Demographic Study Public School Enrollments for

Avon Grove School District

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A. Cohort Survival Worksheets

- 1. Standard Projection
- 2. Alt 2 Projection that is Adjusted "K:Gr 1" Projection, using Fall 2019 K: Gr 1 Survival Ratio
- 3. Charter only 3 B:K S/Rs Projection
- 4. Charter plus Cyber only 3 B:K S/Rs Projection
- 5. Adjusted "All / Combined" Projection combining District, Charter and Cyber students as base



Executive Summary

The Methodology used in projecting enrollments is the recommended method of the Pennsylvania Department of Education (PDE) and is known as "Cohort Survival" or "Grade Level Progression".

The Avon Grove School District (AGSD) had a student population of just 5,020 students (Oct 2021) in 4 schools, organized as a Grade K-2 Elementary, followed by a Gr 3-6 Intermediate School, a Grade 7 & 8 Middle School and a Grade 9-12 High School.

The Municipalities in the School District include seven municipalities in Chester County; the Boroughs of Avondale and West Grove, and Franklin Township, London Britain Township, London Grove Township, New London Township and Penn Township.

Private School enrollment levels start at 18.2% in Kindergarten, and 8.7% in Grade 1-4, increasing to 8.3% in Grades 5-8 and ending at 9.5% in Grades 9-12.

Population Trends are such that the school district area had a population of only 6,896 in 1950 which increased to 31,907 in the peak year of 2020.

Age & Gender Pyramids, with population counts in 5-year age groupings, show Child Bearing Age groups to be relatively small; and that the school age and pre-school age groups are successively smaller in size.

Population by Age Group from 1990 to 2010 to 2019 reveals an increase in the population of all groups with recent smaller rates of growth with the exception of School Age which decreased from 2010 to 2019.

Live Births in the AGSD have been slightly decreasing since year 2016 with a high of 345 Births in 2016. The 6-year trend is for 3.9 fewer births per year.

Historic Residential permitting for new construction peaked at 495 units in year 2004, and decreased to 46 units in 2015. The recent 6-year average is 53 units per year.

Future Residential Permitting 2022-26 is not anticipated to rise above the recent 6-year average.

School Age Children will be generated by "below the average" units, but their counts are "built into" the projection that utilizes the 6-year average Grade Level Cohort Survival Rates. Therefore, NO modifications for students from new housing are made in this projection.

This study makes a Standard and two Alternate projections. The alternates are Alternate #1 "All" and Alternate #2 "K:1".

The Standard projection utilizes 6 years of enrollment history to calculate 5-year average Survival Rates.

The AGSD, with a year 2020 constituent population of 31,907 continues to grow at a moderately increasing rate.



Executive Summary /2

The **Alternate 1 "All"** projection is based on a combined projection that first includes all possible students within the district geography, in a standard projection i.e. all District, Cyber and Charter students. From that is subtracted a second a**djusted** projection that only includes combined Cyber and Charter students, and uses only the most recent 3 years average of the decreasing Birth to Kindergarten Survival Ratios. The remaining students are at the District. This alternate projection results in from 3 additional students in year one to 30 fewer students in year five.

A Standard and two Alternate projections are made.

The **Alternate 2 "K:1"** projects uses a reduced Kindergarten to Grade 1 Survival Ratio of 1.027 instead of the 6-year average of 1.108. This adjustment is made using the Fall 2019 to Fall 2020 Survival Rate that is the last prior to the Pandemic years. K:1 is the only Survival Rate that is adjusted. This adjustment results in an average of 26 fewer students in each future 1st Grade.

District-wide Enrollment increased by 73 students in the actual projection period ending at 5,020 students. The district enrollment will increase by 250 students to 5,270 in 2026 in the Standard projection, by 220 students to 5,240 in the Alternate 1 projection, and by 103 students to 5,123 in the Alternate 2 projection.

The District experienced a 73 student increase in the 6-year actual period. In the 5-year projection period, the district enrollment will increase by an additional 103-250 students.

Less accurate 6th to 10th year extended projections are not reported in this summary.

In the 5-year projection period, ...

Elementary School Enrollment for Grades K-2/1 increased by 194 students in the actual period ending at a high of 1,038 students. Enrollments will increase to 1,072 next year before realignment as a K-1 school and ending the projection period at 654 students in the Standard projection, at 697 students in the Alternate 1 projection, and at 629 in the Alternate 2 projection. Enrollments are under Capacity after the realignment.

Avon Grove Elementary School enrollments are decreasing between 341 and 409 students, after reorganizing with one fewer grade level.

Intermediate School Enrollments for Grades 3-6 (Gr 2-5 in Fall 2023) were stable for 4 years then decreased by 55 students to 1,429 students in the actual period. During the projection period, enrollments increase to a high of 1,685 in the Standard projection, to 1,670 in the Alternate 1 projection and to 1,562 in the Alternate 2 projection. Enrollments exceed PDE and Functional Capacity in all the projections.

Avon Grove Intermediate School enrollments are increasing between 133 and 256 students after reorganizing as a Grade 2-5 school.

Middle School Enrollments for Grades 7-8 (Gr 6-8 in Fall 2023) were stable averaging 827 students in the historic period. During the projection period, enrollments increase by 472 with the addition of a grade level in the Standard and Alternative 2 projection ending at 1,290 in year 2026, and are increasing in the Alternate 1 projection ending at 1,226. Enrollment is 16 students over the increased Functional Capacity in year 2026.

Middle School enrollments are increasing between 408 and 472 students after adding a grade level in the realignment as a Grade 6-8 school.

High School Enrollments for grades 9-12 decreased 60 students to 1,735 in the actual period. During the projected period, enrollments will decrease by 93 students to 1,642 students in the Standard and Alternate 2 projections, and decrease by 11 students to 1,724 in the Alternate 1 projection. Enrollments are under Capacity in all years following the new school opening.

High School enrollments are decreasing between 11 to 93 students .



Introduction

Sundance Associates has been retained by the Avon Grove School District to prepare a demographic study of the district and to project enrollments from school year 2022-23 to school year 2026-27.

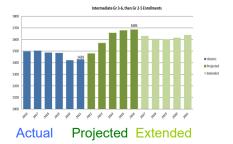
Actual enrollment data is from the official annual October submissions to PDE. Birth data is from the official web site of the Pennsylvania Department of Health.

