

**Tredyffrin/Easttown School District  
BOARD EDUCATION COMMITTEE**

**November 15, 2017  
5:00 PM  
TEAO, Meeting Room 200**

**Agenda**

- I. Approval of October 4, 2017 Minutes
  
- II. School Performance Profile (SPP) Scores
  
- III. Demographic Report
  
- IV. Other
  
- V. Public Comment

**Board Education Committee Goals**

1. Review the recommended administrative changes to the academic program that have impact on curriculum or budget and communicate recommendations to the full Board.
2. Review all enrollment and staffing numbers and projections for the year to determine the extent to which educational needs are addressed.
3. Review student assessment results.
4. Recommend informational education presentations to include in the monthly Board meetings as priority discussions.
5. Receive administrative recommendation for school calendar and make recommendation to the full Board.
6. Review current programming to determine alignment with federal and state mandates including Keystone Exams content and implementation.
7. Make recommendations to Board committees to communicate appropriate educational positions to legislators.
8. Review current programming at the middle school level.

Next Meeting Date: January 3, 2018

DRAFT PENDING COMMITTEE APPROVAL  
BOARD EDUCATION COMMITTEE MEETING MINUTES  
October 4, 2017

Tredyffrin/Easttown Administrative Offices  
6:30 p.m.

**Attending all or part of the meeting:**

**Board Committee Members:** Katharine Murphy (Chair), Scott Dorsey, Roberta Hotinski, Virginia Lastner (via phone)

**Other Board Members:** Michele Burger, Doug Carlson, Todd Kantorczyk, Edward Sweeney

**TE School District Representatives:** Wendy Towle (Administrative Liaison), Patrick Gately, Richard Gusick, Nicole Roy, Mike Szymendera, Oscar Torres

**Community Members:** Amy Alvarez (TEEA Representative), Doug Anestad, Xavier Arnault, Wendy Brooks, Marine Havel, Xiaoyan Han, Karen Huang, Jamie Lynch, Kate Mayer, Pat McHugh, Andrea Sau, Jessica Schneck, Cindy Tu, Tina Whitlow, Ling Zhong

The meeting was called to order at 6:30 p.m.

**Public Comment:**

Xavier Arnault commented on the **School Calendar**.

Doug Anestad commented on the **School Calendar**.

Xavier Arnault commented on the **World Languages Review (MS/HS)**.

Jessica Schneck commented on the **World Languages Review (MS/HS)**.

Doug Anestad commented on the **World Languages Review (MS/HS)**.

Pat McHugh commented on the **World Languages Review (MS/HS)**.

Cindy Tu commented on the **World Languages Review (MS/HS)**.

Karen Huang commented on the **World Languages Review (MS/HS)**.

Jamie Lynch commented on the **World Languages Review (MS/HS)**.

Jessica Schneck commented on **Electronic Report Cards**.

Xavier Arnault commented on **Electronic Report Cards**.

Pat McHugh commented on diversity.

Marine Havel commented on diversity.

Marine Havel commented on school start times.

Xavier Arnault commented on school start times.

Karen Huang commented on school start times.

Kate Mayer commented on Dyslexia Awareness Month.

Jamie Lynch commented on Dyslexia Awareness Month.

Doug Anestad commented on Dyslexia Awareness Month.

Wendy Brooks commented on Dyslexia Awareness Month.

Xavier Arnault commented on Conestoga High School (AP Exams and student privileges).  
Doug Anestad commented on Conestoga High School (BC Calculus).

### **Approval of Minutes:**

The September 6, 2017 minutes were approved.

### **Committee Discussion and Recommendations:**

The Committee continued their discussion of the **2018-2019 School Calendar**. The Committee reviewed the revised draft calendar, suggesting: a pre-Labor Day start, moving the instructional staff inservice day from February 15 to February 4, and not moving the dates for the April spring break. After hearing comments provided by community members, the Committee recommended the 2018-2019 school calendar to the full Board for approval.

The Committee reviewed **World Languages at the Middle Schools and High School**. Dr. Towle, Director of Curriculum, Instruction, Staff Development, and Planning, and Dr. Torres, Director of State and Federal Programs, shared information regarding: September Board Education Committee goals; number of certified World Language candidates available in Pennsylvania; the current middle school program and enrollment numbers; the cost of adding additional World Languages at the middle school; the current high school program and enrollment numbers; language performance levels based on the American Council on the Teaching of Foreign Languages (ACTFL) scale and AP Exams; and considerations for the middle school and high school programs moving forward. Dr. Towle and Dr. Torres answered several questions from Committee and community members. The Committee made the following recommendations: 5<sup>th</sup> grade FLEX to be replaced with 5<sup>th</sup> grade Spanish and French as a precursor to 6<sup>th</sup> grade Spanish and French; continued development of 4<sup>th</sup> grade programs to increase elementary student awareness of the languages offered in 5<sup>th</sup> grade; Chinese 1 to be renewed in the Conestoga High School Program of Studies for the 18-19 school year; World Language Standing Committee examination of enhancements to upper-level Chinese courses at Conestoga High School.

The Committee discussed **Electronic Report Cards**. Dr. Szymendera, Director of Instructional Technology, shared information about the District's current electronic report cards, including the plan to no longer share paper copies of the report card with all families during the first three marking periods. Since the electronic report card contains the same information that was previously mailed home at each marking period, families will receive a paper copy only of year-end report cards.

The meeting was adjourned at 9:33 p.m.

Next meeting: **TBD**

# School Performance Profile (SPP) Scores

## 2016-2017

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Beaumont – 85.3

Devon – 86.3

Hillside – 79.7

New Eagle – 76.5

Valley Forge Elementary – 81.6

TE Middle – 72.4

Valley Forge Middle – 77.0

Conestoga – 89.7

Demographic Study: October 2017 Update  
**Public School Enrollments**  
for  
**Tredyffrin/Easttown School District**  
940 West Valley Road , Suite 1700, Wayne, PA 19087

Prepared by



**Sundance Associates**

117 Greenvale Court  
Cherry Hill, NJ 08034

Tel 856-755-0174  
Fax 856-755-0176  
E-mail: [gsundell@sundanceassoc.com](mailto:gsundell@sundanceassoc.com)

November 2, 2017

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A1. Standard Worksheet	
A2. Plus Housing Impact Worksheet	
B1. Notes on Methodology	
C1. Exposition of Grade Level Survival Ratios	

### NOTES REGARDING THIS OCTOBER 2017 UPDATE

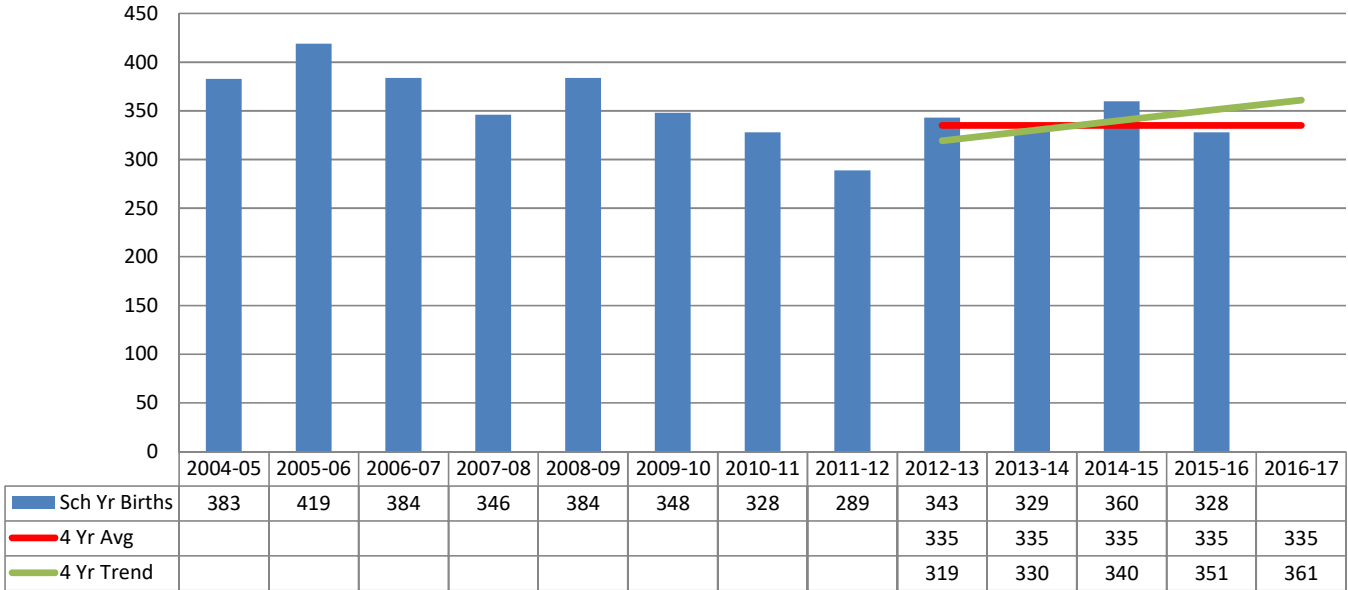
The projection uses the Standard methodology for Cohort Survival as described in previous studies.

Adjustments are made for recent trends. This includes using a 4-year average for Births for the as yet unknown years, instead of a 6-year average.

Also the Birth to Kindergarten Survival Ratio and the Kindergarten to 1st Grade Survival Ratio are the average of the most recent two years. This significantly increases the B:K ratio and slightly decreases the K:1 ratio. This adjustment is made on the District level and at individual schools.

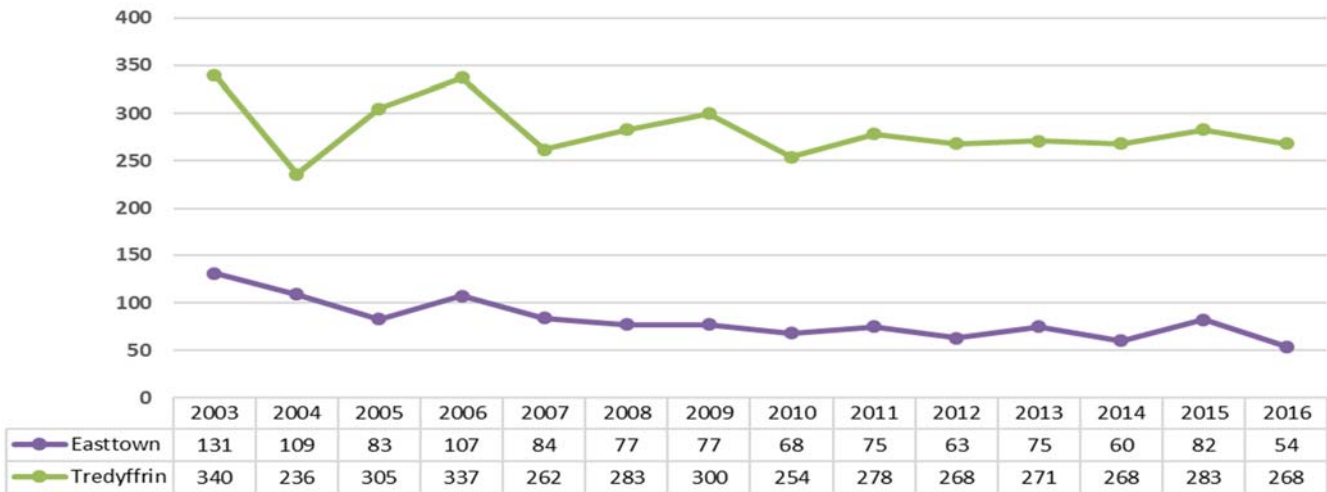
Adjustments are also made for new housing in accordance with permitting and occupancy schedules determined in consultation with the Developers.

