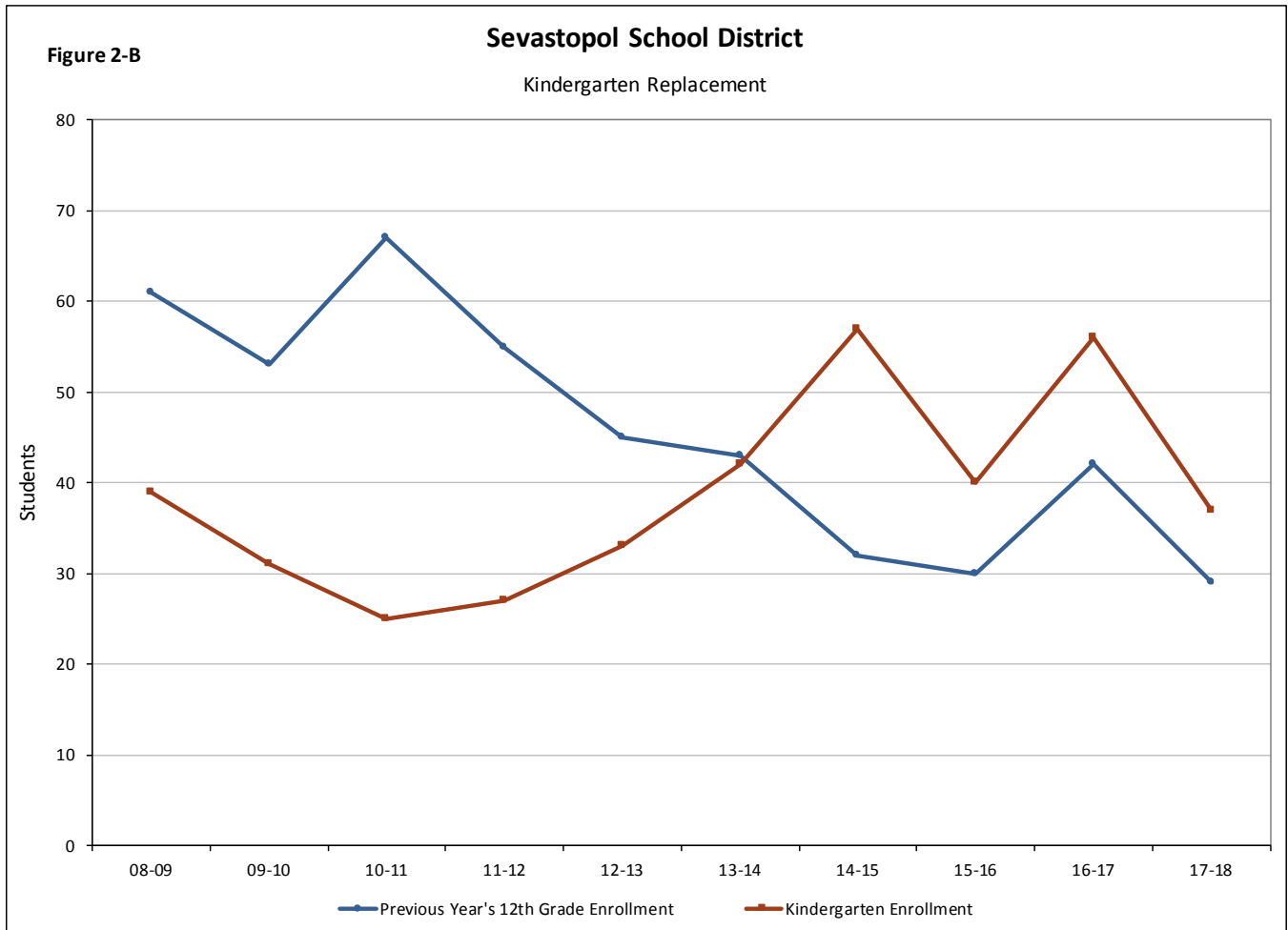


## Kindergarten Enrollment Trends

Examining trends in kindergarten enrollment is particularly informative for gaining perspective on future district enrollment, as today’s kindergartners will gradually make up tomorrow’s students at the higher grade levels as they age and move through the school system. When kindergarten enrollment is increasing, elementary enrollment might be expected to increase in the near future, while middle school enrollment may increase farther in the future. Figure 2-A shows kindergarten enrollment history in black, and trend lines depicting kindergarten enrollment in red and blue. The “Long Term Trend” line (shown in red) averages kindergarten enrollment changes between 2008/09 and 2017/18. The “Recent Trend” line emphasizes kindergarten enrollment changes over the last five years. In the Sevastopol School District, the long term trend projects drastically increasing kindergarten enrollment while the recent trends projects increasing enrollment at a somewhat slower pace. The recent trend will be used in the Kindergarten Trend model to project future kindergartners.



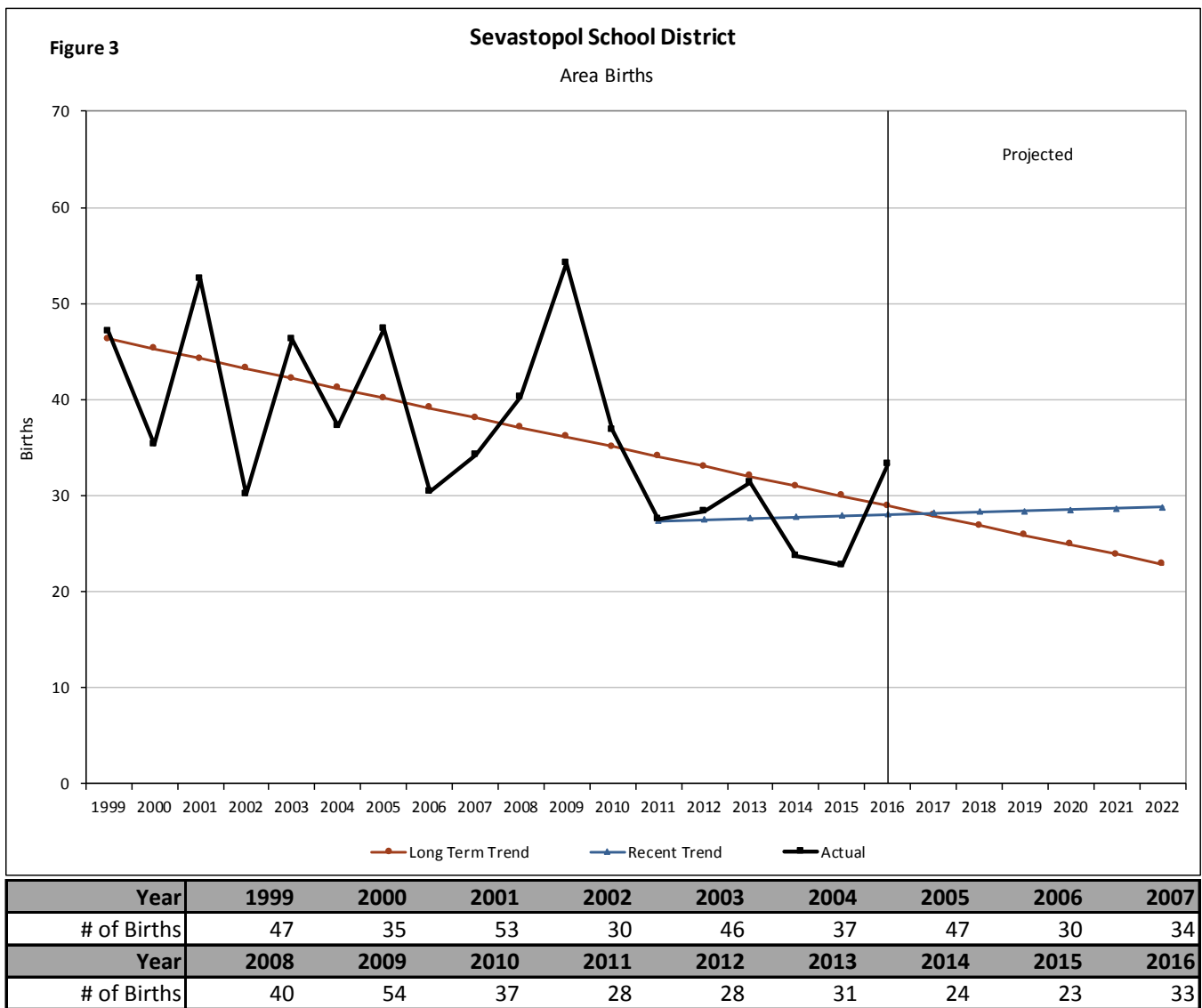
In addition to examining kindergarten enrollment on its own, comparing kindergarten enrollment to outgoing 12<sup>th</sup> graders offers a snapshot of how the age structure of district enrollment is shifting either from older to younger, or younger to older. Districts tend to experience overall growth when kindergarten enrollment outpaces outgoing students, and they tend to experience decline when kindergartners do not fully replace the number of graduates. In the Sevastopol School District, Figure 2-B shows kindergartners have replaced outgoing 12<sup>th</sup> graders the past four years.