The actual enrollments for this demographic study begin with the October 1 enrollment reports for the 2016-17 school year and end with the October 1 enrollment reports for 2021-22 school year. In projection graphs, the actual enrollments appear in blue.

The five-year enrollment projections begin with the 2022-23 school year and end with the 2026-27 school year and appear in dark green. The extended and less accurate 6-10 year projection is in light green.

Extensive data and graphics that support understanding of general demographic trends are provided, however, it is important to understand that they are for support purposes only. This projection is made based on Live Births and Historic Enrollment, the two primary determinants of future enrollments.

The information in this demographic report is suitable for inclusion in any document to be forwarded to the Pennsylvania Department of Education for matters concerning school facilities.





Projection Methodology Cohort Survival

Although many techniques have been used to predict demographic trends including future enrollment, the method most widely employed and accepted for predicting future school enrollment is the "Cohort-Survival" method. This method is considered the most reliable. It captures the key determinants of enrollment, yet also allows for changes in historical trends, is relatively simple to apply and the data requirements are reasonable and usually easily fulfilled.

The major assumption underlying the cohort survival method is that the past to a large extent is a reasonable predictor of the future: that is, given the number of births and historical enrollment, the net effect of all other factors remain in relative balance.

However, any of the following factors could cause a significant change in projected student enrollments, and adjustments to the standard methodology may be made for:

- Boundary adjustments, school openings or consolidation
- Changes/additions in program offerings
- · Preschool programs
- Change in grade configuration
- · General Economic Conditions, Interest rates/unemployment shifts
- Magnet/Charter/Private school opening or closure
- Zoning changes
- New housing activity; planned, but not built, housing
- In and Out-Migration

The cohort-survival method requires the calculation of the ratio of the number of children in one grade in one year compared to the number of children who "survive" the year and enroll in the next grade the following year (see detailed Mathematical Analysis, page 14). Fluctuations in such data from year to year create a pattern over time from which an average rate may be calculated to project enrollment.

The reliability of the cohort-survival method is related to both the number of years one is projecting as well as the relative volatility of the historical data. Projections covering five years or less, especially at the elementary level, tend to be more reliable than projections going out more than five years. In addition, in some communities the numbers of births, population, household size, and net migration rates have held relatively steady which increases the reliability of the results. In other communities, one or more such variables exhibit extreme variation leading to less reliable results.

The major assumption underlying the cohort survival method is that the past to a large extent is a reasonable predictor of the future.

The most important factors are Live Birth counts and historical, grade level Enrollment counts.



The Institute of Educational Sciences, 1997 publication "Accuracy of Enrollment Forecast Methods", reviews three special-purpose forecasting methods ... and three methods of universal applicability (the cohort-survival, percentage- survival, and law-of-growth methods) to help administrators grasp enrollment forecasting technicalities. A comparison shows that the cohort-survival method consistently produced lower error rates for each fiveyear projection for median or mean error rates.



Profile: School District

The Avon Grove School District is a publicly funded school district located in West Grove, Pennsylvania, 19390. The District is located in a rural-suburban setting 34 miles southwest of Philadelphia, PA, and 18 miles northwest of Wilmington, DE. Avon Grove covers 67 square miles and consists of five townships and two boroughs. They include the Boroughs of Avondale and West Grove and Franklin Township, London Britain Township, London Grove Township, New London Township and Penn Township in Chester County, Pennsylvania.

In the fall of 2021, the district operates one High School, one Middle School, and two Elementary Schools with a combined enrollment of 5,020 students. The schools are;

Penn London Elementary School (K-2) with 1,038 students averaging 346 students per grade.

Avon Grove Intermediate School (3-6) with 1,429 students averaging 357 students per grade.

Fred S. Engle Middle School (7-8) with 818 students averaging 409 students per grade

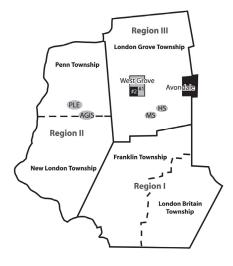
Avon Grove High School (9-12) with 1,735 students, averaging 434 students per grade

The District began offering **full-day kindergarten** in the 2017-18 school year. The inaugural-year .

The District will open a new High School in September 2022 that will be followed by a realignment of grade levels in the remaining schools and increased Capacity at the Middle and High Schools. The grade level realignments and increased capacities are evidenced in all tables and charts in this report.

Avon Grove High School offers students a **dual-enrollment program**. This program allows high school students to take college credit-earning courses while remaining enrolled at their high school. The courses count towards both high school graduation requirements and a college degree. In the 2016-17 school year, 94 Avon Grove students earned 213 passing grades in dual-enrollment programs, with an estimated college savings of \$66.500.

The District began implementing its **1:1 Technology Initiative** in 2016-17, issuing a Chromebook to every seventh- and eighth-grade student at Fred S. Engle Middle School in the program's inaugural year. The Chromebooks are a gateway to Schoology, the District's digital learning management system. Through Schoology, students can access curriculum and content, including text, video and other resources provided by their teachers. The Chromebooks allow students to access the same engaging materials whether at school or at home. In the 2017-18 school year, all sixth-graders received a device. By 2018-19, all students from grades six through twelve had a District-provided device.



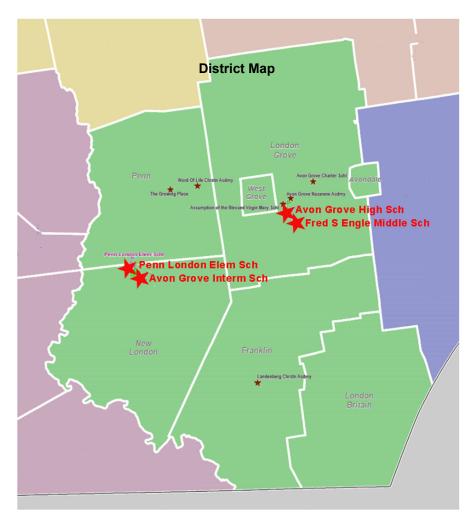
The Avon Grove School District is in southern Chester County, and serves over 5,000 students in grades K-12.