### School Year Births- 4 Yr Trend



This study uses the 4-year average of 335 births for years 2017 and forward for which no data is available. Use of a standard 6-year average would be skewed away from recent trends. The recent 4-year trend is for 10 additional Births per year.

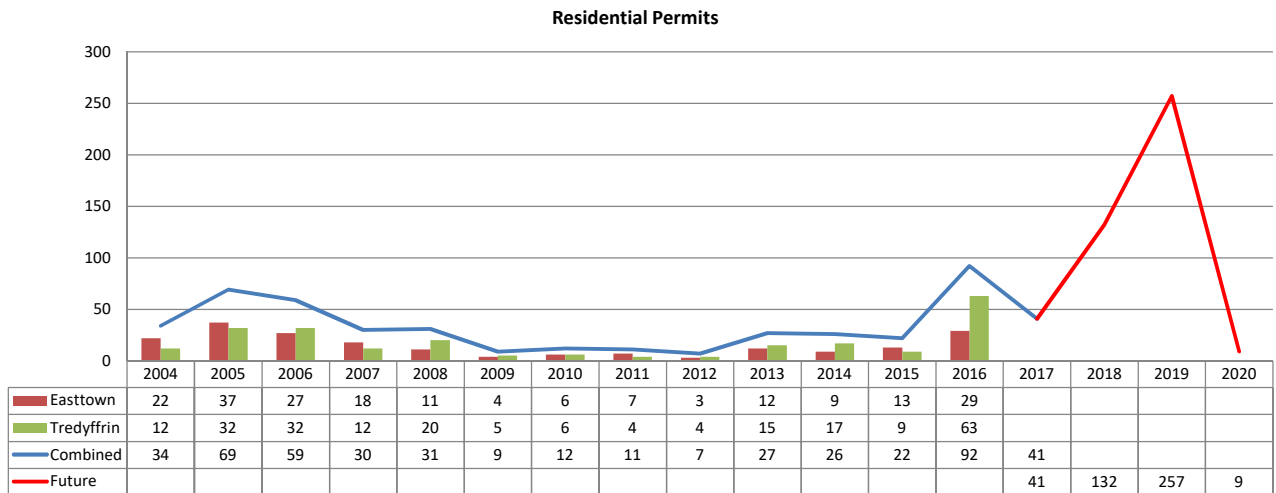
### TESD Live Births by Municipality



Total Housing Unit Building Permits for: Sum of TESD														Permitted or Planned >			
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total Units</b>	34	69	59	30	31	9	12	11	7	27	26	22	92	41	132	257	9
<b>Single-Family</b>	34	69	59	30	31	9	12	11	7	27	26	22	92				
<b>Multi-Family</b>	0	0	0	0	0	0	0	0	0	0	0	0	0				

Housing Unit Building Permits for: EASTTOWN TOWNSHIP, PA (Chester County)													
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Units</b>	22	37	27	18	11	4	6	7	3	12	9	13	29
<b>Single-Family</b>	22	37	27	18	11	4	6	7	3	12	9	13	29
<b>All Multi-Family</b>	0	0	0	0	0	0	0	0	0	0	0	0	0

Housing Unit Building Permits for: TREDYFFRIN TOWNSHIP, PA (Chester County)													
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Units</b>	12	32	32	12	20	5	6	4	4	15	17	9	63
<b>Single-Family</b>	12	32	32	12	20	5	6	4	4	15	17	9	63
<b>Multi-Family</b>	0	0	0	0	0	0	0	0	0	0	0	0	0



398 units of housing are approved or planned for construction and occupancy over the next three years. These townhouse, apartment and single-family houses will generate school age children.

There are also 400 approved units of Assisted Living that will not generate school age children.



**Future Housing Occupancy Schedule**

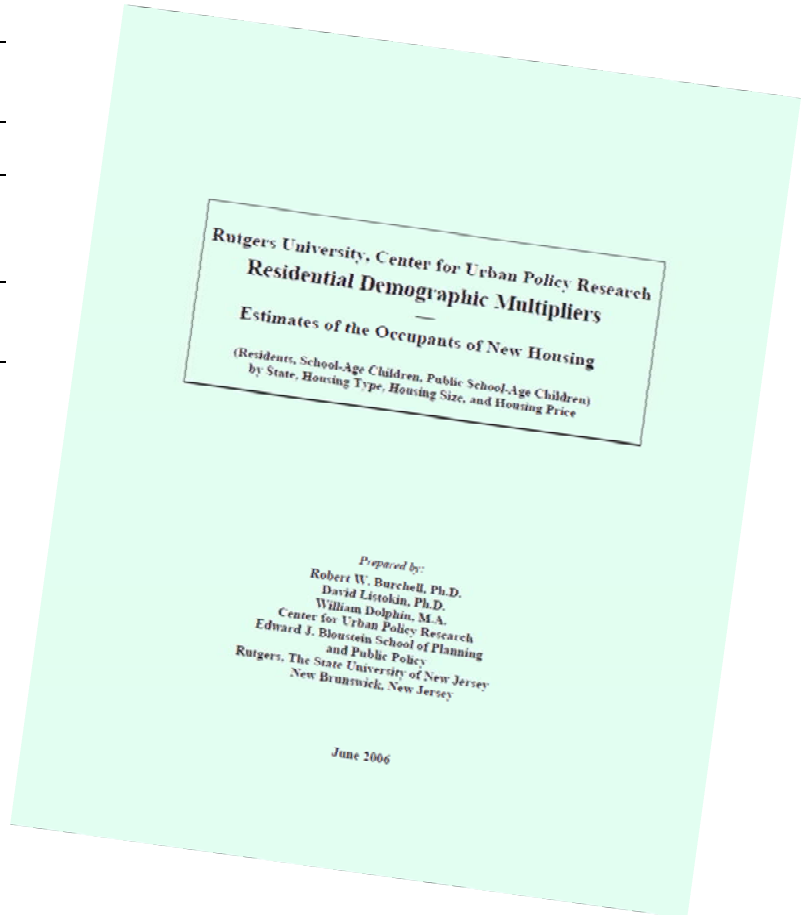
	Type	Bdrms	Unit Count	2016	2017	2018	2019	2020	Total Remain
Wayne Glen 750 Walker Rd. <i>Conditional Use App'l</i>	Townhouse	2 Bdrm	30			15	15		
	Townhouse	3 Bdrm	62			30	32		
			92			45	47		92
Chesterbrook V 500 Chesterbrook Blvd. <i>In Construction</i>	TH <i>own</i>	3 Bdrm	68	22	22	24			
	TH <i>rent</i>	3 Bdrm	60	10	10	10			
			128	32	32	34			34
Village Square 23-45 So Valley Rd. <i>In Construction</i>	Townhouse	2 Bdrm	10		5	5			
	Townhouse	3 Bdrm	20		4	16			
			30		9	21			9
Lehman & Holder Center Overlay District <i>Needs Ord Amend</i>	Townhouse	3 Bdrm	6			6			
			6			6			6
Station Square 37 N. Valley <i>Resubmit-App'l Denied</i>	Rental Apt	1 Bdrm	53				53		
	Rental Apt	2 Bdrm	100				100		
			153				153		153
Peytons Crossing 20-22 Berkley Rd. <i>Under Review</i>	Townhouse	3 Bdrm	8			8			
			8			8			8
WWEDFritz Lumber 631 Lancaster Ave. <i>Under Review</i>	Rental Apt	1 Bdrm	10				10		
	Rental Apt	2 Bdrm	32				32		
			42				42		42
Newtown Road 1016 Newtown Rd <i>Under Review</i>	Single Fam	4 Bdrm	12			12			
			12			12			12
Mack Oil-Tredyffrin 44-55 Branch Ave. <i>No Application yet</i>	Single Fam	4 Bdrm	18				9	9	
			18				9	9	18
Mack Oil-Easttown 44-55 Branch Ave. <i>SD Approved 10/16/17</i>	Single Fam	4 Bdrm	6				6		
			6				6		6
Armstrong Prop 30-50 Price Ave <i>Approved 10/16/17</i>	Single Fam	4 Bdrm	6			6			
			6			6			6
Howelville Rd 951 Howelville Rd. <i>Withdrawn</i>	Townhouse	3 Bdrm	13						
			13						0
<b>TOTAL</b>				<b>32</b>	<b>41</b>	<b>132</b>	<b>257</b>	<b>9</b>	<b>398</b>

Plus 440 units of Assisted Living in 2018-20 that might increase local resales by 50-75 units.  
159 Units (40%) are speculative but deemed reasonable for future approvals and inclusion on this table.

**Multipliers by Unit Type and Number of Bedrooms**

		School Age Children	Public School Age Children
<b>Townhouse</b>	2 Bdrm	0.160	0.150
<b>Townhouse</b>	3 Bdrm	0.420	0.360
<b>TH own</b>	3 Bdrm	0.160	0.150
<b>TH rent</b>	3 Bdrm	0.730	0.360
<hr/>			
<b>Rental Apt</b>	1 Bdrm	0.040	0.040
<b>Rental Apt</b>	2 Bdrm	0.210	0.190
<hr/>			
<b>Single Fam</b>	4 Bdrm	1.060	0.840

Multipliers for School Age Children by Unit Type and Number of Bedrooms are sourced from "Residential Demographic Multipliers for Pennsylvania" prepared by the Edward J. Bloustein School of Planning and Public Policy at Rutgers the State University of New Jersey.



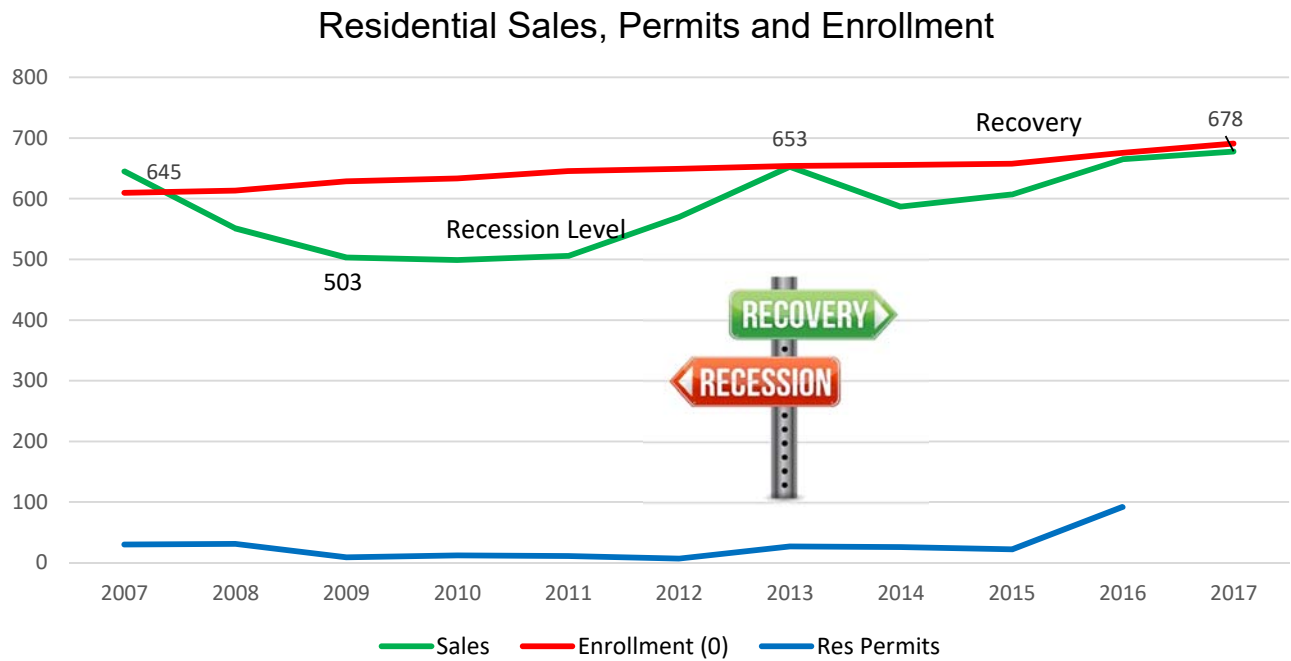
**Future Public School Age Children (PSAC)**