## Birth Trends

We use historical and projected birth data to forecast the number of kindergarten students who will enroll in the Sevastopol School District in the future years. Figure 3 shows (in black) the number of births to mothers living in municipalities that fall within school district boundaries, by year, from 1999-2016, as collected from the Wisconsin Department of Health Services. We count resident births from the towns of Egg Harbor, Jacksonport, Sevastopol, Sturgeon Bay, and a small percentage from the City of Sturgeon Bay.

We extrapolate these birth trends into the future to correspond with our Baseline and Recent Trend projection models. The red line represents birth trends over the long term and the blue line examines birth patterns for the last six years. The long term birth trend is decreasing while the recent trend is slightly increasing.



Source: WI Department of Health Services



## Population Estimates

This section examines general population trends for municipalities that fall within the Sevastopol School District. Changes in the total population of the district area, particularly when examined by age, provide clues into how the school age population may be changing.

Table 3 and Figure 4-A provide U.S. Census population counts and Wisconsin Department of Administration (DOA) estimates for district area municipalities from 2010 to 2017. These municipal populations can be compared with the population for Door County and the State of Wisconsin.

**TABLE 3**  
**Total Population by Municipality: 2010-2017**  
**Sevastopol School District**

Municipality	POPULATION							
	Census 2010	est. 2011	est. 2012	est. 2013	est. 2014	est. 2015	est. 2016	est. 2017
T.Egg Harbor	1,342	1,342	1,349	1,356	1,357	1,377	1,359	1,388
T. Jacksonport	705	699	703	709	706	714	711	722
T.Sevastopol	2,628	2,630	2,637	2,655	2,662	2,687	2,685	2,691
T.Sturgeon Bay	818	818	818	819	813	824	822	825
<b>District Area</b>	<b>5,493</b>	<b>5,489</b>	<b>5,507</b>	<b>5,539</b>	<b>5,538</b>	<b>5,602</b>	<b>5,577</b>	<b>5,626</b>
Door County	27,785	27,765	27,867	27,966	27,976	28,175	28,127	28,340
State of Wisconsin	5,686,986	5,694,236	5,703,525	5,717,110	5,732,981	5,753,324	5,775,120	5,788,500

Municipality	PERCENT CHANGE							
	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	2015 to 2016	2016 to 2017	2010 to 2017
T.Egg Harbor	0.0%	0.5%	0.5%	0.1%	1.5%	-1.3%	2.1%	3.4%
T. Jacksonport	-0.9%	0.6%	0.9%	-0.4%	1.1%	-0.4%	1.5%	2.4%
T.Sevastopol	0.1%	0.3%	0.7%	0.3%	0.9%	-0.1%	0.2%	2.4%
T.Sturgeon Bay	0.0%	0.0%	0.1%	-0.7%	1.4%	-0.2%	0.4%	0.9%
<b>District Area</b>	<b>-0.1%</b>	<b>0.3%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>1.2%</b>	<b>-0.4%</b>	<b>0.9%</b>	<b>2.4%</b>
Door County	-0.1%	0.4%	0.4%	0.0%	0.7%	-0.2%	0.8%	2.0%
State of Wisconsin	0.1%	0.2%	0.2%	0.3%	0.4%	0.4%	0.2%	1.8%

Source: U. S. Census Bureau & Demographic Services Center, WIDOA



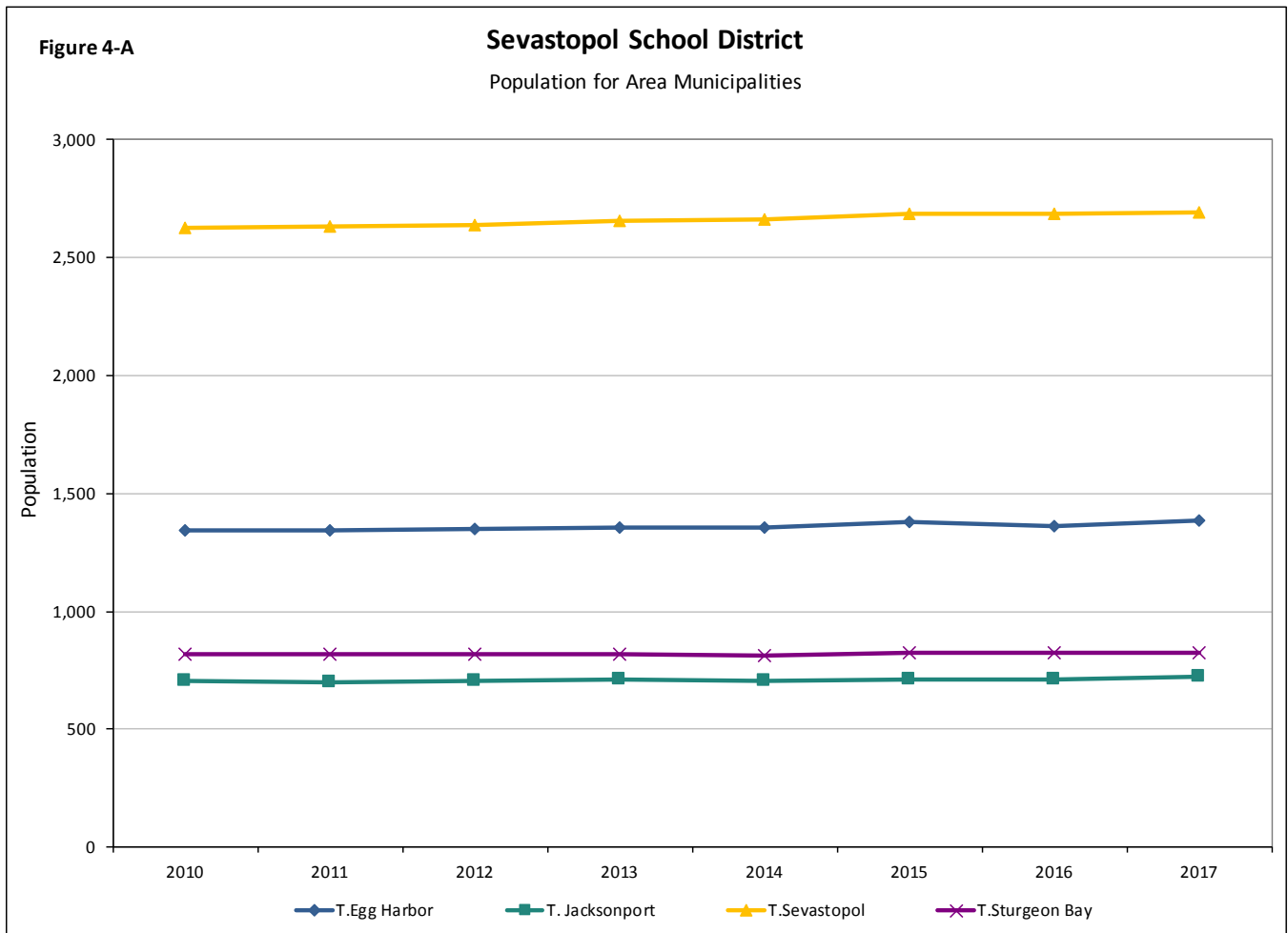
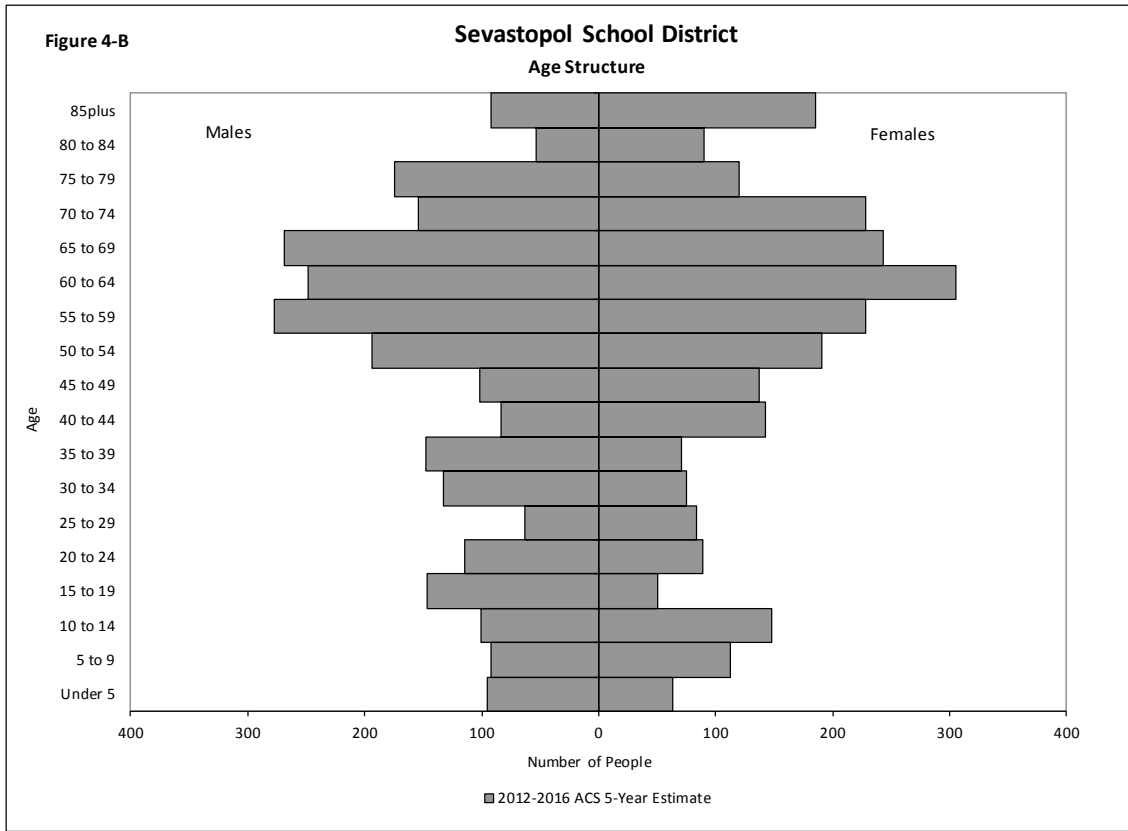


Figure 4-B and Table 4 show the 2016 population estimate by age for Sevastopol School District from the U.S. Census Bureau. This community overall has a very large population age 55-69 while the school aged population is proportionally smaller.