Chester County PA School Districts





Profile: School District



Penn London Elementary School 383 South Jennersville Rd. West Grove, Pa 19390

Avon Grove Intermediate School 395 South Jennersville Rd. West Grove, Pa 19390

Fred S. Engle Middle School 107 School House Rd. West Grove, Pa 19390

Avon Grove High School 257 State Rd. West Grove, Pa 19390





New Schools and Grade Level Realignments

The new Avon Gove High School is under construction and will open in September 2022 as a grade 9-12 school.

In September 2023, Penn London ES will be realigned from grades K-2 to grades K and 1. Also in 2023, Avon Grove Intermediate will be realigned as grades 2 to 5, from grades 3-6 and the Middle School will be realigned as grades 6 to 8 from 7-8, and High School will remain as 9 to 12. These changes are reflected in the vertical enrollment bars and red capacity lines on the school projection graphs.

	Capacity 2	2021	Capacity:	2023
	Functional	DPE	Functional	DPE
Penn London Elementary School	902	1025	902	1025
Avon Grove Intermediate School	1488	1575	1488	1575
Fred S Engle Middle School	807	854		
New Middle School			1274	1433
Avon Grove High School	1433	1676	1750	2059
_	4630	5130	5414	6092



The following data is an average of the period 2017-19 (latest available) from the American Community Survey 3-Year estimates. The data is presented as the survey collates the information which is not as the District organizes the schools.

Kindergarten enrollment, was at 81.8% public, slightly higher than the county and less than the state, and 4.5% higher than the previous half-day counts.

Elementary School (Grades 1-4) at 93.3% public is 10% more than the county or and 6% more than state, and increased slightly over the prior report

Middle School (Grade 5-8) at 91.7% public is about 8% more than the comparable county and 6% more than the state public school enrollments, and has increased 0.5% in the last 5 years.

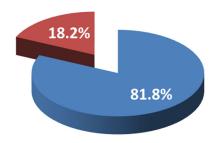
High School (Grade 9-12) at 90.5% public is about 6% more than the comparable county and 1% more than the state public school Enrollments, and is up 5% over the last 5 years.

The 2013-16 statistics from the previous report are provided in the table below for comparative purposes. They substantiate a general increase in public school enrollment across all grade levels.

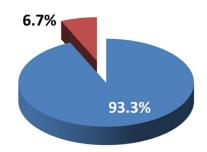
		2013-16 AGSD	2017-19 AGSD	2017-19 Ches Co	2017-19 Penn
Kindergarten	Public	77.2%	81.8%	80.1%	83.9%
	Private	22.8%	18.2%	19.9%	16.1%
Elementary Gr 1-4	Public	93.0%	93.3%	85.2%	85.6%
	Private	7.0%	6.7%	14.8%	14.4%
Middle Gr 5-8	Public	91.2%	91.7%	83.3%	86.0%
	Private	8.8%	8.3%	16.7%	14.0%
High Sch Gr 9-12	Public	88.6%	90.5%	84.8%	86.7%
	Private	11.4%	9.5%	15.2%	13.3%

SOURCE: American Community Survey 2018-20 found at http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?

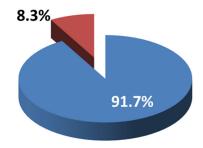
Kindergarten



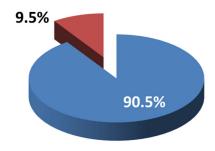
Elementary Gr 1-4



Middle Gr 5-8



High School Gr 9-12







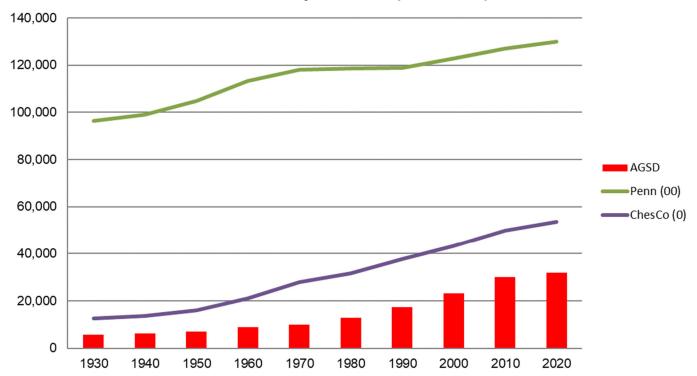
Population Growth
Comparative School District, County and State

The AGSD population was 31,907 persons, as of the US Census 2020, up by nearly 2,000 from 30,080 in 2010.

The AGSD population was 31,907 persons as of the US Census 2020.

	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020
AGSD	5,810	6,106	6,896	8,802	9,937	12,908	17,432	23,067	30,080	31,907
Chester Co	126,629	135,626	159,141	210,608	278,311	316,660	376,396	433,501	498,886	534,413
Pennsylvania	9,631,350	9,900,180	10,498,012	11,319,366	11,793,909	11,863,895	11,881,643	12,281,054	12,702,379	13,002,700

Local AGSD-County-State Comparative Population



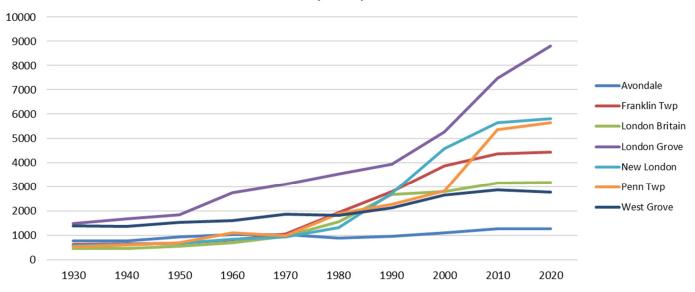




Population Growth Municipal Comparation

	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020
Avondale	763	754	941	1,016	1,025	891	954	1,108	1,265	1,274
Franklin Twp	620	655	666	817	1,043	1,920	2,779	3,850	4,352	4,433
London Britain	455	462	559	686	963	1,546	2,671	2,797	3,139	3,179
London Grove	1,484	1,666	1,844	2,734	3,109	3,531	3,922	5,265	7,475	8,797
New London	576	624	660	845	938	1,312	2,721	4,583	5,631	5,810
Penn Twp	537	588	705	1,097	989	1,888	2,257	2,812	5,364	5,644
West Grove	1,375	1,357	1,521	1,607	1,870	1,820	2,128	2,652	2,854	2,770

Municipal Populations



London Grove, the fastest growing of the constituent municipalities, grew by 1,322 persons or 17.7% between 2010 and 2020.