	Type	Bdrms	SAC/ Unit	2016	2017	2018	2019	2020	Total Remain	
Wayne Glen <i>750 Walker Rd.</i>	Townhouse	2 Bdrm	0.150			2.3	2.3			New Eagle-VFMS
	Townhouse	3 Bdrm	0.360			10.8	11.5			
						13.1	13.8		27	
Chesterbrook V <i>500 Chesterbrook Blvd.</i>	TH <i>own</i>	3 Bdrm	0.150			3.6				New Eagle-VFMS
	TH <i>rent</i>	3 Bdrm	0.730			7.3				
						10.9			11	
Village Square <i>23-45 So Valley Rd.</i>	Townhouse	2 Bdrm	0.150			0.8				Beaumont-TEMS
	Townhouse	3 Bdrm	0.360			5.8				
						6.5			7	
Lehman & Holder <i>Center Overlay District</i>	Townhouse	3 Brdm	0.360			2.2				Devon-TEMS
						2.2			2	
Station Square <i>37 N. Valley</i>	Rental Apt	1 Bdrm	0.040				2.1			Hillside-VFMS
	Rental Apt	2 Bdrm	0.190				19.0			
							21.1		21	
Peytons Crossing <i>20-22 Berkley Rd.</i>	Townhouse	3 Brdm	0.360			2.9				Devon-TEMS
						2.9			3	
WWEDFritz Lumber <i>631 Lancaster Ave.</i>	Rental Apt	1 Bdrm	0.040				0.4			Devon-TEMS
	Rental Apt	2 Bdrm	0.190				6.1			
							6.5		6	
Newtown Road <i>1016 Newtown Rd</i>	Single Fam	4 Bdrm	0.840			10.1				Beaumont-TEMS
						10.1			10	
Mack Oil-Tredyffrin <i>44-55 Branch Ave.</i>	Single Fam	4 Bdrm	0.840				7.6	7.6		Hillside-TEMS
							7.6	7.6	15	
Mack Oil-Easttown <i>44-55 Branch Ave.</i>	Single Fam	4 Bdrm	0.840				5.0			Hillside-TEMS
							5.0		5.0	
Armstrong Prop <i>30-50 Price Ave</i>	Single Fam	4 Bdrm	0.840			5.0				Hillside-TEMS
						5.0			5.0	
Howelville Rd <i>951 Howelville Rd.</i>	Townhouse	3 Brdm	0.840							Hillside-TEMS
									0	
<b>TOTAL PSAC</b>						<b>50.6</b>	<b>54.0</b>	<b>7.6</b>	<b>112</b>	

**Factors Impacting Enrollments**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Residential Permits</b>	30	31	9	12	11	7	27	26	22	92	
<b>Enrollment</b>	6097	6132	6288	6334	6457	6493	6541	6553	6575	6753	6909
<b>Enrollment (0)</b>	610	613	629	633	646	649	654	655	658	675	691
<b>Residential Sales</b>	645	551	503	499	506	570	653	587	607	665	678

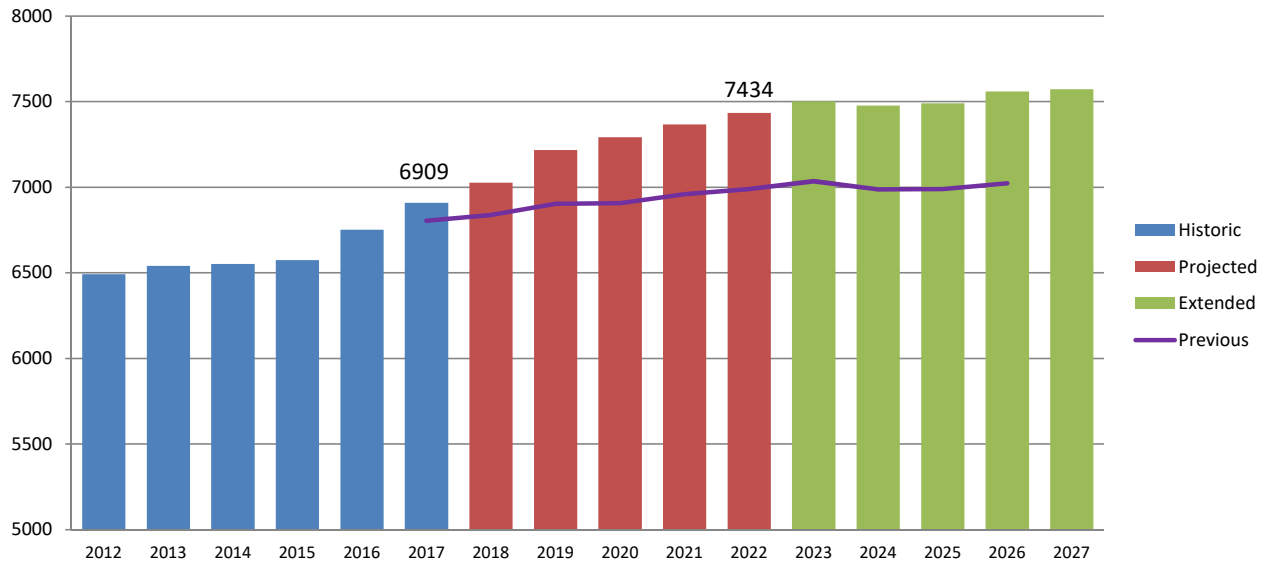
Annualized



The level of sales of existing housing at 500-700 units per year has a stronger impact on enrollments than does permitting for new housing, which for the 10-year period preceding 2016 averaged just 23 units per year.

It is unusual that the enrollment grew at a substantial rate through the 2007-12 recession despite a 150-unit reduction in annual housing sales.

### District Wide Enrollments K-12

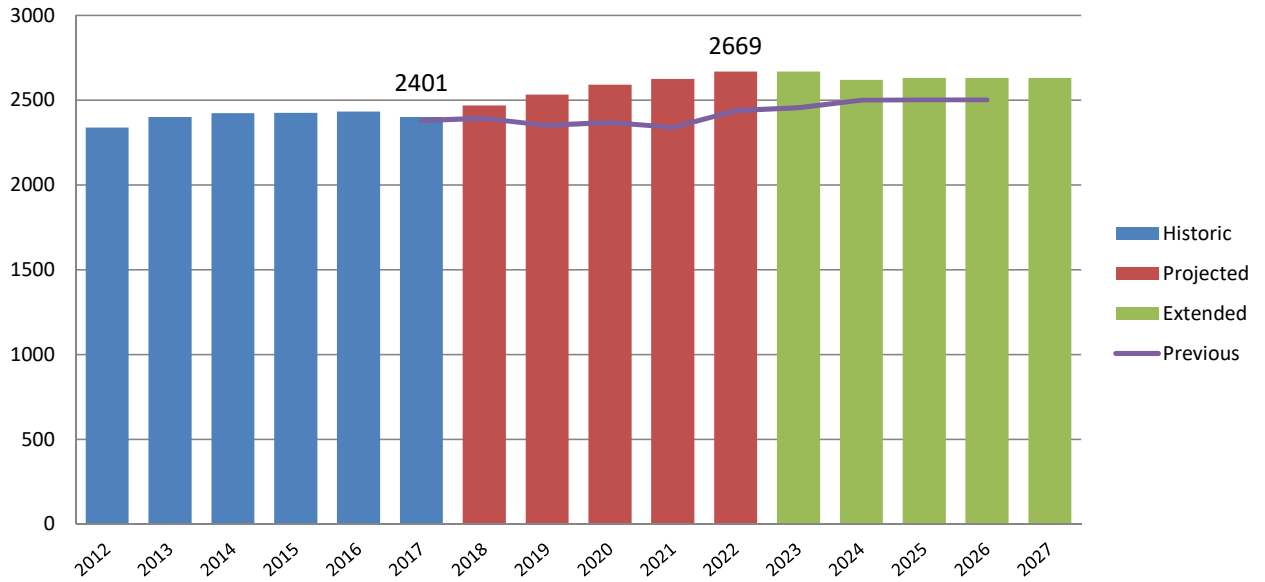


	TOTAL	Average	Change	%Chg	
<b>Historic</b>	2012	6,493			
	2013	6,541			
	2014	6,553			
	2015	6,575	6,637		
	2016	6,753			
	2017	6,909		416	6.4%
	<b>Projected</b>	2018	7,028		
2019		7,219			
2020		7,292	7,268		
2021		7,367			
2022		7,434		525	7.5%
<b>Extended</b>		2023	7,502		
	2024	7,477			
	2025	7,491	7,521		
	2026	7,559			
	2027	7,574		140	1.9%

Tredyffrin-Easttown School District  
**Elementary K-Grade 4 Enrollments**  
 52 Students from new housing

		K	1	2	3	4	K-4	Period	Period
							TOTAL	Average	Change
<b>Historic</b>	<b>2012</b>	367	524	466	500	481	<b>2,338</b>		
	<b>2013</b>	366	500	540	478	516	<b>2,400</b>		
	<b>2014</b>	393	452	519	565	495	<b>2,424</b>		
	<b>2015</b>	356	496	462	529	582	<b>2,425</b>	2,403	
	<b>2016</b>	399	462	525	500	546	<b>2,432</b>		
	<b>2017</b>	380	483	481	544	513	<b>2,401</b>		<b>63</b> 2.7%
<b>Projected</b>	<b>2018</b>	413	480	505	505	565	<b>2,469</b>		
	<b>2019</b>	452	522	503	531	525	<b>2,533</b>		
	<b>2020</b>	409	568	543	525	548	<b>2,591</b>	2,577	
	<b>2021</b>	417	513	589	566	541	<b>2,625</b>		
	<b>2022</b>	417	523	532	614	583	<b>2,669</b>		<b>268</b> 10.8%
<b>Extended</b>	<b>2023</b>	417	523	543	554	633	<b>2,670</b>		
	<b>2024</b>	417	523	543	565	572	<b>2,619</b>		
	<b>2025</b>	417	523	543	565	583	<b>2,631</b>	2,636	
	<b>2026</b>	417	523	543	565	583	<b>2,631</b>		
	<b>2027</b>	417	523	543	565	583	<b>2,631</b>		<b>-38</b> -1.4%