**TABLE 4**  
**Population by Age and Gender, 2016\***  
**Sevastopol School District**

Age	2016 Estimate		
	Males	Females	Total
Under 5	95	63	158
5 to 9	92	113	205
10 to 14	101	148	249
15 to 19	147	50	197
20 to 24	115	89	204
25 to 29	63	84	147
30 to 34	133	75	208
35 to 39	148	71	219
40 to 44	83	143	226
45 to 49	102	137	239
50 to 54	194	191	385
55 to 59	277	228	505
60 to 64	248	305	553
65 to 69	269	243	512
70 to 74	154	228	382
75 to 79	174	120	294
80 to 84	54	90	144
85plus	92	185	277
<b>Total</b>	<b>2,541</b>	<b>2,563</b>	<b>5,104</b>

\*Source: 2012-2016 ACS 5-Year Estimates



## Residential Development

Table 5 shows the number of housing starts in the Sevastopol School District over the past ten years. Area housing starts have fluctuated significantly over this ten year period, with the majority being single family housing starts. The new housing totals in the table include the entire municipality although only a portion of the towns of Egg Harbor and Sturgeon Bay are in the school district. The towns of Egg Harbor and Sevastopol have seen the most housing starts during this time period.

**TABLE 5**  
**School District Area Housing Starts**  
**Sevastopol School District**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>District Area</b>										
<b>TOTAL</b>	<b>61</b>	<b>42</b>	<b>23</b>	<b>17</b>	<b>22</b>	<b>35</b>	<b>44</b>	<b>40</b>	<b>54</b>	<b>28</b>
Single Family	50	38	23	17	22	33	42	38	54	28
Two Family	8	4	0	0	0	2	2	2	0	0
Multi-family	3	0	0	0	0	0	0	0	0	0
<b>T. Egg Harbor</b>										
<b>TOTAL</b>	<b>23</b>	<b>15</b>	<b>9</b>	<b>5</b>	<b>10</b>	<b>8</b>	<b>13</b>	<b>17</b>	<b>19</b>	<b>12</b>
Single Family	14	13	9	5	10	8	13	17	19	12
Two Family	6	2	0	0	0	0	0	0	0	0
Multi-family	3	0	0	0	0	0	0	0	0	0
<b>T. Jacksonport</b>										
<b>TOTAL</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>6</b>
Single Family	8	1	4	0	4	6	5	5	8	6
Two Family	0	0	0	0	0	0	0	0	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0
<b>T. Sevastopol</b>										
<b>TOTAL</b>	<b>19</b>	<b>22</b>	<b>9</b>	<b>9</b>	<b>6</b>	<b>17</b>	<b>23</b>	<b>14</b>	<b>24</b>	<b>10</b>
Single Family	17	20	9	9	6	17	21	12	24	10
Two Family	2	2	0	0	0	0	2	2	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0
<b>T. Sturgeon Bay</b>										
<b>TOTAL</b>	<b>11</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>0</b>
Single Family	11	4	1	3	2	2	3	4	3	0
Two Family	0	0	0	0	0	2	0	0	0	0
Multi-family	0	0	0	0	0	0	0	0	0	0

Source: Demographic Services Center, WIDOA

Examining trends in recent housing development can help to explain how in-migration into the Sevastopol School District area might be affecting school enrollment. If the number of housing starts in the district area is expected to be reasonably consistent for the next several years, then we assume that in-migration of school-age children will also remain relatively consistent. If the number of housing starts is expected to increase significantly, school district may experience an increase in student enrollment. However, it is important to recognize that the number of housing starts in any given year is dependent upon a large number of confounding variables (decisions of local, county, and state policy



makers, residential developers, interest rates, demand for housing, etc.), making future growth patterns difficult to predict. Households in single family homes, on average, contain more school-aged children than in two-family and multi-family complexes.

It is also important to consider that turnover in ownership of existing housing stock also contributes to changes in enrollment. A district can maintain or even increase enrollment depending upon the cycle of resident homeowners, regardless of housing starts. For instance, a younger community will have a higher child-per-household ratio, whereas an older community will have a lower child-per-household ratio. However, within a few years a turnover in ownership in an older community may result in an increase in the child-per-household number. As younger families move into the area, the school district will tend to see new students enrolling into the district’s schools. Absent new housing development or housing turnover, families age in place and the number of school-aged children declines. Turnover in ownership does not happen overnight and housing turnover may happen over several years at varying rates.

Figure 5-A shows the number of residential building permits issued by municipality in the district area. Figure 5-B shows housing starts in the area by type of housing unit: single family home, two family housing, and multi-family housing.