Penn Township grew by 280 persons or 5.2%.

The remaining municipalities grew by less than 5%, except for West Grove that decreased 84 persons between 2010 and 2020.





2010 Population Age & Gender Pyramid School District

The 2010 Age & Gender Pyramid for the municipality illustrates population counts in 5 year groups with Males on the left and Females on the right.

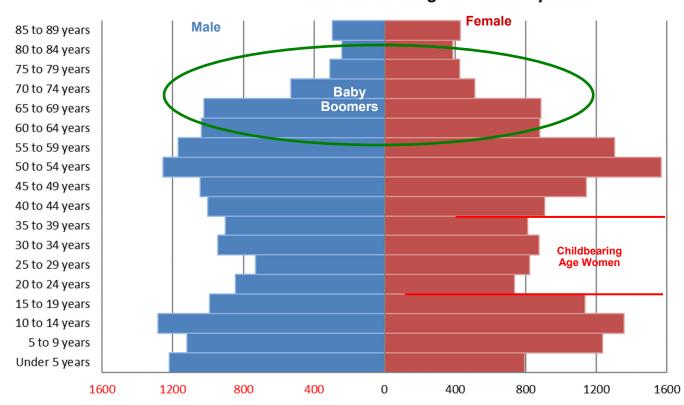
Of particular interest in school demography is the size of the prime childbearing age groups between 20 and 39 years of age. The female counts in these groups are smaller than adjacent, older age groups, averaging 81 fewer women per year...and of the adjacent, younger age groups.

Of real importance is that the Under 5 group is smaller than the 5-9 group indicating the possibility of decreasing elementary enrollments each year in the near future.

The under 5 age group was 343 persons less than the 5-9 age group or about 68 per year

Childbearing age women are decreasingly smaller in the younger ages.

Avon Grove SD: Age & Gender Pyramid







Comparative Population by Age Groups School District

Population by Age Group from 2000 through 2010 to 2020 reveals significant changes in all school relevant categories.

Pre-School Age (0-4) increased by 88 between 2000 and 2010, and by 348 between 2010 and 2020.

School Age (5-17) increased by 2,165 between 2000 and 2010 and decreased by 477 between 2010 and 2020.

Childbearing Age (18-39) increased 1,596 between 2000 and 2010 and by only 538 between 2010 and 2020, but still increased.

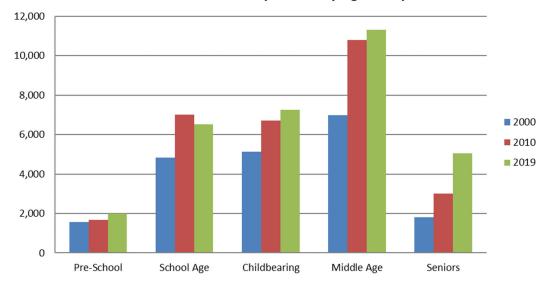
Middle Age (40-64) increased 3.812, then increased by only 506.

Seniors (65+) increased by 1,199 persons between 2000 and 2010, and by 2,031 between 2010 and 2020.

Over the period, 2000 - 2010, Pre-School counts increased, by 88 persons, and then by 348 persons between 2020 and 2020.

School Age populations increased in the first ten years and decreased in the second nine years.

Avon Grove SD: Population by Age Group



The increasing Pre-School age group supports an increasing school enrollment, while the increase in the Child Bearing Age group also indicates a probable continued increase of Births and further increases in the Pre-School group.

Age	2000	2010	2019
Pre-School 0-4	1,576 88	1,664 <i>348</i>	2,012
School Age 5-17	4,843 2,165	7,008 -477	6,531
Childbearing 18-39	5,120 <i>1,5</i> 96	6,716 <i>538</i>	7,254
Middle Age 40-64	6,992 3,812	10,804 506	11,310
Seniors 65 +	1,809 1,199	3,008 2,031	5,039
	20 340	29 201	32 146

Percents	1990	2000	2010
Pre-School	7.75%	5.70%	6.26%
School Age	23.81%	24.00%	20.32%
Childbearing	25.17%	23.00%	22.57%
Middle Age	34.38%	37.00%	35.18%
Seniors	8.89%	10.30%	15.68%
	100%	100%	100%



District Annual Births



The number of babies born to families who reside in the district is a significant factor effecting enrollments. Birth counts from "5 years earlier" are used for the "Birth to Kindergarten" Survival Ratios in the standard Cohort Survival projection method. Births are the starting point for all cohorts.

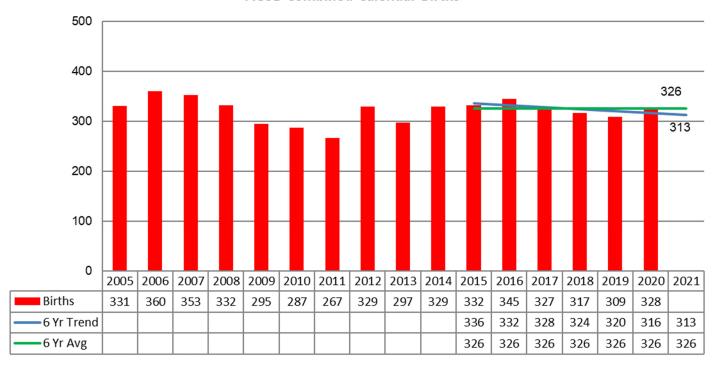
Combined Births in the area municipalities have decreased slightly for the last 3 years of the 6-year projection period. The 6-year trend, is perhaps more indicative of recent levels of birth. The 6-year trend is for about 3.9 fewer births every year.

However births could easily turn around and start an increase as they did in 2012. It is for that reason that **the Cohort Survival methodology is based on averages.** The 6-year average is from the same years as the 6-years of actual enrollments that is the basis of the Cohort Survival projection used in this study. The 6-year average is 326 births per year.

Births have been averaging 326 per year for the last 6 years paralleling the last 6 years of actual enrollment data on which the projection is based.

The 6-year trend is for about 4 fewer births per year.