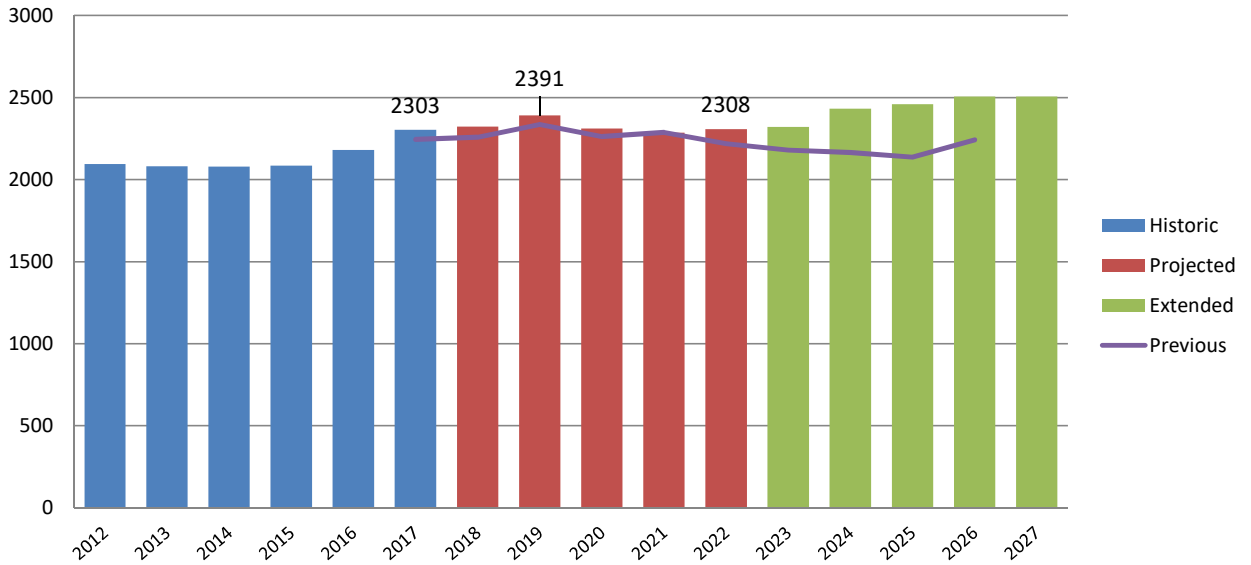
**Elementary K-Gr 4 Enrollments**



Tredyffrin-Easttown School District  
**Middle School Grade 5-8 Enrollments**  
 26 Students from new housing

		5	6	7	8	Gr 5-8 TOTAL	Period Average	Period Change	
<b>Historic</b>	<b>2012</b>	532	523	536	504	<b>2,095</b>			
	<b>2013</b>	481	537	522	541	<b>2,081</b>			
	<b>2014</b>	523	500	536	519	<b>2,078</b>			
	<b>2015</b>	506	525	511	542	<b>2,084</b>	2137		
	<b>2016</b>	600	520	540	520	<b>2,180</b>			
	<b>2017</b>	575	625	548	555	<b>2,303</b>		208	9.9%
<b>Projected</b>	<b>2018</b>	529	593	641	558	<b>2,322</b>			
	<b>2019</b>	583	546	609	653	<b>2,391</b>			
	<b>2020</b>	538	597	558	617	<b>2,310</b>	2323		
	<b>2021</b>	561	551	609	565	<b>2,286</b>			
	<b>2022</b>	554	575	562	617	<b>2,308</b>		5	0.2%
<b>Extended</b>	<b>2023</b>	597	567	586	569	<b>2,320</b>			
	<b>2024</b>	648	612	579	593	<b>2,432</b>			
	<b>2025</b>	585	664	624	586	<b>2,459</b>	2445		
	<b>2026</b>	597	600	677	632	<b>2,506</b>			
	<b>2027</b>	597	612	612	686	<b>2,506</b>		198	8.5%

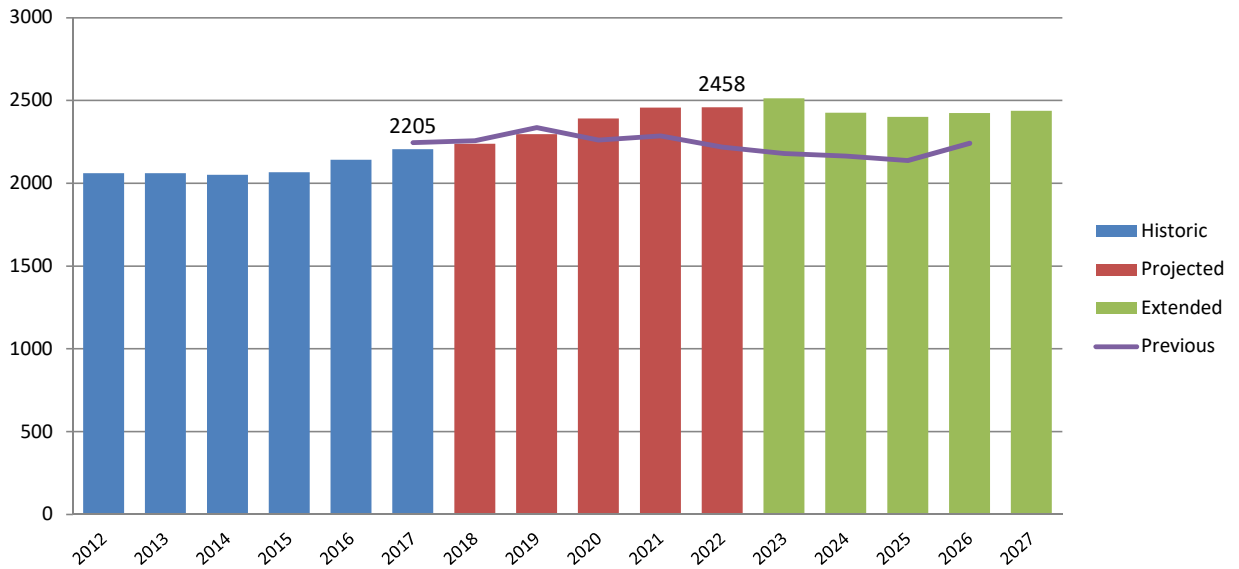
**Middle School Gr 5-8 Enrollments**



Tredyffrin-Easttown School District  
**High School Grade 9-12 Enrollments**  
 35 Students from new housing

		9	10	11	12	Gr 9-12	Period	Period	
						TOTAL	Average	Change	
<b>Historic</b>	<b>2012</b>	523	501	515	521	<b>2,060</b>			
	<b>2013</b>	501	527	510	522	<b>2,060</b>			
	<b>2014</b>	531	506	507	507	<b>2,051</b>			
	<b>2015</b>	511	550	500	505	<b>2,066</b>	2097		
	<b>2016</b>	563	523	554	501	<b>2,141</b>			
	<b>2017</b>	552	570	529	554	<b>2,205</b>		145	7.0%
<b>Projected</b>	<b>2018</b>	566	566	572	534	<b>2,237</b>			
	<b>2019</b>	569	580	568	577	<b>2,295</b>			
	<b>2020</b>	662	580	579	570	<b>2,391</b>	2367		
	<b>2021</b>	624	674	579	580	<b>2,456</b>			
	<b>2022</b>	571	636	672	579	<b>2,458</b>		253	11.3%
<b>Extended</b>	<b>2023</b>	624	582	634	673	<b>2,512</b>			
	<b>2024</b>	576	635	580	635	<b>2,426</b>			
	<b>2025</b>	600	586	634	581	<b>2,401</b>	2440		
	<b>2026</b>	593	611	585	634	<b>2,423</b>			
	<b>2027</b>	639	603	609	585	<b>2,438</b>		-20	-0.8%

**Conestoga High School Grade 9-12 Enrollments**



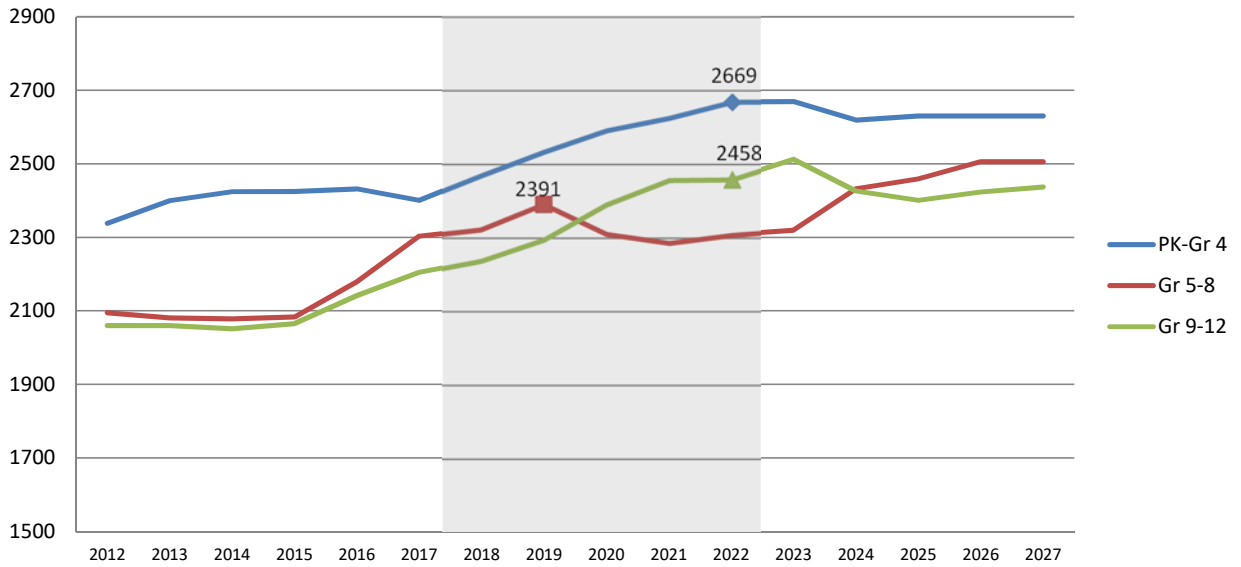


Tredyffrin-Easttown School District  
**Comparative Enrollments by Grade Level Organization**

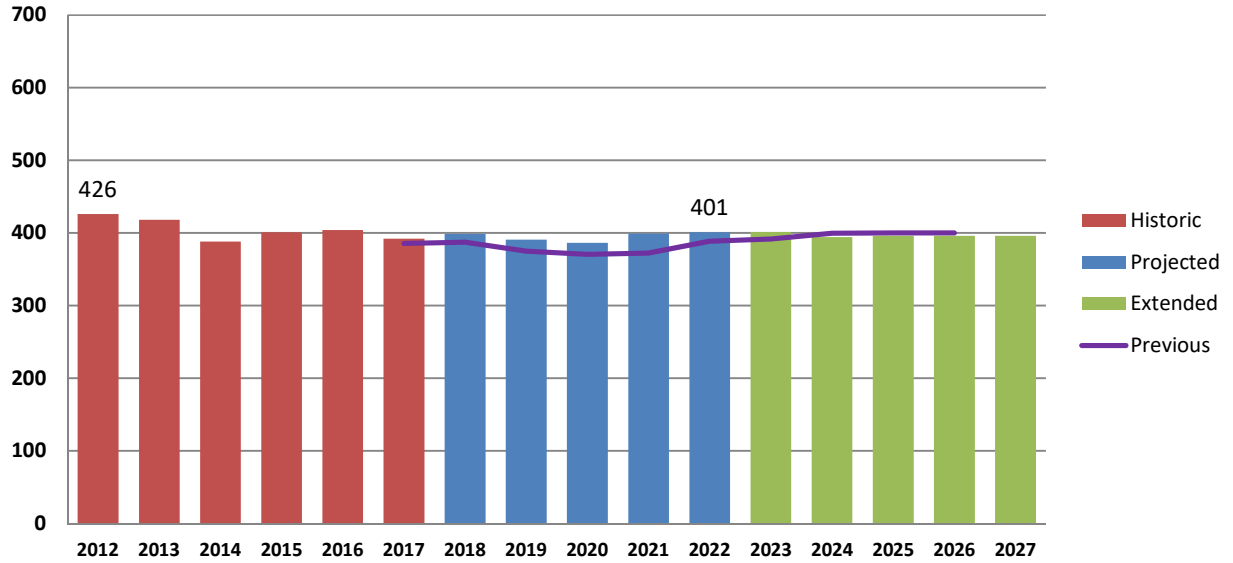
		K-4	Gr 5-8	Gr 9-12	TOTAL
<b>Historic</b>	<b>2012</b>	2338	2095	2060	6493
	<b>2013</b>	2400	2081	2060	6541
	<b>2014</b>	2424	2078	2051	6553
	<b>2015</b>	2425	2084	2066	6575
	<b>2016</b>	2432	2180	2141	6753
	<b>2017</b>	2401	2303	2205	6909
<b>Projected</b>	<b>2018</b>	2469	2322	2237	7028
	<b>2019</b>	2533	2391	2295	7219
	<b>2020</b>	2591	2310	2391	7292
	<b>2021</b>	2625	2286	2456	7367
	<b>2022</b>	2669	2308	2458	7434
<b>Extended</b>	<b>2023</b>	2670	2320	2512	7502
	<b>2024</b>	2619	2432	2426	7477
	<b>2025</b>	2631	2459	2401	7491
	<b>2026</b>	2631	2506	2423	7559
	<b>2027</b>	2631	2506	2438	7574