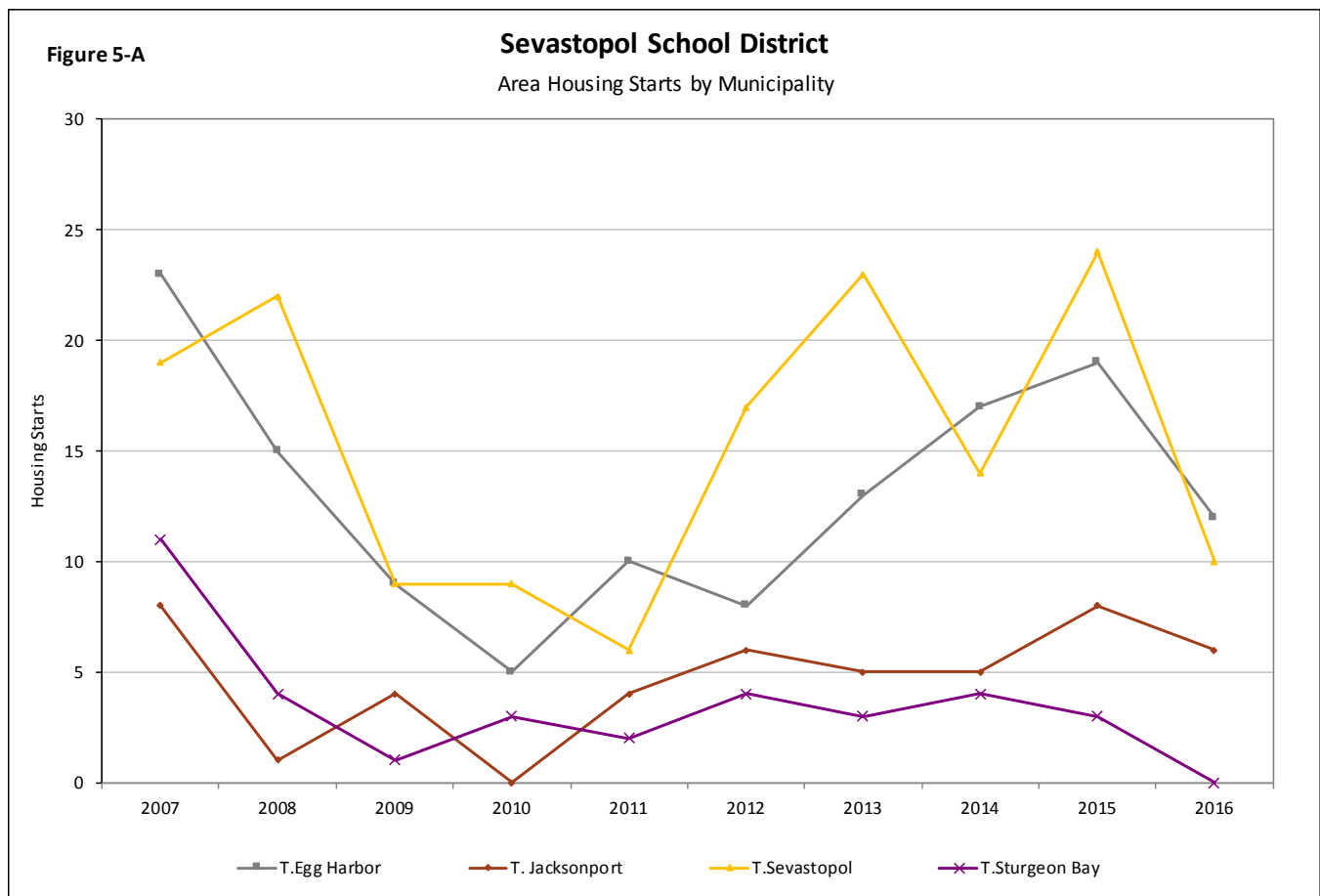
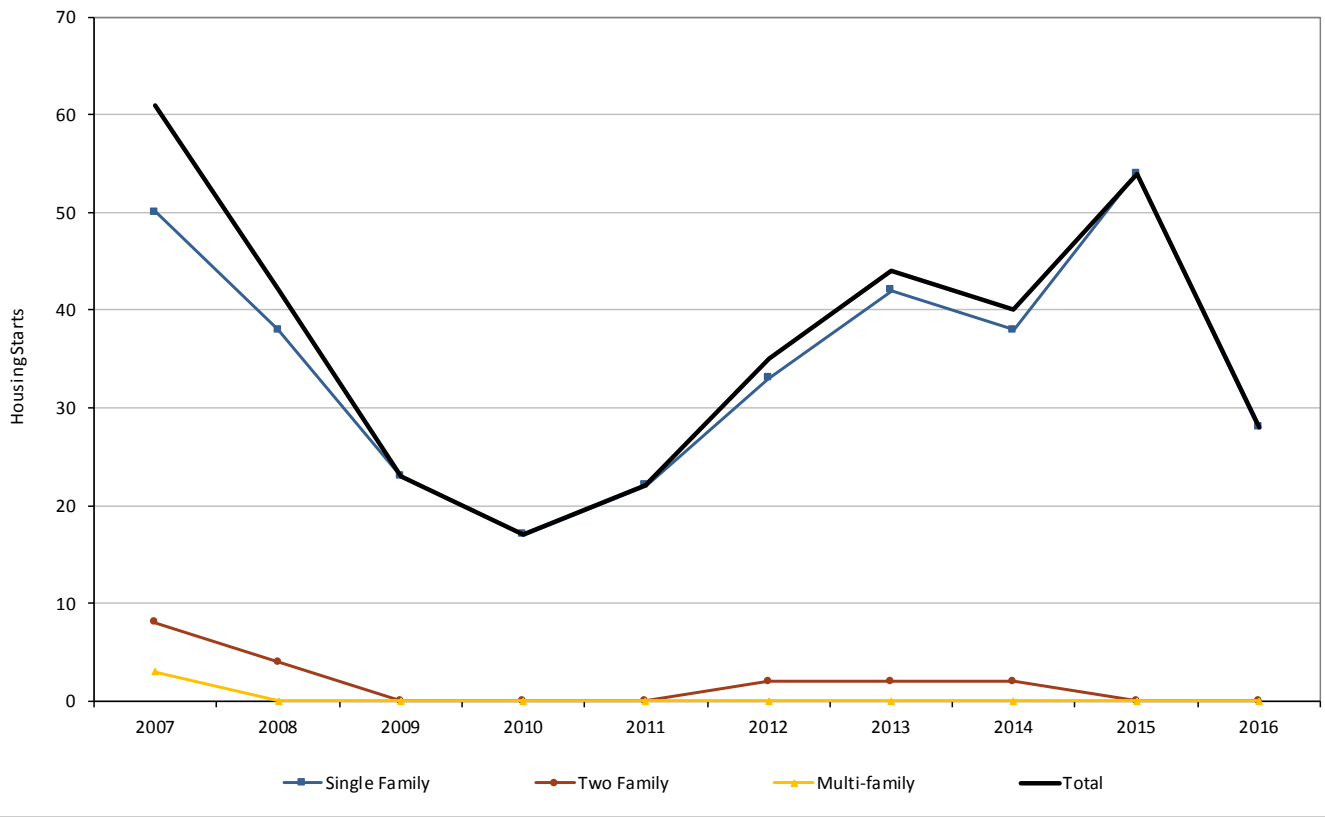




Figure 5-B

### Sevastopol School District

Area Housing Starts by Type



## Method

In order to generate school enrollment projections, we rely on a commonly used demographic technique called the “cohort survival” method or the “grade progression ratio” method. This method advances current students through the school system over time and applies rates of transfer (or “survival”) as the students who are now in school age from year to year and grade to grade. It is through these rates of transfer that we make assumptions about how migration into and out of the district and transfers to and from different schools or home schooling will impact future enrollment.

### Grade Progression Ratios

Grade progression ratios are used to measure district enrollment changes, year to year and grade to grade that have occurred within the school district in the recent past. By examining these, we can better understand recent changes in enrollment. We use these ratios as the rates of transfer to inform future student projections.

Table 6 shows the grade progression ratios for the Sevastopol School District. The ratios measure the effects of in- and out-migration and the transfer of students between private and public schools. The ratios are calculated for several pairs of years and then averages of these based on different time frames are calculated for each grade.

**TABLE 6**  
Grade Progression Ratios  
Sevastopol School District

YEAR CHANGES	B:K	K:1	1:2	2:3	3:4	4:5	5:6	6:7	7:8	8:9	9:10	10:11	11:12
08-09/09-10	0.758	0.923	1.057	1.147	1.143	1.026	1.030	1.000	0.933	1.125	0.917	1.038	1.063
09-10/10-11	0.620	1.065	1.028	1.135	1.051	1.000	1.000	1.000	0.794	1.107	0.978	0.977	1.000
10-11/11-12	0.614	1.120	1.091	1.108	1.119	1.049	0.900	1.103	0.912	1.000	1.097	1.023	1.047
11-12/12-13	0.915	1.000	1.107	1.111	1.073	1.000	1.047	0.972	1.093	1.226	1.111	0.912	0.956
12-13/13-14	1.275	1.182	1.000	1.000	1.050	0.955	0.936	1.111	1.000	1.043	1.053	0.967	1.032
13-14/14-15	1.490	1.024	1.051	1.296	1.065	1.000	1.024	1.023	0.980	1.057	0.980	1.050	1.034
14-15/15-16	0.807	1.035	0.953	1.000	1.057	1.000	1.167	1.023	1.044	1.102	0.973	1.000	1.000
15-16/16-17	1.314	1.050	0.695	0.878	0.756	1.135	1.273	0.959	1.114	0.766	0.907	1.139	0.604
16-17/17-18	1.209	0.589	1.024	1.390	1.139	1.194	0.976	0.857	1.064	0.939	1.444	1.184	0.878
<b>Baseline</b>	<b>1.046</b>	<b>1.031</b>	<b>1.039</b>	<b>1.084</b>	<b>1.087</b>	<b>1.013</b>	<b>1.002</b>	<b>0.996</b>	<b>1.004</b>	<b>1.053</b>	<b>1.002</b>	<b>1.009</b>	<b>1.001</b>
<b>5 Year Trend</b>	<b>1.219</b>	<b>0.976</b>	<b>0.945</b>	<b>1.113</b>	<b>1.013</b>	<b>1.057</b>	<b>1.075</b>	<b>0.995</b>	<b>1.040</b>	<b>0.981</b>	<b>1.071</b>	<b>1.068</b>	<b>0.910</b>
<b>2 Year "Trend"</b>	<b>1.261</b>	<b>0.820</b>	<b>0.859</b>	<b>1.134</b>	<b>0.947</b>	<b>1.164</b>	<b>1.124</b>	<b>0.908</b>	<b>1.089</b>	<b>0.852</b>	<b>1.176</b>	<b>1.161</b>	<b>0.741</b>