AGSD Combined Calendar Births



SOURCE: Births Data from Pa Department of Health found at http://www.statistics.health.pa.gov/Pages/default.aspx#.VckGXzZRGUk



Municipal Annual Births

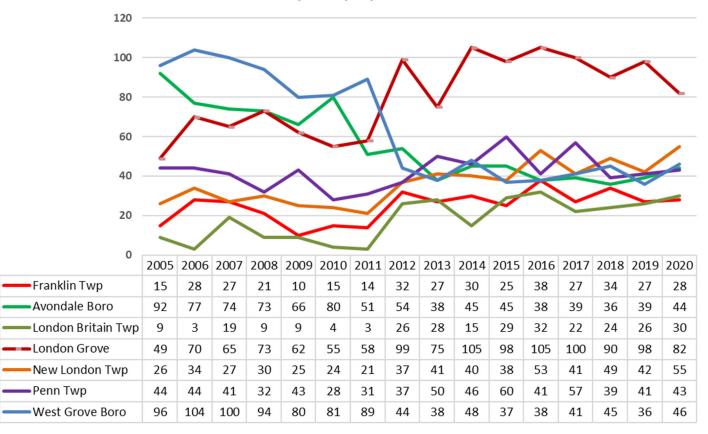


Live Births in each contributing municipality are provided below.

Live Births are generally trending **higher** in; New London where Births are trending 1.7 more per year, and West Grove where Births are trending 1.2 more per year.

Live Births are generally trending **lower** in; Franklin Township where Births are trending 0.3 fewer per year, and. Avondale where Births are trending 0.1 fewer per year, and. London Britain where Births are trending 0.3 fewer per year, and. London Grove where Births are trending 3.2 fewer per year, and. Penn Township where Births are trending 2.9 fewer per year.

AGSD Births by Municipality & Calendar Year



Source: Pa Dept. of Health at http://www.portal.state.pa.us/portal/server.pt/community/health_statistics_and_research/11599





Residential Permitting History for New Construction

A Building Permit is obtained by a developer after approval of a major sub-division, and when construction of a "next phase" of residential units is eminent. Residential Building Permits are often correlated with population growth in a community. Significantly, there had been less development in the District in the period 2008-18, except for London Grove.

Residential permitting has been low except for London Grove.

As with the nation, residential development in the District had been depressed for several years. The southeastern PA economy, however, is reported to be in recovery. However there is no significant recovery within the geographies oof the School District.

Permits by Municipality RECESSION 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Avondale Franklin Twp London Britain London Grove New London Twp Penn Twp West Grove

SOURCE: http://socds.huduser.org/permits/index.html and Local Planning Officials





Residential Permitting for New Construction and Impact on Enrollment

The period 2015-2020, a low point in permitting, yielded only an average of 53 single-family permits per year.

All municipalities were contacted relative to future Residential construction. Any construction levels "above the average" would add Public School Age Children (PSAC) to the projection.

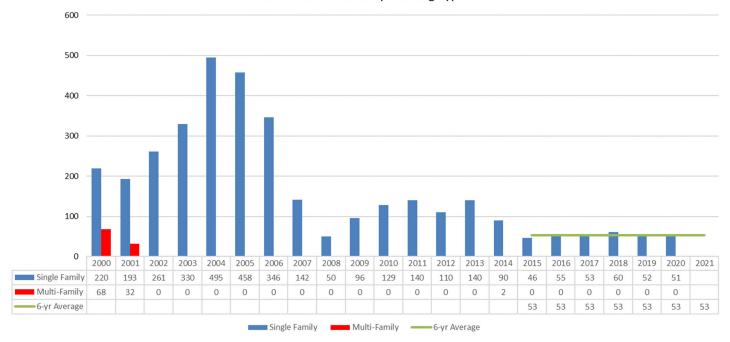
No municipality has approved permits for residential construction that would place future Occupancies above their individual municipal average or combined municipalities above the District average.

Some level of new students from new housing is already "built into" the grade level Survival Rates derived from the 6 actual years of enrollments.

However, no additional students are added to the standard projection.

No students are added to the projection from new housing.

Residential Permits by Building Type



SOURCE: http://socds.huduser.org/permits/index.html and Local Planning Officials





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.

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 328 students in 1st Grade in year 2013-14, following a 289 student Kindergarten in year 2012-13. This yields a Kindergarten to First Grade **Survival Ratio** of 1.135 (or 328 ÷ 289). Another expression of the Survival Ratio would be that 113% of the Kindergarten students "survived" to 1st Grade.

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 1.165 is the 6-year average Kindergarten to Grade 1 ratio and 1.051 is the 6-year Grade 1 to Grade 2 Survival Ratio.

The sample projections use the past school year 2016-17 enrollments, at the bottom of the Historic chart, as a base year. The Average 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.

In the side-bar example 331 Kindergarten students in 2018-19 survive at a rate of 1.165 as a 2019-20 First Grade of 386 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.

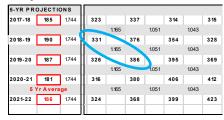
Enrollment projections have been made using the Cohort Survival method.

Modifications were made for the rising school year for which the current grade level counts were used.

Historic Enrollments

	Births				1st		2nd		3rd
School	5 Sch Yrs		к		Gr.		Gr.		Gr.
Year	Ago	"s"		"s"		"s"		"s"	
				_					
2011-12	169	1.538	260		308		327		404
		.→ (1204		1097		1028	
2012-13	175	1651	289		313		338		336
				1.135		1.019		1038	
2013-14	132	2.091	276		328		3 19		351
				1.116		1037		1028	
2014-15	131	1916	251		308		340		328
				1.155		1.062		1.065	
2015-16	143	1.720	246		290		327		362
				1.215		1041		1.058	
2016-17	187	1.545	289		299		302		346
6 Yr Avg	SR	1.744							
				1.165)	1.051		1.043	

Projected Enrollments







Cohort Survival Methodology Adjustments

Alternate 1 "All-in" Projection

Alternate 1 "All-in" projection starts with historical enrollments that include all students from the District, the Charter School and all Cyber students at every grade level for the last 6 years. That base projection is made using a standard Cohort Survival methodology.

A separate "adjusted" projection is made for the combination of the Charter plus Cyber students. The adjustment is made using the most recent 3

B:K Survival Rate 0.259 0.186 0.80 0.60 0.40 0.20 0.00

B:K Survival Rates rather than all six. This reduces the future Survival Rate to 0.186 from 0.259.