HIGH 5 Yr  
 LOW

**Comparative Enrollments by Grade Level Organization**



### Beaumont ES Enrollment by Year

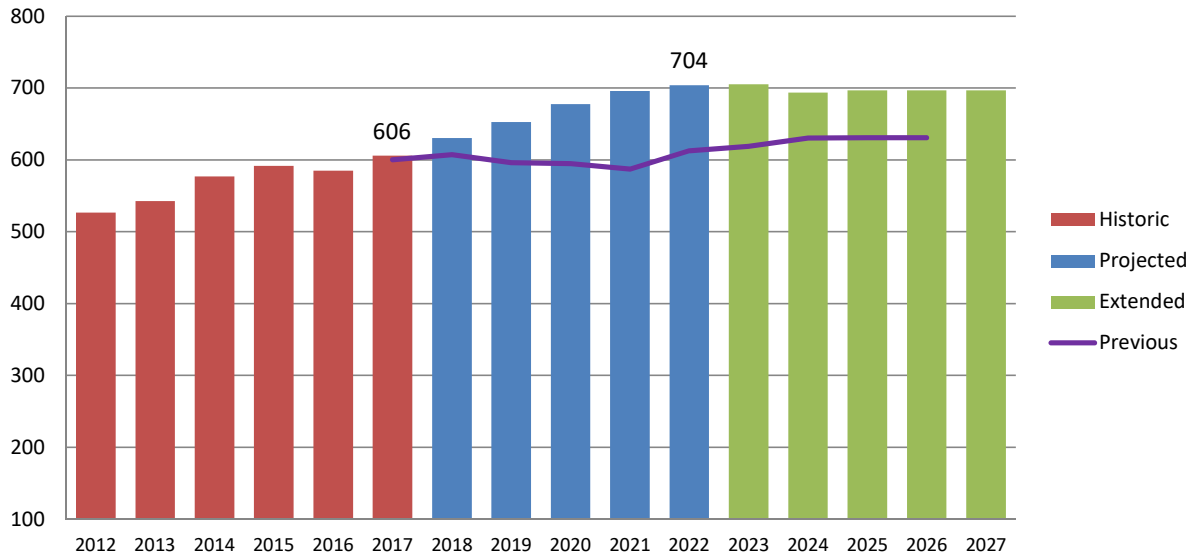


#### Beaumont Elementary School

17 students from new housing yields  
8 students at this elementary school

		K	1	2	3	4	TOTAL	Average	Change
<b>Historic</b>	<b>2012</b>	66	84	81	96	99	<b>426</b>		
	<b>2013</b>	63	92	81	77	105	<b>418</b>		
	<b>2014</b>	54	72	98	85	79	<b>388</b>		
	<b>2015</b>	59	76	79	96	91	<b>401</b>	405	
	<b>2016</b>	57	79	88	82	98	<b>404</b>		
	<b>2017</b>	60	65	85	94	88	<b>392</b>		-34 -8.0%
<b>Projected</b>	<b>2018</b>	62	76	71	88	101	<b>399</b>		
	<b>2019</b>	67	77	81	72	93	<b>391</b>		
	<b>2020</b>	61	83	83	83	76	<b>386</b>	395	
	<b>2021</b>	62	76	89	85	87	<b>399</b>		
	<b>2022</b>	62	77	81	91	89	<b>401</b>		9 2.3%
<b>Extended</b>	<b>2023</b>	62	77	83	83	96	<b>401</b>		
	<b>2024</b>	62	77	83	84	87	<b>394</b>		
	<b>2025</b>	62	77	83	84	89	<b>396</b>	397	
	<b>2026</b>	62	77	83	84	89	<b>396</b>		
	<b>2027</b>	62	77	83	84	89	<b>396</b>		-5 -1.2%

### Devon ES Enrollment by Year

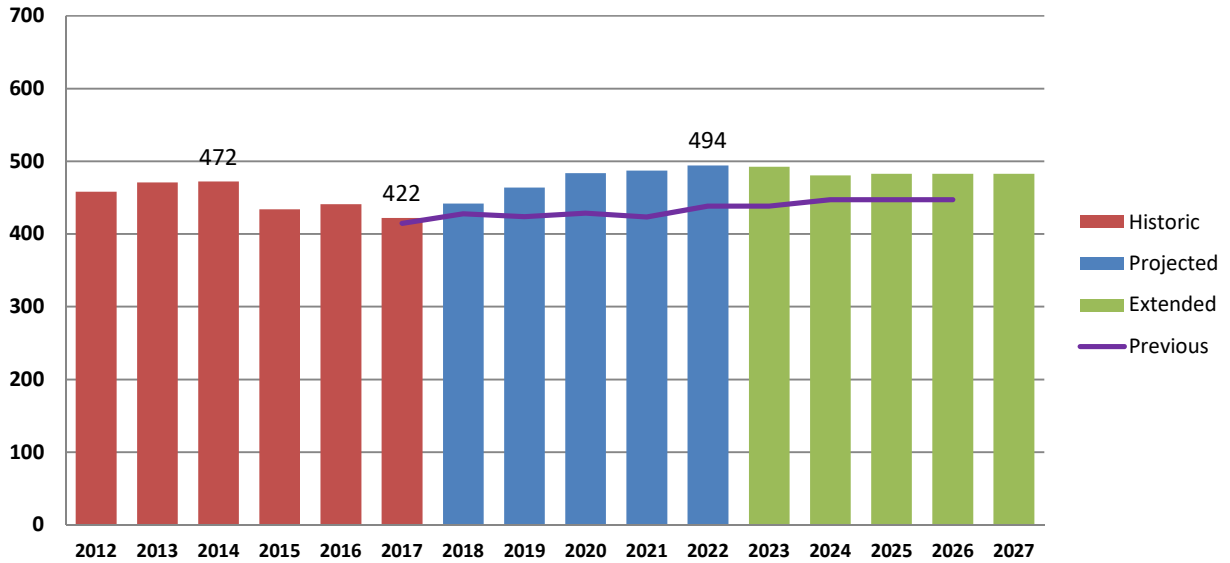


#### Devon Elementary School

12 students from new housing yields  
5 students at this elementary school

		K	1	2	3	4	TOTAL	Average	Change
<b>Historic</b>	<b>2012</b>	75	139	100	117	96	<b>527</b>		
	<b>2013</b>	87	98	143	99	116	<b>543</b>		
	<b>2014</b>	102	110	109	154	102	<b>577</b>		
	<b>2015</b>	90	133	112	110	147	<b>592</b>	572	
	<b>2016</b>	103	123	135	120	104	<b>585</b>		
	<b>2017</b>	104	123	120	138	121	<b>606</b>		79 15.0%
<b>Projected</b>	<b>2018</b>	109	134	127	124	136	<b>631</b>		
	<b>2019</b>	119	140	138	132	123	<b>653</b>		
	<b>2020</b>	108	153	144	143	130	<b>678</b>	672	
	<b>2021</b>	110	139	157	149	141	<b>696</b>		
	<b>2022</b>	110	141	143	163	147	<b>704</b>		98 15.6%
<b>Extended</b>	<b>2023</b>	110	141	146	148	160	<b>705</b>		
	<b>2024</b>	110	141	146	151	145	<b>694</b>		
	<b>2025</b>	110	141	146	151	149	<b>697</b>	698	
	<b>2026</b>	110	141	146	151	149	<b>697</b>		
	<b>2027</b>	110	141	146	151	149	<b>697</b>		-7 -1.0%

### Hillside ES Enrollment by Year

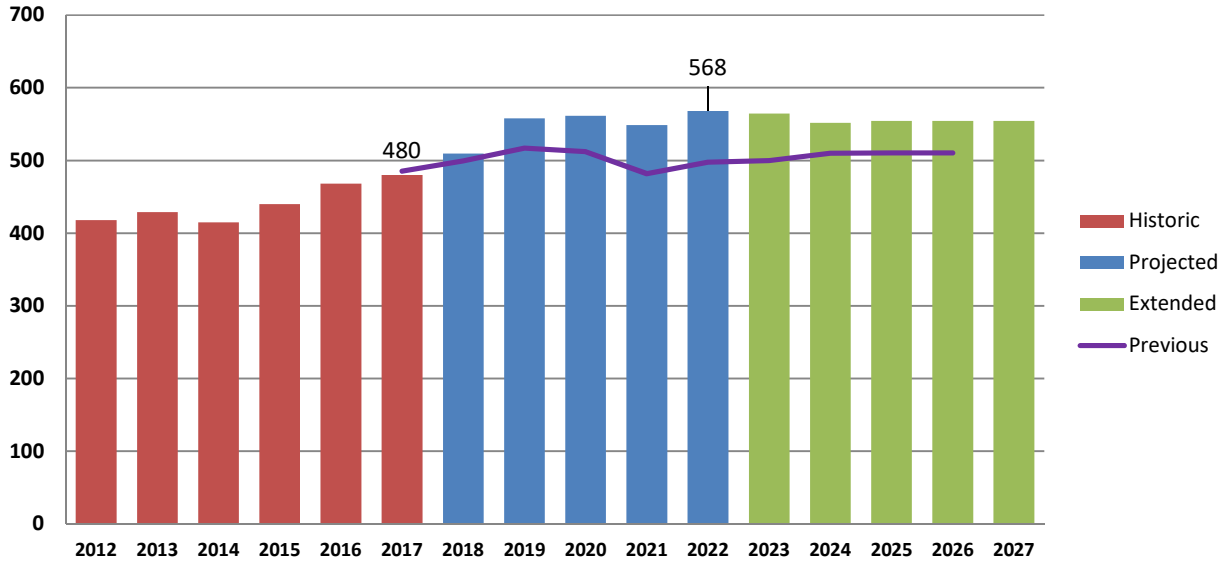


#### Hillside Elementary School

46 students from new housing yields  
21 students at this elementary school

		K	1	2	3	4	TOTAL	Average	Change
<b>Historic</b>	2012	81	95	108	86	88	458		
	2013	72	103	101	108	87	471		
	2014	86	78	101	99	108	472		
	2015	59	96	73	102	104	434	450	
	2016	76	78	98	81	108	441		
	2017	71	91	78	99	83	422		-36 -7.9%
<b>Projected</b>	2018	78	90	91	80	102	442		
	2019	87	100	92	96	85	464		
	2020	77	110	101	95	99	484	474	
	2021	79	97	110	103	98	487		
	2022	79	99	97	113	106	494		72 16.3%
<b>Extended</b>	2023	79	99	99	99	116	492		
	2024	79	99	99	101	102	481		
	2025	79	99	99	101	104	483	484	
	2026	79	99	99	101	104	483		
	2027	79	99	99	101	104	483		-11 -2.3%