\*Shaded progression ratios are excluded from the Baseline Average

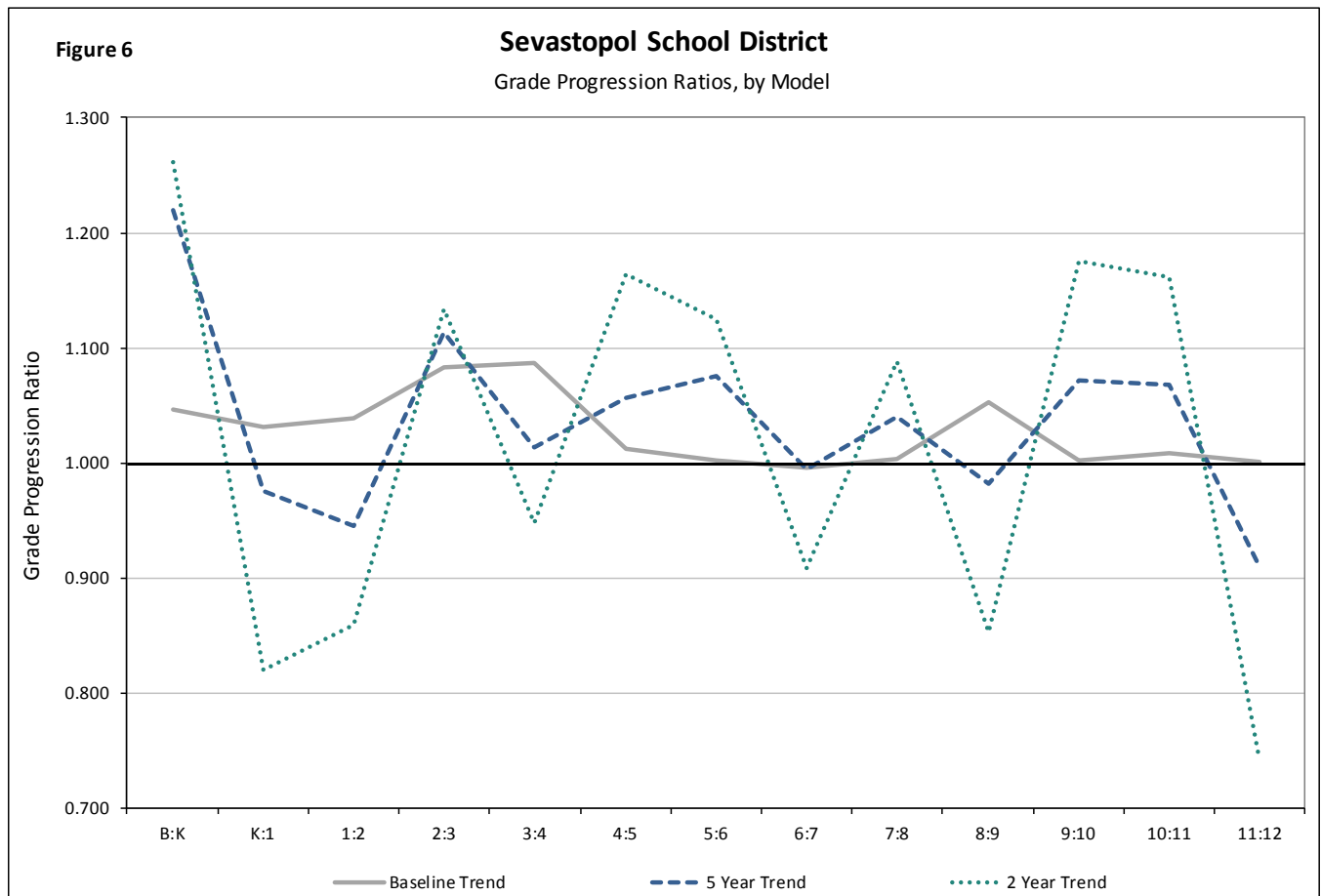
The grade progression ratios can be interpreted in the following manner. The Baseline ratio for K:1 is 1.031. This means that in the Sevastopol School District, the first grade class is on average 3.1% larger each year than the kindergarten class was the previous year (the result of transfers from other schools and in-migration into the district). The 6:7 Baseline ratio of .996 indicates that on average, approximately 99.6% of the district area sixth graders will advance to district 7<sup>th</sup> graders a year later.



In order to predict future enrollment under different growth assumptions, three sets of grade progression ratios are calculated:

- Baseline averages the past ten years of progression ratios, with outlying ratios (those outside of one standard deviation of the mean) excluded;
- Five-year Trend averages the past five years of progression ratios with no exclusions;
- Two-year “Trend” averages the past two years of progression ratios with no exclusions;

These short-, medium- and long-range bases produce varying projections that indicate a range of likely enrollment outcomes in the future. Figure 6 shows the differences between these three sets of grade progression ratios.



## 4K Grade Progression Ratios

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Table 7 shows the observed transfer ratio between birth and 4K and between 4K and kindergarten for the last ten years and the grade progression ratio trend averages. To generate 4K enrollment projections, the corresponding B:4K averages are used in each of the corresponding projections models. 4K:K ratios are provided as a point of reference but not used to determine kindergarten enrollment in any of the projections models.

**TABLE 7**  
**4K Grade Progression Ratios**  
**Sevastopol School District**

	<b>B:4K</b>	<b>4K:K</b>
08-09/09-10	0.595	1.550
09-10/10-11	0.478	1.042
10-11/11-12	0.832	1.286
11-12/12-13	1.245	1.100
12-13/13-14	1.228	1.024
13-14/14-15	0.868	1.213
14-15/15-16	0.798	0.930
15-16/16-17	1.470	1.647
16-17/17-18	1.139	0.822
<b>Baseline</b>	<b>0.961</b>	<b>1.179</b>
<b>5 Year Trend</b>	<b>1.101</b>	<b>1.127</b>
<b>2 Year "Trend"</b>	<b>1.304</b>	<b>1.235</b>



## School Enrollment Projections

When considering all of the projections provided in this report for decision-making, it is important to recognize that population projections of all types, including school enrollment projections, are more accurate in the immediate future than they are farther into the future. This is especially true for grades 4K-5, because the students who will enter the school district after 2022 have not yet been born.

Overall, our projections are more reliable over the next five years (up to the 2022/23 school year) than they are in the latter half of the next decade. When considering these projections, it is important to remember that projections made for smaller populations are less reliable than those projections made for districts with a larger population.

### Baseline Projections

The Baseline model (Table 8) projects enrollments using the assumption that average trends year to year, grade to grade, will continue into the future. This model assumes that long term (the past ten years) trends in enrollment and births will represent future trends in the district. Enrollment is projected to decrease from 599 students in 2017/18 to 554 students in 2022/23, or 45 fewer students.

**TABLE 8**  
**Baseline Projection Model**  
**Sevastopol School District**

	SCHOOL YEAR									
	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
4K	25	22	29	28	25	24	23	22	21	20
K	32	27	24	31	31	29	27	26	25	24
1	38	33	28	25	32	32	29	28	27	26
2	34	40	34	29	26	33	33	31	29	28
3	47	37	43	37	32	28	36	36	33	32
4	62	51	40	47	40	35	31	39	39	36
5	42	63	51	41	47	41	35	31	40	40
6	37	42	63	51	41	47	41	35	31	40
7	41	37	41	63	51	41	47	40	35	31
8	36	41	37	42	63	51	41	47	41	35
9	53	38	43	39	44	66	54	43	50	43
10	46	53	38	43	39	44	66	54	43	50
11	52	47	53	38	44	39	44	67	55	44
12	58	53	47	53	39	44	40	44	67	55
<b>TOTAL</b>	<b>603</b>	<b>582</b>	<b>572</b>	<b>568</b>	<b>554</b>	<b>554</b>	<b>548</b>	<b>546</b>	<b>537</b>	<b>504</b>
K-12	578	560	544	540	529	530	525	523	516	483
K-5	254	250	221	210	208	197	192	192	194	186
6-8	114	120	141	156	155	140	129	123	107	106
9-12	209	190	181	174	165	193	204	209	215	191



## 5 Year Trend Projections

The 5 Year Trend model (Table 9) uses the grade progression ratios from the last five years and recent birth trends to project what future enrollments would look like if more recent patterns were representative of future trends. For the 5 Year Trend, enrollment is projected to decrease from 599 students in 2017/18 to 580 students in 2022/23, a decrease of 19 students.

**TABLE 9**  
**5 Year Trend Projection Model**  
**Sevastopol School District**

GRADE	SCHOOL YEAR									
	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
4K	29	25	33	33	31	31	31	32	32	32
K	37	32	28	36	36	34	35	35	35	35
1	36	36	31	27	35	36	34	34	34	34
2	31	34	34	29	26	33	34	32	32	32
3	48	35	38	38	33	29	37	37	35	36
4	58	48	35	38	38	33	29	38	38	36
5	43	61	51	37	41	41	35	31	40	40
6	40	47	66	55	40	44	44	38	33	43
7	41	40	46	65	55	40	43	43	38	33
8	37	42	41	48	68	57	41	45	45	39
9	49	37	42	40	47	67	56	41	44	44
10	49	53	39	45	43	51	71	60	43	48
11	56	53	56	42	48	46	54	76	64	46
12	53	51	48	51	38	43	42	49	69	58
<b>TOTAL</b>	<b>607</b>	<b>593</b>	<b>589</b>	<b>586</b>	<b>580</b>	<b>585</b>	<b>587</b>	<b>590</b>	<b>583</b>	<b>556</b>
K-12	578	567	556	554	549	554	555	559	551	524
K-5	253	246	218	207	210	206	203	206	214	213
6-8	118	129	153	169	163	140	128	126	116	115
9-12	207	192	185	178	176	207	223	226	221	197



2 Year "Trend" Projections

The 2 Year "Trend" model (Table 10) uses the grade progression ratios from the last two years to project what future enrollments would look like if even more recent patterns were representative of future trends. For the 2 Year "Trend," enrollment is projected to decrease from 599 students in 2017/18 to 546 students in 2022/23, a 53 student decrease over the next five years.