The projection for Charter + Cyber is then subtracted from the District + Charter + Cyber,... and the remaining counts are the District projection.

Modifications were made to the Standard projection for 2 Alternate projections.

DISTRICT NAME: Avon Grove School District

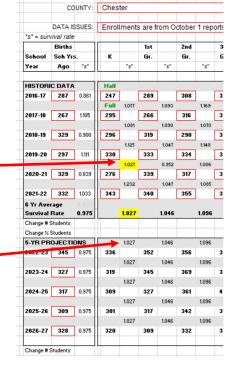
Standard Cohort-Survival Enrollme

Alternate 2 "K:1 Survival Rate" Adjustment

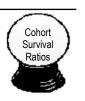
In reviewing the K:1 Grade Level Survival Rates, it is seemingly evident that the Survival Rates in the last two pandemic-impacted years were volatile.

However, It is possible that the Fall 2019 to Fall 2020 Survival Rate might be correct moving forward, following the start of Full-day Kindergarten, and that assumption is the basis for Alternate 2 "K:1" projection. 2019-20 SR of 1.027

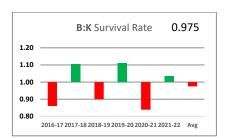
1.027 used for all future years instead of the 6-yera Average of 1.108





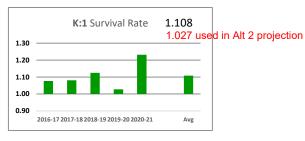


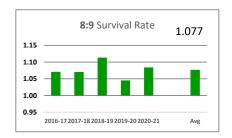
Cohort Survival Rates Standard Projection



On this page are graphs of each year of each Grade Level Survival Ratio, followed by a five-year average. Red bars are a Survival Rate below 1.0 signifying loss and green bars are greater than 1.0 indicating growth. The upper right side number and far right bar is the Average. The Pandemic interruption is obvious.

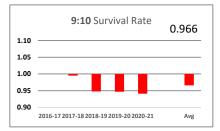
The bottom graph illustrates the growth of the year 2016 Kindergarten as it grows to the 12th Grade graduating class of 2031.



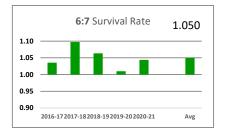


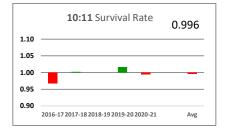


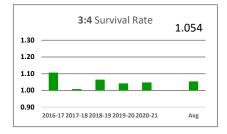


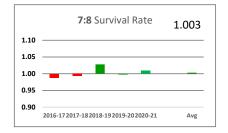






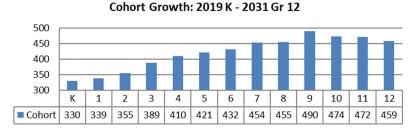






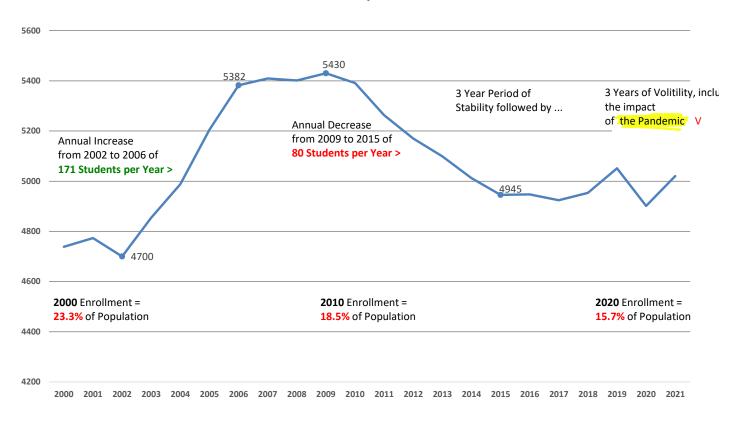






Actual Enrollments History 2000-2021

Enrollment History October 2000 to 2021



As a Percent of Population, Student Enrollment has decreased from 23.3% in year 2000 to 18.5 % in year 2010 to 15.7% in year 2020.

Annual enrollment decline was 80 students per year between 2009 and 2015. Around 2015 enrollment stabilized before entering a period of volatility associated with the Pandemic.



Reading the Enrollment Charts

7,000 6,000 5270 Accuracy 5020 4947 5,000 Historic Projected Extended FCap=5414 4,000 PDE=6092 Altern 1 All Altern 2 K:1 3,000 2,000 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031

District-wide K-12 Enrollments

The blue bars are the 6 years of actual enrollments from Fall 2016 to Fall 2021.

The dark green bars are the resulting 1-5 year projected enrollments in the Standard Method projection.

The 6 to 10 year projections shown in light green are <u>not</u> considered accurate for facilities planning. Long-range projection counts range as high as ±10% in accuracy in the 10th year.

The orange color is the ±1% per year "Cone of Accuracy" in the first 5 years of the standard projection.

The purple (Alt 1) and blue (Alt 2) dashed lines are the alternate projections.

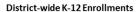
The red lines are the grade-level (building) capacities as determined by the District (FCap=Functional Capacity) and by the Pennsylvania Department of Education (PDE).

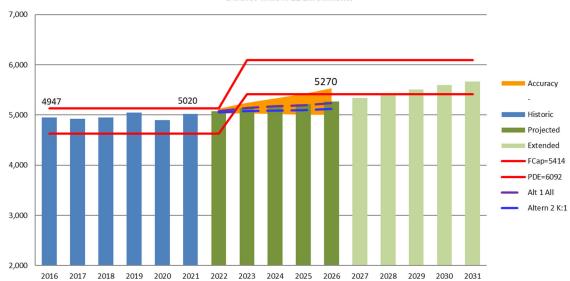


District-Wide Enrollment

The 2021 enrollment is 73 students (1.5%) more than the 2016 enrollments at the beginning of the actual period having increased to 5,020 students. That growth is the equivalent of 5 to 6 students per grade.

The District averaged 4,966 students in the actual period, and will average 5,174 in the projection period.





Enrollments are projected to grow by 250 students to the peak year of 2026-27 where enrollments will have increased to 5,270 students (4.9%) over the end of the historic period. This is growth of nearly 20 students per grade.