### New Eagle ES Enrollment by Year

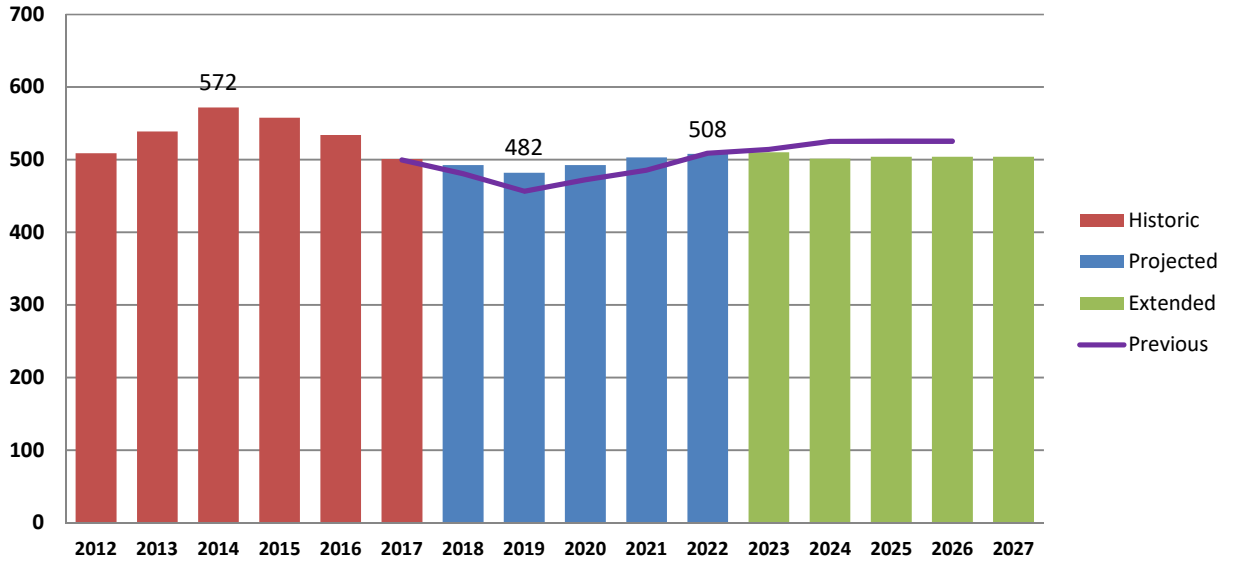


#### New Eagle Elementary School

59 students from new housing yields  
23 students at this elementary school

		K	1	2	3	4	TOTAL	Average	Change
<b>Historic</b>	2012	62	91	84	86	95	418		
	2013	64	92	98	89	86	429		
	2014	56	80	92	99	88	415		
	2015	83	77	85	94	101	440	442	
	2016	94	97	88	94	95	468		
	2017	72	115	107	90	96	480		62 14.8%
<b>Projected</b>	2018	90	88	126	114	93	510		
	2019	99	110	97	134	117	558		
	2020	88	118	119	102	135	562	549	
	2021	90	105	128	124	103	549		
	2022	90	107	113	133	125	568		88 17.3%
<b>Extended</b>	2023	90	107	115	118	134	565		
	2024	90	107	115	121	119	552		
	2025	90	107	115	121	122	554	556	
	2026	90	107	115	121	122	554		
	2027	90	107	115	121	122	554		-14 -2.4%

### Valley Forge ES Enrollment by Year



#### Valley Forge Elementary School

0 students from new housing yields  
0 students at this elementary school

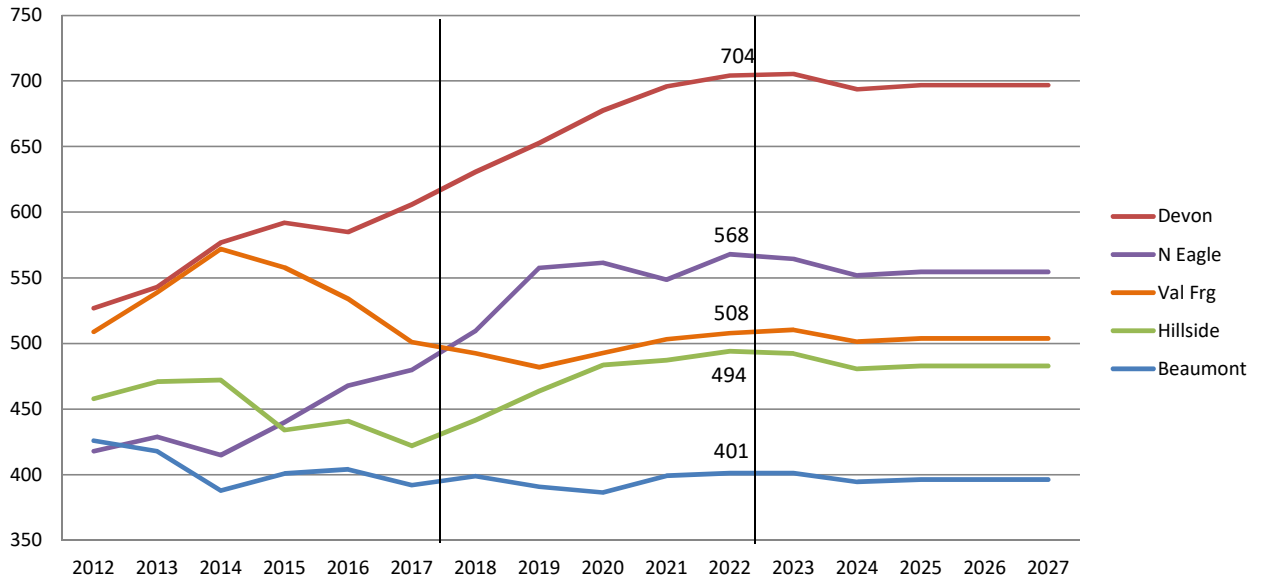
		K	1	2	3	4	TOTAL	Average	Change
<b>Historic</b>	<b>2012</b>	83	115	93	115	103	<b>509</b>		
	<b>2013</b>	80	115	117	105	122	<b>539</b>		
	<b>2014</b>	95	112	119	128	118	<b>572</b>		
	<b>2015</b>	65	114	113	127	139	<b>558</b>	536	
	<b>2016</b>	69	85	116	123	141	<b>534</b>		
	<b>2017</b>	73	89	91	123	125	<b>501</b>		-8 -1.6%
<b>Projected</b>	<b>2018</b>	74	95	92	99	133	<b>493</b>		
	<b>2019</b>	81	96	98	100	107	<b>482</b>		
	<b>2020</b>	74	106	99	106	108	<b>493</b>	496	
	<b>2021</b>	76	96	109	108	115	<b>503</b>		
	<b>2022</b>	76	98	99	118	117	<b>508</b>		7 1.4%
<b>Extended</b>	<b>2023</b>	76	98	101	108	128	<b>510</b>		
	<b>2024</b>	76	98	101	110	116	<b>501</b>		
	<b>2025</b>	76	98	101	110	119	<b>504</b>	505	
	<b>2026</b>	76	98	101	110	119	<b>504</b>		
	<b>2027</b>	76	98	101	110	119	<b>504</b>		-4 -0.8%

### Comparative Elementary Schools

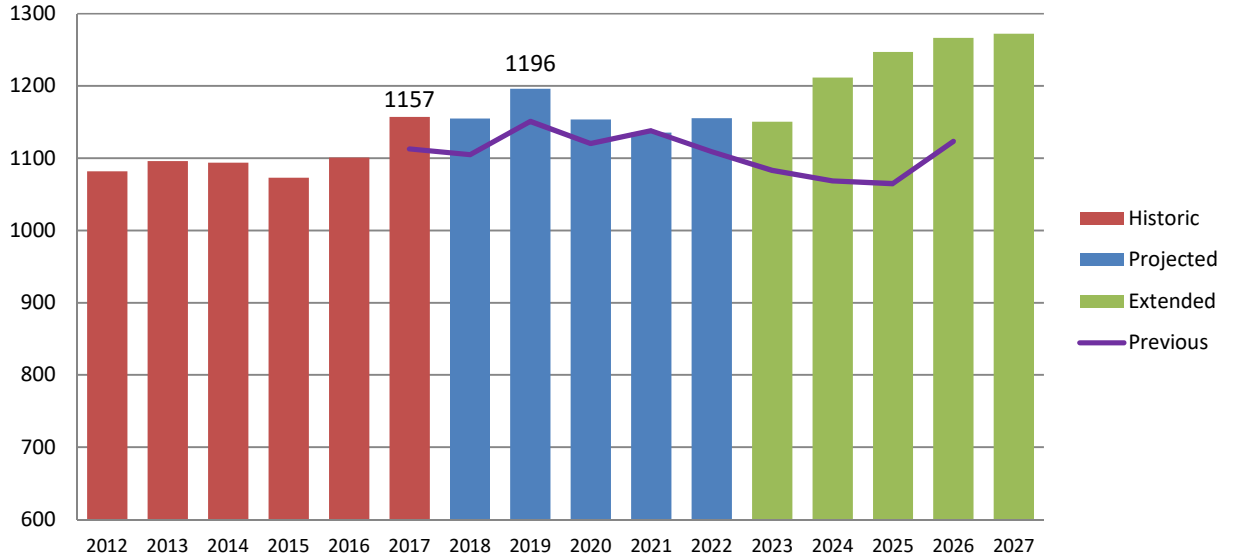
		Beaumont	Devon	Hillside	New Eagle	Valley Forge
<b>Historic</b>	<b>2012</b>	426	527	458	418	509
	<b>2013</b>	418	543	471	429	539
	<b>2014</b>	388	577	472	415	572
	<b>2015</b>	401	592	434	440	558
	<b>2016</b>	404	585	441	468	534
	<b>2017</b>	392	606	422	480	501
<b>Projected</b>	<b>2018</b>	399	631	442	510	493
	<b>2019</b>	391	653	464	558	482
	<b>2020</b>	386	678	484	562	493
	<b>2021</b>	399	696	487	549	503
	<b>2022</b>	401	704	494	568	508
<b>Extended</b>	<b>2023</b>	401	705	492	565	510
	<b>2024</b>	394	694	481	552	501
	<b>2025</b>	396	697	483	554	504
	<b>2026</b>	396	697	483	554	504
	<b>2027</b>	396	697	483	554	504