**TABLE 10**  
**2 Year "Trend" Projection Model**  
**Sevastopol School District**

GRADE	SCHOOL YEAR									
	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
4K	34	30	39	39	37	37	37	37	38	38
K	38	33	29	38	38	36	36	36	36	36
1	30	31	27	24	31	31	29	29	29	30
2	28	26	27	23	21	26	27	25	25	25
3	49	32	30	31	26	23	30	30	28	29
4	54	46	30	28	29	25	22	28	29	27
5	48	63	54	35	33	34	29	26	33	33
6	42	54	71	60	40	37	38	33	29	37
7	37	38	49	64	55	36	33	34	30	26
8	39	41	41	53	70	60	39	36	37	32
9	43	33	35	35	45	60	51	34	31	32
10	54	50	39	41	41	53	70	60	40	36
11	60	63	58	46	47	48	62	81	70	46
12	43	45	47	43	34	35	35	46	60	52
<b>TOTAL</b>	<b>600</b>	<b>585</b>	<b>575</b>	<b>560</b>	<b>546</b>	<b>540</b>	<b>539</b>	<b>536</b>	<b>515</b>	<b>479</b>
K-12	566	555	536	521	509	503	502	499	477	442
K-5	247	232	197	179	177	175	173	175	181	180
6-8	118	132	161	178	165	133	111	103	96	96
9-12	200	191	179	164	167	196	218	221	200	166



## Kindergarten Trend Projections

For this method we perform a trend analysis to project the number of future kindergarten students. Then, the 5 Year Trend grade progression ratios are used for projecting the other grades (1-12) in the district. In other words, this model assumes that the number of new kindergartners each year over the next decade will continue to follow a trend similar to the recent trend in kindergarten enrollment. According to this hybrid projection method (Table 11), enrollment is projected to increase from 599 students in 2017/18 to 614 students in 2022/23, an increase of 15 students over the next five years.

**TABLE 11**  
**Kindergarten Trend Projection Model**  
**Sevastopol School District**

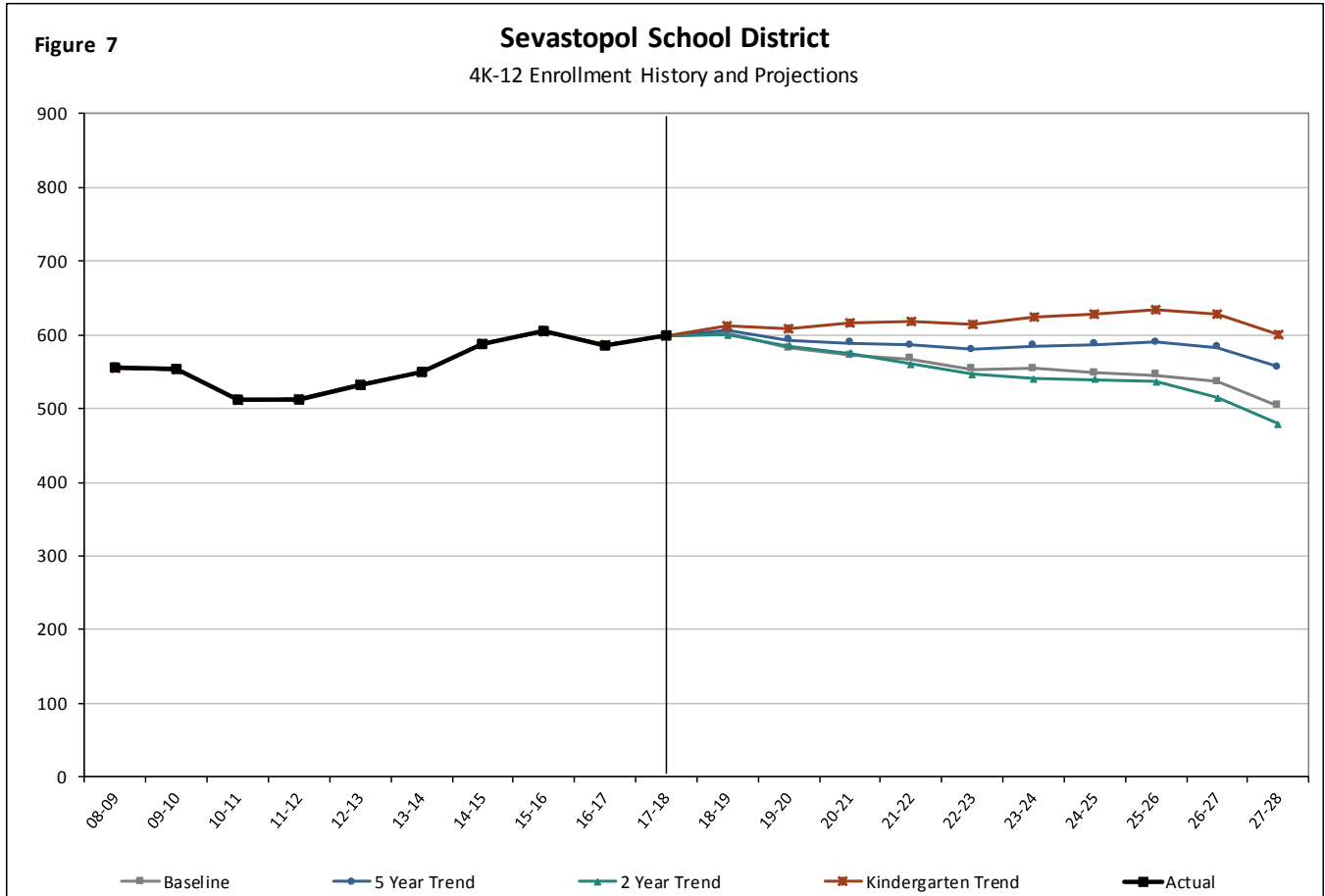
GRADE	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
4K	29	25	33	33	31	31	31	32	32	32
K	43	42	41	40	39	38	37	35	34	33
1	36	42	41	40	39	38	37	36	35	33
2	31	34	40	39	38	37	36	35	34	33
3	48	35	38	44	43	42	41	40	39	37
4	58	48	35	38	45	44	43	41	40	39
5	43	61	51	37	41	47	46	45	44	43
6	40	47	66	55	40	44	51	50	48	47
7	41	40	46	65	55	40	43	51	49	48
8	37	42	41	48	68	57	41	45	53	51
9	49	37	42	40	47	67	56	41	44	52
10	49	53	39	45	43	51	71	60	43	48
11	56	53	56	42	48	46	54	76	64	46
12	53	51	48	51	38	43	42	49	69	58
<b>TOTAL</b>	<b>613</b>	<b>609</b>	<b>617</b>	<b>618</b>	<b>614</b>	<b>624</b>	<b>629</b>	<b>635</b>	<b>628</b>	<b>600</b>
K-12	584	583	584	585	583	592	598	603	597	569
K-5	259	262	246	238	244	245	238	232	225	218
6-8	118	129	153	169	163	140	136	145	150	146
9-12	207	192	185	178	176	207	223	226	221	204





## Comparison of Projection Models

Figures 7-11 and Tables 12-16 compare the four enrollment projections models broken down by 4K-12 and K-12 enrollment and by grade groupings (K-5, 6-8, and 9-12).