District-wide enrollments exceed the Functional Capacity in only the first year of the projection until grade levels are realigned along with the opening of the new High School. PDE Capacity is never exceeded in the projection.

		TOTAL A	Average	Change	%Chg	Alt 1 All		Alt 2 K;1	
Actual	2016	4,947							
	2017	4,924							
	2018	4,953							
	2019	5,051	4,966						
	2020	4,901							
	2021	5,020		73	1.5%				
Projected	2022	5,078				5,081	3	5,050	-28
	2023	5,134				5,139	5	5,078	-56
	2024	5,177	5,174			5,173	-5	5,091	-86
	2025	5,212				5,195	-16	5,095	-117
	2026	5,270		250	4.9%	5,240	-30	5,123	-148
Extended	2027	5,338				5,290	-48	5,157	-181
	2028	5,420				5,353	-67	5,204	-215
	2029	5,510	5,506			5,424	-85	5,259	-250
	2030	5,597				5,493	-104	5,309	-288
	2031	5,668		398	7.4%	5,560	-108	5,344	-324

The Alternate 1 All Projection projects 3 additional students in 2022 to 139 fewer in 2026, an average of 87 per year fewer in the 5-year projection period or about 8 to 9 fewer per grade.

The Alternate 2 K;1 Projection also projects fewer students ranging from 28 fewer in 2022 to 148 fewer in 2026.



Elementary School

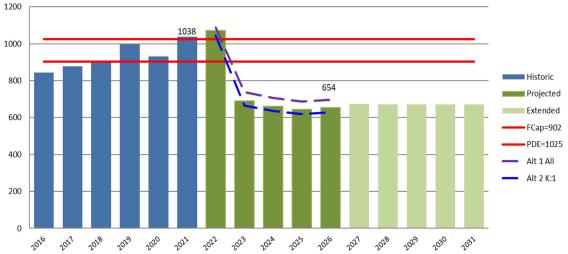
Kindergarten-Grade 2 and K-1 Penn London Elementary School

In the actual period enrollments increased 194 students to a total of 1,038 students.

Elementary School enrollments do not exceed capacity in any years of the projection.

In the projection period, and due to grade realignment, enrollments will decrease in the 2nd to 5th years to an average of 745 and thereafter stabilize. The Alternate #1 All projection is 16 to 44 students higher.

The Alt #2 K:1 Projection averaged 26 fewer students or 13 per grade.



Elementary K-Gr 2, then K-Gr 1 Enrollments

A year-to-year breakdown by grade level is as follows;

Penn London Elementary School Avon Grove School District

Elementary K-Grade 2 Enrollments

K-Grade 1 in Sept 2023

					K-1/2	Period to	Period			Alternate	s	
		K	1	2	TOTAL	Average	Change		Alt 1 All		Alt 2 K:1	
Actual	2016	247	289	308	844							
	2017	295	266	316	877							
	2018	296	319	290	905							
	2019	330	333	334	997	932						
	2020	276	339	317	932							
	2021	343	340	355	1,038		194	23.0%				
Projected	2022	336	380	356	1,072				1088	16	1044	-28
	2023	319	373		691				737	46	664	-27
	2024	309	353		662	745			706	44	636	-26
	2025	301	343		644				686	43	619	-25
	2026	320	334		654		-384	-35.9%	697	44	629	-24
Extended	2027	318	354		672				717	45	647	-26
	2028	318	353		671				715	45	645	-26
	2029	318	353		671	671			715	45	645	-26
	2030	318	353		671				715	45	645	-26
	2031	318	353		671		17	2.5%	715	45	645	-26



Intermediate School

Grade 3-6 and 2-5 Avon Grove Intermediate School

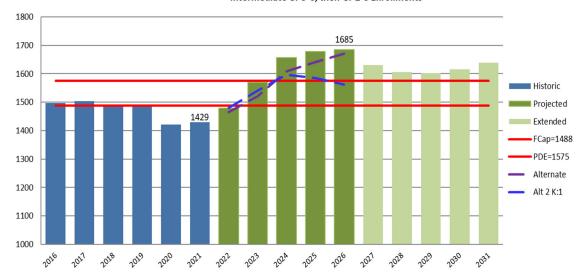
In the historic period enrollments decreased 68 students to a total of 1,429 students.

Intermediate School enrollments exceed capacity in the last three projection years.

In the projection period, and following a grade realignment, enrollments will increase by 256 students to a peak of 1,685 students at the end of the projection period in year 2026-27. The Alt 1 All projection starts the projection period with 15 fewer students but averages 33 fewer students.

The Alt 2 K;1 projection starts the projection period with 0 fewer students and ends with 123 fewer students, i.e. between 30 and 31 students per grade.

Intermediate Gr 3-6, then Gr 2-5 Enrollments



Avon Grove Intermediate School Avon Grove School District Intermediate Grade 3- 6 Enrollments Grade 2-5 in Sept 2023

							K-5	PK-5	Period to	Period		Α	Iternates		
		2	3	4	5	6	SCSE	TOTAL	Average	Change		Alt 1 All		Alt 2 K:1	
Actual	2016		337	377	389	394		1,497							
	2017		360	373	381	390		1,504							
	2018		338	363	395	392		1,488							
	2019		333	360	385	406		1,484	1,471						
	2020		336	347	352	387		1,422							
	2021		344	352	357	376		1,429		-68	-4.5%				
Projected	2022		389	363	362	366		1,480				1465	-15	1480	0
	2023	398	390	410	372			1,570				1522	-48	1541	-29
	2024	390	436	411	421			1,657	1,614			1608	-49	1597	-60
	2025	370	427	459	422			1,678				1642	-36	1586	-92
	2026	358	405	450	472			1,685		256	17.3%	1670	-15	1562	-123
Extended	2027	349	392	427	463			1,631				1649	18	1511	-119
	2028	371	383	414	438			1,605				1624	19	1488	-118
	2029	369	406	403	425			1,603	1,619			1623	19	1486	-117
	2030	369	404	428	414			1,615				1635	19	1497	-118
	2031	369	404	426	440			1,638		-47	-2.9%	1658	19	1518	-120



Middle School

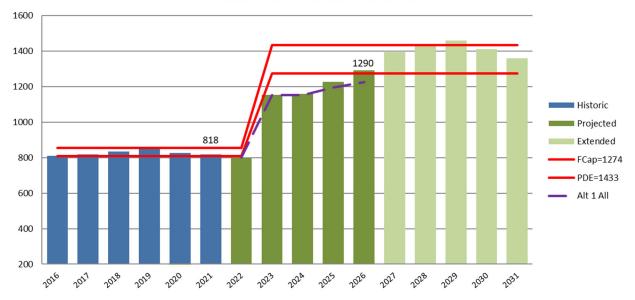
Grades 7-8 and 6-8 Fred S. Engle Middle School

In the actual period enrollments increased by 46 students in year 2019 but ended the period with an increase of only 7 students by 2021.