Low  
 High 5-Yr Projection

### Comparative Enrollments: Elementary Schools



### Tredyffrin-Easttown MS Enrollment by Year

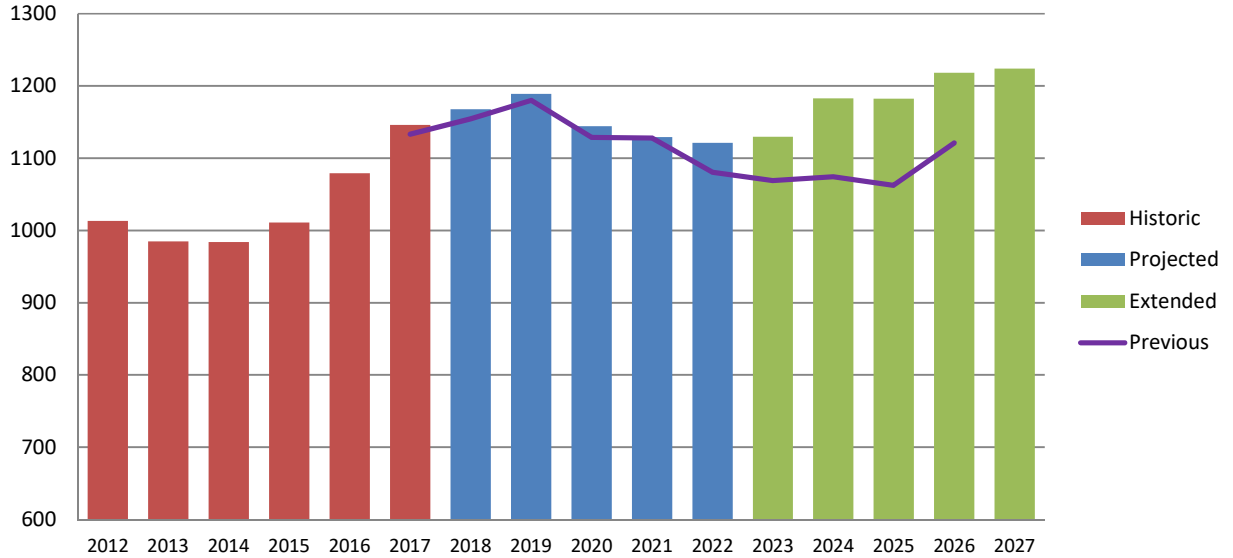


**Tredyffrin-Easttown Middle School**      51 Students from new housing, yields  
16 Students at this Middle School

		5	6	7	8	TOTAL	Average	Change
<b>Historic</b>	2012	289	275	281	237	1,082		
	2013	250	294	270	282	1,096		
	2014	271	263	292	268	1,094		
	2015	249	268	262	294	1,073	1,101	
	2016	302	259	276	264	1,101		
	2017	279	316	275	287	1,157		75 6.9%
<b>Projected</b>	2018	264	289	322	280	1,155		
	2019	302	273	294	327	1,196		
	2020	267	311	277	298	1,153	1,159	
	2021	265	275	315	280	1,135		
	2022	286	273	278	318	1,156		-1 -0.1%
<b>Extended</b>	2023	299	294	276	281	1,151		
	2024	327	308	298	279	1,212		
	2025	298	337	311	301	1,247	1,230	
	2026	304	307	341	315	1,266		
	2027	304	313	311	344	1,272		117 10.2%



### Valley Forge MS Enrollment by Year



#### Valley Forge Middle School

53 Students from new housing, yield  
12 Students at this Middle School

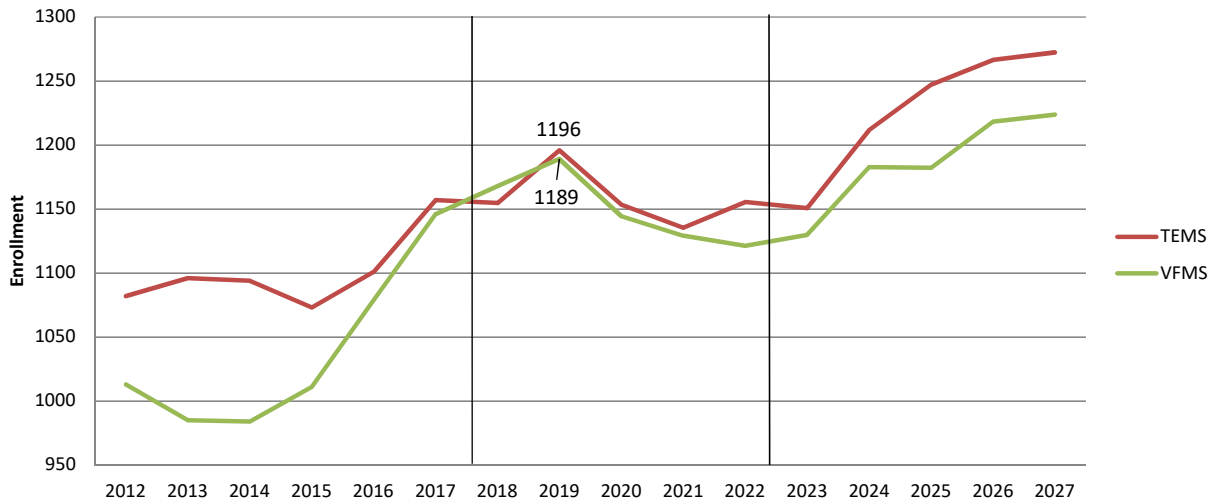
		5	6	7	8	TOTAL	Average	Change
<b>Historic</b>	<b>2012</b>	243	248	255	267	<b>1,013</b>		
	<b>2013</b>	231	243	252	259	<b>985</b>		
	<b>2014</b>	252	237	244	251	<b>984</b>		
	<b>2015</b>	257	257	249	248	<b>1,011</b>	1,036	
	<b>2016</b>	298	261	264	256	<b>1,079</b>		
	<b>2017</b>	296	309	273	268	<b>1,146</b>		<b>133</b> 13.1%
<b>Projected</b>	<b>2018</b>	265	304	320	279	<b>1,168</b>		
	<b>2019</b>	277	272	314	326	<b>1,189</b>		
	<b>2020</b>	262	283	280	319	<b>1,144</b>	1,150	
	<b>2021</b>	287	267	291	284	<b>1,129</b>		
	<b>2022</b>	259	292	274	296	<b>1,121</b>		<b>-25</b> -2.1%
<b>Extended</b>	<b>2023</b>	287	264	301	278	<b>1,130</b>		
	<b>2024</b>	314	292	271	305	<b>1,183</b>		
	<b>2025</b>	286	320	301	275	<b>1,182</b>	1,187	
	<b>2026</b>	292	292	329	305	<b>1,218</b>		
	<b>2027</b>	292	298	300	334	<b>1,224</b>		<b>103</b> 9.1%

**Comparative Middle Schools**

		TEMS	VFMS
<b>Historic</b>	2012	1082	1013
	2013	1096	985
	2014	1094	984
	2015	1073	1011
	2016	1101	1079
	2017	1157	1146
<b>Projected</b>	2018	1155	1168
	2019	1196	1189
	2020	1153	1144
	2021	1135	1129
	2022	1156	1121
<b>Extended</b>	2023	1151	1130
	2024	1212	1183
	2025	1247	1182
	2026	1266	1218
	2027	1272	1224

Low  
 High 5-Yr Projection

**Comparative Enrollments: Middle School**



Standard Cohort-Survival Enrollment Projection Worksheet

DISTRICT NAME: Tredyffrin-Easttown School District

COUNTY: Chester

DATA ISSUES: Enrollments are from the Oct 1 reports.

"s" = survival rate

School Year	Births 5 Sch Yrs. Ago "s"	K-5						K-5 Subt.	EUG	K-5 Total (excl. PK)	PK SCSE	PK 3 yrs.	PK 4yrs.	PK-5 Total	6-8			6-8 Subt.	MUG	6-8 Total	9-12				9-12 Subt.	SUG	9-12 Total	PK Subt.	K-12 Subt.	K-12 Total excl. SCSE w/ SCSE	PK-12 Total	
		K Gr.	1st Gr. "s"	2nd Gr.	3rd Gr.	4th Gr.	5th Gr.								6th Gr. "s"	7th Gr.	8th Gr.				6-8 Gr.	7th Gr.	8th Gr.	9th Gr. "s"								10th Gr.
2012-13	346	1.061	367	524	466	500	481	532	2870	0	2870	0	0	0	2870	523	536	504	1563	0	1563	523	501	515	521	2060	0	2060	0	6493	6493	6493
2013-14	384	0.953	366	500	540	478	516	481	2881	0	2881	0	0	0	2881	537	522	541	1600	0	1600	501	527	510	522	2060	0	2060	0	6541	6541	6541
2014-15	348	1.129	393	452	519	565	495	523	2947	0	2947	0	0	0	2947	500	536	519	1555	0	1555	531	506	507	507	2051	0	2051	0	6553	6553	6553
2015-16	328	1.085	356	496	462	529	582	506	2931	0	2931	0	0	0	2931	525	511	542	1578	0	1578	511	550	500	505	2066	0	2066	0	6575	6575	6575
2016-17	289	1.381	399	462	525	500	546	600	3032	0	3032	0	0	0	3032	520	540	520	1580	0	1580	563	523	554	501	2141	0	2141	0	6753	6753	6753
2017-18	343	1.108	380	483	481	544	513	575	2976	0	2976	0	0	0	2976	625	548	555	1728	0	1728	552	570	529	554	2205	0	2205	0	6909	6909	6909
6 Yr Avg SR	1.119		1.274	Std												1.024	1.020	1.012				1.012	1.018	0.997	1.001							
2 Yr Avg SR	1.244		1.254	5 Yr >	1.038	1.042	1.031	1.024																								

Change # Students: 106, 106, 106, 165, 165, 145, 145, 416  
 Change % Students: 4%, 4%, 4%, 11%, 11%, 7%, 7%, 6%

5-YR PROJECTIONS		2018-19						2019-20						2020-21						2021-22						2022-23						
2018-19	329	1.244	409	477	501	501	561	525	2975	0	2975	0	0	0	2975	589	638	555	1781	0	1781	562	562	569	530	2222	0	2222	0	6978	6978	6978
2019-20	360	1.244	448	513	495	522	517	574	3070	0	3070	0	0	0	3070	538	601	645	1784	0	1784	561	572	560	569	2263	0	2263	0	7116	7116	7116
2020-21	328	1.244	408	562	533	515	539	529	3086	0	3086	0	0	0	3086	588	549	608	1745	0	1745	653	571	570	561	2356	0	2356	0	7187	7187	7187
4 Yr Avg			1.254	1.038	1.042	1.031	1.024																									
2021-22	335	1.244	417	512	583	555	532	552	3150	0	3150	0	0	0	3150	542	600	556	1698	0	1698	615	665	570	571	2421	0	2421	0	7269	7269	7269
2022-23	335	1.244	417	523	531	608	573	544	3195	0	3195	0	0	0	3195	565	553	607	1726	0	1726	562	626	663	570	2422	0	2422	0	7343	7343	7343

Change # Students: 219, 219, 219, -2, -2, 217, 217, 434  
 Change % Students: 7%, 7%, 7%, 0%, 0%, 10%, 10%, 6.3%

**KEY to Number Colors**


- 99 Standard number with no modifications to methodology
- 99 Provisional, but uncertified births from the PA Department of Health
- 99 Births projected as an average of the prior 6 years, including provisional data...and projected students resulting from this "less accurate" average
- 99 Students per Grade Level added for residential development

The above information is prepared and certified by a qualified demographer.