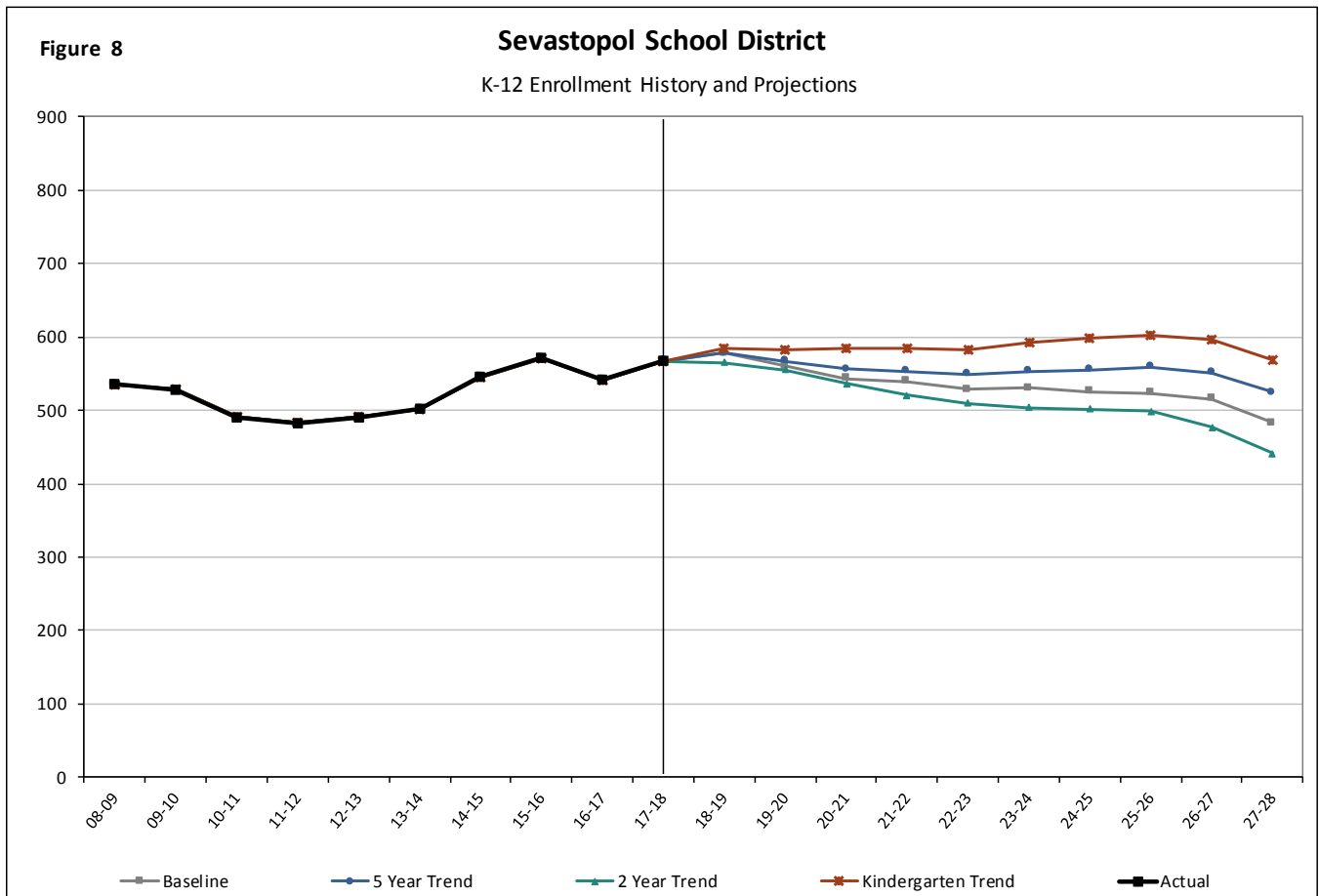


**TABLE 12**  
**Summary of 4K-12 Enrollment Projections**  
**Sevastopol School District**

	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Baseline	603	582	572	568	554	554	548	546	537	504
5 Year Trend	607	593	589	586	580	585	587	590	583	556
2 Year "Trend"	600	585	575	560	546	540	539	536	515	479
Kindergarten Trend	613	609	617	618	614	624	629	635	628	600

4K-12 enrollment in 2017/18 is 599. All projection models except for the Kindergarten Trend forecast declining enrollment in the near future. The Kindergarten Trend model projects steady enrollment growth. District-wide enrollment projections five years from now (2022/23) forecast a range of enrollment from 546 to 614.



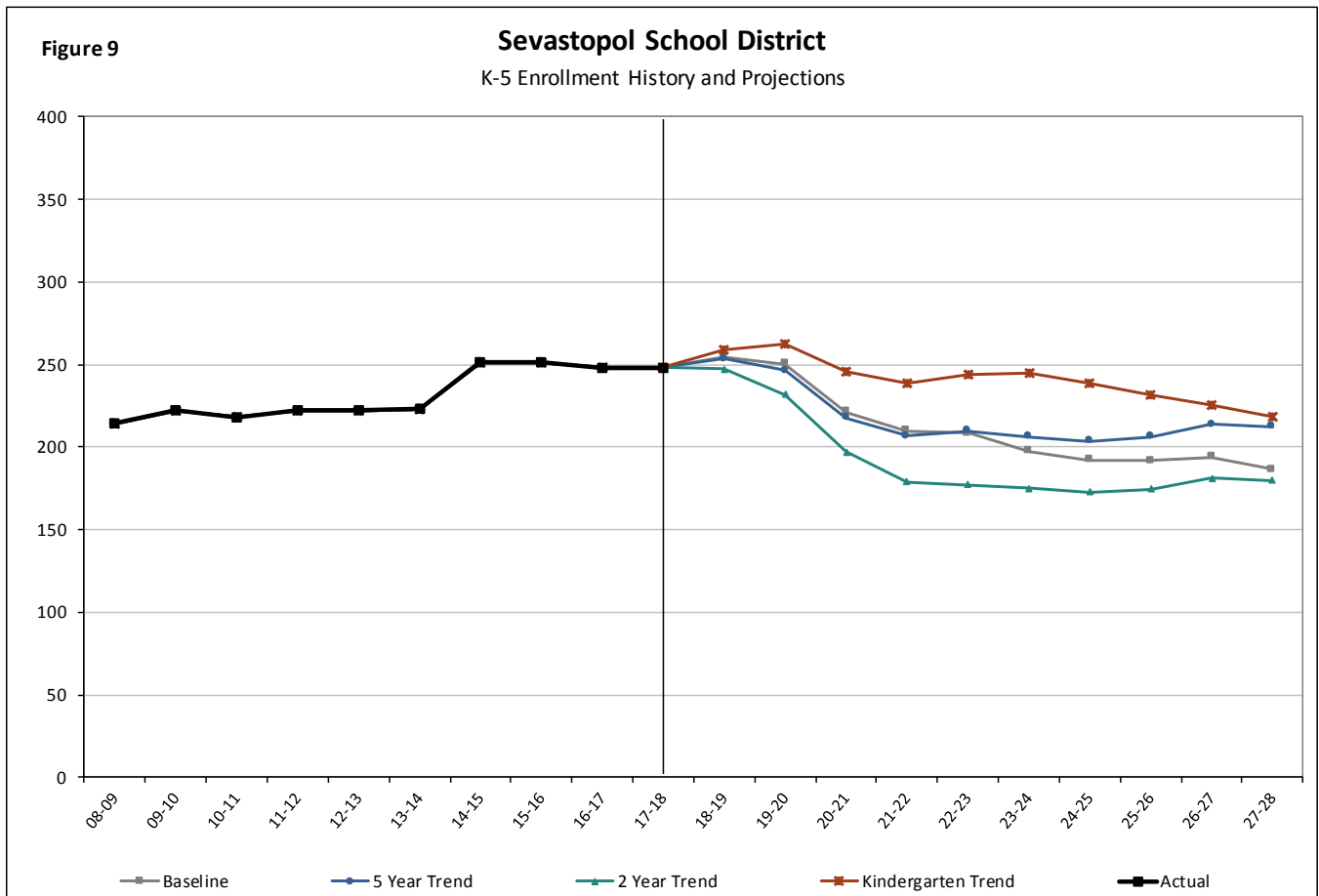


**TABLE 13**  
**Summary of K-12 Enrollment Projections**  
**Sevastopol School District**

	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Baseline	578	560	544	540	529	530	525	523	516	483
5 Year Trend	578	567	556	554	549	554	555	559	551	524
2 Year "Trend"	566	555	536	521	509	503	502	499	477	442
Kindergarten Trend	584	583	584	585	583	592	598	603	597	569

Grades K-12 enrollment in 2017/18 is 567. Again, three of the models project declining enrollment over the next five years while the Kindergarten Trend projects steady enrollment. The K-12 enrollment projections five years from now (2022/23) forecast a range of enrollment from 509 to 583.



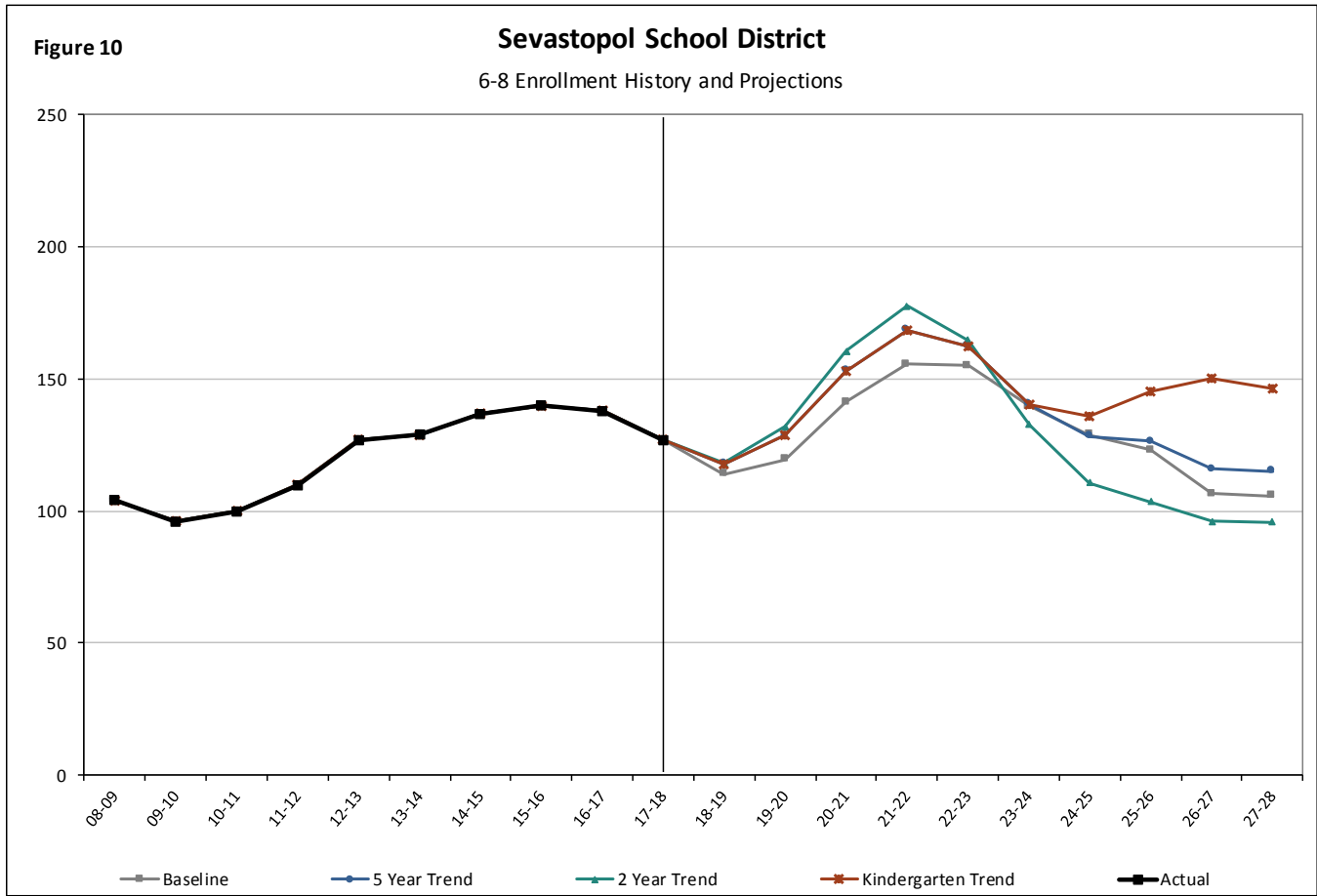


**TABLE 14**  
**Summary of K-5 Enrollment Projections**  
**Sevastopol School District**

	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Baseline	254	250	221	210	208	197	192	192	194	186
5 Year Trend	253	246	218	207	210	206	203	206	214	213
2 Year "Trend"	247	232	197	179	177	175	173	175	181	180
Kindergarten Trend	259	262	246	238	244	245	238	232	225	218

Grades K-5 enrollment in 2017/18 is 248. The Baseline, 5 Year Trend, and 2 Year Trend all project decreasing enrollment, while the Kindergarten Trend forecasts some increasing enrollment followed by decline. In five years, elementary enrollment in the 2022/23 school year is projected to range from 177 to 244.



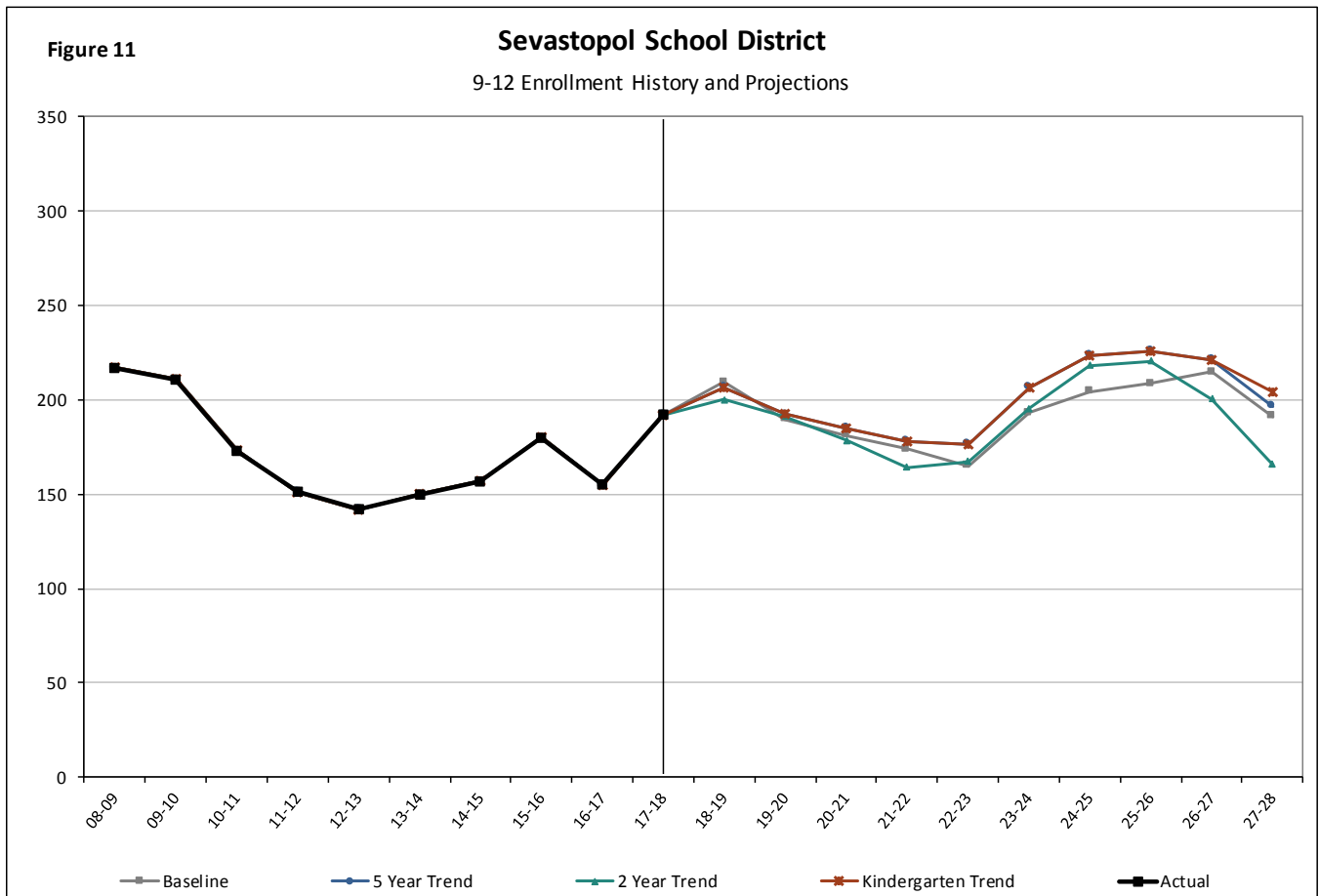


**TABLE 15**  
**Summary of 6-8 Enrollment Projections**  
**Sevastopol School District**

	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Baseline	114	120	141	156	155	140	129	123	107	106
5 Year Trend	118	129	153	169	163	140	128	126	116	115
2 Year "Trend"	118	132	161	178	165	133	111	103	96	96
Kindergarten Trend	118	129	153	169	163	140	136	145	150	146

Grades 6-8 enrollment in 2017/18 is 127. All projection models project a decline in enrollment next year followed by increasing enrollment. Middle school enrollment in five years (2022/23) is projected to be the same as this year, ranging from 155 to 165.





**TABLE 16**  
**Summary of 9-12 Enrollment Projections**  
**Sevastopol School District**

	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28
Baseline	209	190	181	174	165	193	204	209	215	191
5 Year Trend	207	192	185	178	176	207	223	226	221	197
2 Year "Trend"	200	191	179	164	167	196	218	221	200	166
Kindergarten Trend	207	192	185	178	176	207	223	226	221	204

Grades 9-12 enrollment in 2017/18 is 192. All projection models forecast an increase in enrollment next year followed by decreasing enrollment over the next four years. High school enrollment in five years (2022/23) is projected to range from 165 to 176.

## Conclusions



These district-level enrollment projections are based on models that incorporate recent past and current demographic information as well as the district's own enrollment data and assumptions about future housing development in the school district area. Because most of the students in the district's schools over the next few years have already been born or are already in school, and because their grade progression from one year to another is highly predictable, the total district-level projections should be viewed as having high accuracy over the next few years. After a few years, and increasingly for the lower elementary grades, actual enrollment figures will likely deviate from these projections by ever increasing amounts. The reason for this is that birth trends, in-migration of pre-school age children, and transfers into the district are more difficult to predict and therefore this makes meaningful incorporation into enrollment projections a challenge. As with nearly all types of forecasts, accuracy in these enrollment projections decreases over time.

The Baseline, 5 Year Trend, and 2 Year Trend models show overall decreasing enrollment in the near term in the Sevastopol School District. The Kindergarten Trend model projects increasing enrollment for a few years followed by decreasing enrollment. Birth rates have declined over the long term but recently have leveled off. As the large 3<sup>rd</sup> grade class moves to the older grades and as potentially smaller kindergarten classes occur the elementary grades are likely to experience decline. Middle school enrollment will likely decline next year followed by increasing enrollment in the near term. High school enrollment is projected to decline somewhat in the near future due to smaller classes moving through high school but after 2022-23 enrollment will likely increase.

Enrollment should be closely monitored for the next few years, and compared with these projections, to determine the trajectory of future decline. This type of monitoring program might help the district to determine which of the models seems to be the most realistic to use for planning purposes. Because the projections found in this report incorporate the consequences of migration to and from the district, any significant and sustained interruption of current or recent past migration patterns will erode these models' accuracy from the initiation point of the new pattern. The various projection models provide a realistic range of migration and transfer effects on the school district.