Firm Name: Sundance Associates 117 Greenvale Ct. Cherry Hill NJ 08034

Name: George B. Sundell Tel 856-755-0174 Email: GSundell@sundanceassoc.com

Signature: *George B. Sundell* Date: November 1, 2017



6-10 YR PROJECTIONS		2023-24						2024-25						2025-26						2026-27						2027-28						
2023-24	335	1.244	417	523	543	554	627	586	3249	0	3249	0	0	0	3249	558	576	560	1694	0	1694	615	572	625	664	2476	0	2476	0	7418	7418	7418
4 Yr Avg			1.254	1.038	1.042	1.031	1.024																									
2024-25	335	1.244	417	523	543	565	571	642	3260	0	3260	0	0	0	3260	601	569	583	1753	0	1753	566	626	571	626	2389	0	2389	0	7401	7401	7401
Continued			1.254	1.038	1.042	1.031	1.024																									
2025-26	335	1.244	417	523	543	565	583	585	3215	0	3215	0	0	0	3215	657	613	576	1846	0	1846	590	577	624	571	2363	0	2363	0	7423	7423	7423
2026-27	335	1.244	417	523	543	565	583	597	3228	0	3228	0	0	0	3228	599	670	620	1889	0	1889	583	601	575	625	2383	0	2383	0	7500	7500	7500
2027-28	335	1.244	417	523	543	565	583	597	3228	0	3228	0	0	0	3228	612	611	679	1901	0	1901	628	593	599	576	2396	0	2396	0	7524	7524	7524

Change # Students: 32, 32, 32, 175, 175, -27, -27, 181  
 Change % Students: 1%, 1%, 1%, 9%, 9%, -1%, -1%, 2%

**Adjusted for Impact of New Housing Cohort-Survival Enrollment Projection Worksheet - District**

DISTRICT NAME: Tredyffrin-Easttown School District

COUNTY: Chester

FALL REPORT AND Enrollments are from the Oct 1 reports.

\*s" = survival rate

School Year	Births 5 Yrs. Ago	"s"	K-5							6-8				9-12				PK Subt.	K-12 Subt.	K-12 Total	PK-12 Total	New Children Cum	Yr Add											
			K	1st Gr.	2nd Gr.	3rd Gr.	4th Gr.	5th Gr.	Subt.	SCSE	Total	PK SCSE	PK 3 yrs.	PK 4 yrs.	PK-5 Total	6th Gr.	7th Gr.							8th Gr.	6-8 Subt.	SCSE	Total	9th Gr.	10th Gr.	11th Gr.	12th Gr.	9-12 Subt.	SCSE	Total
<b>5-YR PROJECTIONS PLUS NEW HOUSING</b>																																		
2018-19	329	1.244	413	480	505	505	565	529	2998	0	2998	0	0	0	2998	593	641	558	1793	0	1793	566	566	572	534	2237	0	2237	0	7028	7028	7028	51	51
2019-20	360	1.244	452	522	503	531	525	583	3116	0	3116	0	0	0	3116	546	609	653	1809	0	1809	569	580	568	577	2295	0	2295	0	7219	7219	7219	105	54
2020-21	328	1.244	409	568	543	525	548	538	3130	0	3130	0	0	0	3130	597	558	617	1772	0	1772	662	580	579	570	2391	0	2391	0	7292	7292	7292	112	8
2021-22	335	1.244	417	513	589	566	541	561	3186	0	3186	0	0	0	3186	551	609	565	1725	0	1725	624	674	579	580	2456	0	2456	0	7367	7367	7367	112	0
2022-23	335	1.244	417	523	532	614	583	554	3223	0	3223	0	0	0	3223	575	562	617	1754	0	1754	571	636	672	579	2458	0	2458	0	7434	7434	7434	112	0
Change # Students									247	247	247	26	26	253	253	525																		
Change % Students									8%	8%	8%	1%	1%	11%	11%	8%																		

<b>6-10-YR PROJECTIONS PLUS NEW HOUSING NOT CONSIDERED RELIABLE</b>																																		
2023-24	335	1.244	417	523	543	554	633	597	3267	0	3267	0	0	0	3267	567	586	569	1723	0	1723	624	582	634	673	2512	0	2512	0	7502	7502	7502	0	0
2024-25	335	1.244	417	523	543	565	572	648	3267	0	3267	0	0	0	3267	612	579	593	1784	0	1784	576	635	580	635	2426	0	2426	0	7477	7477	7477	0	0
2025-26	335	1.244	417	523	543	565	583	585	3216	0	3216	0	0	0	3216	664	624	586	1874	0	1874	600	586	634	581	2401	0	2401	0	7491	7491	7491	0	0
2026-27	335	1.244	417	523	543	565	583	597	3228	0	3228	0	0	0	3228	600	677	632	1909	0	1909	593	611	585	634	2423	0	2423	0	7559	7559	7559	0	0
2027-28	335	1.244	417	523	543	565	583	597	3228	0	3228	0	0	0	3228	612	612	686	1909	0	1909	639	603	609	585	2438	0	2438	0	7574	7574	7574	0	0
Change # Students									112	5	5	155	155	-20	-20	140																		
Change % Students									0%	0%	0%	9%	9%	-1%	-1%	2%																		

**KEY to Number Colors**


- 99 Standard number with no modifications to methodology
- 99 Provisional, but uncertified births from the NJ Department of Health & Senior Services
- 99 Births projected as an average of the prior 6 years, including provisional data...and projected students resulting from this "less accurat" average
- 99 Students per Grade Level added for residential development

The above information is prepared and certified by a qualified demographer.

Firm Name: Sundance Associates 117 Greenvale Ct. Cherry Hill NJ 08034

Name: George B. Sundell Tel 856-755-0174 Email: GSundell@sundanceassoc.com

Signature: *George B. Sundell* Date: November 1, 2017



# Cohort Survival Methodology

## Mathematical Analysis

Cohort Survival is the name given to the method of projecting enrollments which is recommended by the Pennsylvania Department of Education. The most important terms, concepts and methodology are illustrated herein.

*Enrollment projections have been made using the Cohort Survival method with modifications as described on the following page..*

Cohort Survival projections are based on historic enrollment and birth data in the individual school district and incorporate six years of demographic data. They are considered very reliable where trends are expected to continue, without significant change in housing or birth rates.

Cohort is the name given to the common groups of children originally born in a given year and progressing, together, through the school system, one grade level to the next.

Survival Ratios refer to the number of students from one year and grade level who “survive to” or enter the next grade level the following year.

For example, in the sample partial table in the side bar, historic enrollments show 366 students in 1st Grade in year 2013-14 following a 346 student Kindergarten in year 2012-13. This yields a Kindergarten to First Grade **Survival Ratio** of 1.061 (or  $366 \div 346$ ). Another expression of the Survival Ratio would be that 106% of the Kindergarten students “survived” to 1st Grade.

### Historic Data

School Year	Births		K		1st		2nd	
	Sch Yrs.	#	#	%	#	%	#	%
2012-13	346	1001	367	106%	524	1031	406	1031
2013-14	366	1031	366	100%	500	1038	540	1038
2014-15	340	1001	383	113%	452	1022	519	1022
2015-16	328	1005	355	108%	486	1058	462	1058
2016-17	289	1001	309	107%	462	1041	529	1041
2017-18	343	1100	390	114%	483	1038	461	1038
5 Yr Avg SR		1.119	1.274		Std			
2 Yr Avg SR		1.244	2 Yr		1.254	5 Yr>		1.038

Similar calculations are made for “survival” from Births Five Years Earlier to Kindergarten, and for each and every grade level transition in each and every year of historical enrollments which are used. In general, six years of historic data will yield five Survival Ratios for each grade level change, Birth to K, K to 1, 1 to 2, etc.

The **Average Survival Ratio** is then calculated for each grade level change. In the side-bar example 1.038 is the 5-year average 1st Grade to 2nd Grade ratio.

The sample projections use the current school year 2017-18 enrollments, at the bottom of the Historic chart, as a base year. The Averaged Cohort Survival Ratios are applied to those base year enrollments and to the actual and estimated births, and projected into the next year, one grade level higher.

### Projected Enrollments

5-YR PROJECTIONS					
2018-19	329	1.244	408	477	501
2019-20	350	1.244	428	512	498
2020-21	328	1.244	408	502	503
4 Yr Avg			1.254	1.038	
2021-22	336	1.244	417	512	503
2022-23	336	1.244	417	503	501

Change # Students

In the side-bar example 329 Kindergarten students in 2018-19 survive at a rate of 1.244 as a 2019-20 First Grade of 409 students. This similar projection is made across all grade levels for a 5-year period. Finally, the individual grade level enrollment projections are summed across each year to determine district-wide enrollments in that year.

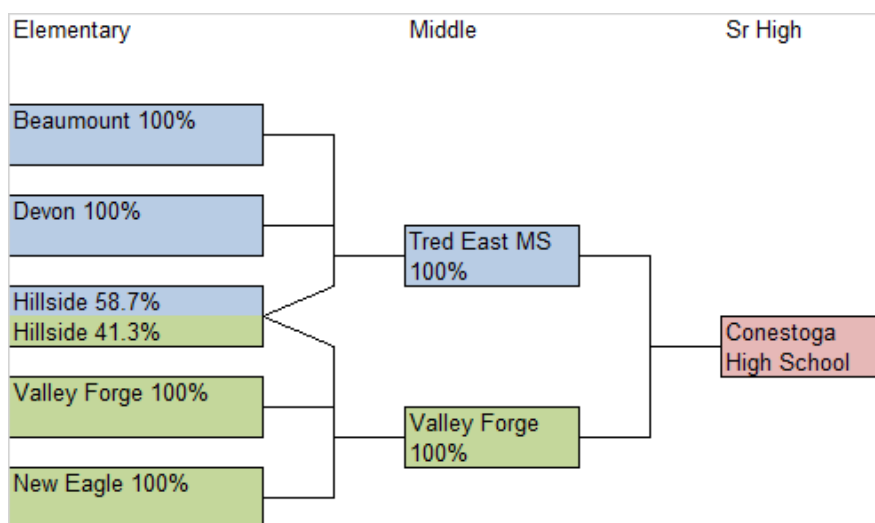
## Cohort Survival Methodology

### Adjustments to Standard Methods

Since the study also provides school level projections, it is important to define the feeder system from elementary school to middle school and middle school to high school.

That feeder system includes students from Hillside Elementary School split 58.6% to Tredyffrin-Easttown Middle School and 41.3% to Valley Forge Middle School.

This is not as much an adjustment to method as it is to distribution.



Hillside 4th Grade ES to		
	TE %	VF %
2011	0.568	0.431
2012	0.568	0.431
2013	0.629	0.371
2014	0.590	0.409
2015	0.578	0.422
2016	0.586	0.413
Avg	0.587	0.413

*The Hillside Elementary School enrollment split to middle schools was addressed in the school level projections.*

No adjustments were made for impact of private/parochial school closures, changes in Charter enrollment or changes in Out-of-District placement which are anticipated to continue within existing trends.

Adjustments were made to the standard Cohort Survival projection method for the **impact of the new Multi-family housing**. This is accomplished as an overlay to the standard projection.

In each year, the number of students from new housing is distributed equally across all grades and added to the standard projection (cohort) for the grade. In the subsequent years it is "survived" at the standard rates for that cohort.

Adjustments were made to the **Birth to Kindergarten Survival Ratio**. The Survival Ratio of the last twoyears only at 1.244 is used. The standard 6-year Survival Ratio of a lower 1.119 is not used. Similiary, a two-year S/R was used for K:1st Grade of 1.254, slightly lower than the 6-year S?R of 1.274

Finally, the 4-year average of 355 **Births** was used rather than the lower 6-year average. This is for Births in the Extended Projection period and effect Elementary grade counts in the final 5 years.

School Year	Births 5 Yrs. Age	%	K	1st	2nd
<b>5-YR PROJECTIONS PLUS NEW HOUSING</b>					
2016-16	322	1.027	322	489	472
			1.241	1.040	
2016-17	322	1.027	322	414	371
			1.241	1.040	
2017-18	321	1.027	341	483	432
			1.241	1.040	
2018-19	348	1.027	348	483	472
			1.241	1.040	
2019-20	348	1.027	348	444	440

*Adjustments were made for the impact of students from new housing...and for the Birth to Kindergarten Survival Ratio.*

**Grade Level Cohort Survival Ratios**  
**TEDS October 2017 Enrollment Projection**