Middle School Enrollments do not exceed capacity in any years of the 5-year projection.

In the projection period, following a grade level realignment, enrollments will increase by 472 students to a peak of 1,290 students at the end of the projection period in year 2026-27. The Alt 1 All projection starts the projection period with 0 fewer students and ends with 64 fewer students, i.e. an average of 21 per grade. The Alt 2 K:1 projection is not different from the standard projection until the less accurate 6 to 10 year period.

Middle School Gr 7-8 then 6-8 Enrollments



Fred S Engle Middle School Avon Grove School District

Middle School Grade 7-8 Enrollments

Grade 6-8 in Sept 2023

					Gr 6/7-8	Period	Period					
		6	7	8	TOTAL	Average	Change		Alt 1 All	A	Alt 2 K:1	
Actual	2016		416	395	811							
	2017		408	411	819							
	2018		428	405	833							
	2019		417	440	857	827						
	2020		410	416	826							
	2021		404	414	818		7	0.9%				
Projected	2022		395	405	800				800	0	800	0
	2023	371	385	396	1,152				1151	-1	1152	0
	2024	382	390	386	1,158	1125			1152	-7	1158	0
	2025	432	402	391	1,225				1195	-30	1225	0
	2026	433	454	403	1,290		472	59.0%	1226	-64	1290	0
Extended	2027	484	455	455	1,395				1293	-102	1359	-35
	2028	475	509	456	1,440				1336	-104	1368	-72
	2029	450	499	510	1,459	1412			1365	-93	1352	-107
	2030	436	473	500	1,409				1340	-69	1306	-103
	2031	425	458	474	1,357		68	4.8%	1291	-66	1258	-99



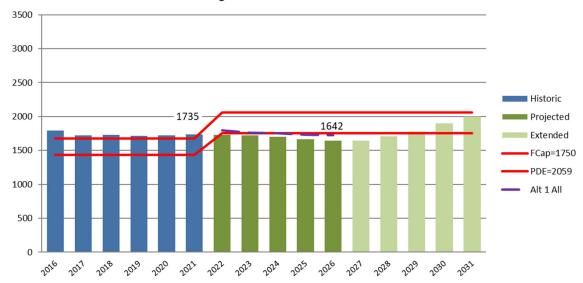
High School Enrollment

Grade 9-12 Avon Grove High School

In the actual period enrollments decreased by 60 students ending the period by 2021 with 1,735 students.

High School enrollments which averaged 1,736 students in the Actual period, will average a decreased 1,691 students in the projection period.

High School Grade 9-12 Enrollments



In the projection period enrollments will continue to decrease by 93 students to a low of 1,642 students at the end of the projection period in year 2026-27.

The Alt 1 All projection starts the projection period with 72 more students and ends with 82 more students. The Alt2 K:1 projection does not differ from the standard.

High School Enrollments do not exceed capacity in any years of the 5-year projection.

A year-to-year breakdown by grade level is as follows;

Avon Grove School District

High School Grade 9-12 Enrollments

							Gr 9-12	Period	Period					
		9	10	11	12	SCSE	TOTAL	Average	Change		Alt 1 All	,	Alt 2 K:1	
Historic	2016	435	462	443	455	0	1,795							
	2017	423	435	447	419	0	1,724							
	2018	440	421	436	430	0	1,727							
	2019	451	417	421	424	0	1,713	1736						
	2020	460	427	424	410	0	1,721							
	2021	451	433	425	426	0	1,735		-60	-3.3%				
Projected	2022	446	436	431	413	0	1,726				1798	72	1726	0
	2023	436	431	434	419	0	1,721				1759	38	1721	0
	2024	427	422	429	422	0	1,699	1691			1753	54	1699	0
	2025	416	412	420	417	0	1,665				1733	68	1665	0
	2026	421	402	411	408	0	1,642		-93	-5.4%	1724	82	1642	0
Extended	2027	434	407	400	399	0	1,640				1693	53	1640	0
	2028	490	419	405	389	0	1,704				1697	-7	1704	0
	2029	491	474	418	394	0	1,777	1805			1693	-84	1777	0
	2030	549	475	472	406	0	1,902				1733	-169	1862	-40
	2031	539	531	473	459	0	2,001		360	21.9%	1826	-175	1923	-78



Comparative Enrollments

by Grade Level Organization Standard Projection

Elementary enrollments are at a high point at the beginning of the projection period in 2022 at 1,072 students.

Intermediate enrollments are increasing throughout the 5-year projection period and peak at 1,685 students in 2026.

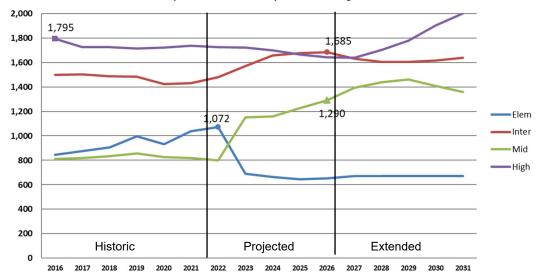
Middle School enrollments are increasing throughout the 5-year projection period and peak at 1,290 students in 2026.

High School enrollments are moderately decreasing for the 5-year project period ending at 1,642 students.

The 5-year Projection is reliable for Facilities Planning purposes.

Extended 6-10 year projections are not reliable for facilities planning purposes. They rely on all trends remaining the same for 10 years.





		Elem	Inter	Mid	High	TOTAL
Actual	2016	844	1,497	811	1,795	4,947
	2017	877	1,504	819	1,724	4,924
	2018	905	1,488	833	1,727	4,953
	2019	997	1,484	857	1,713	5,051
	2020	932	1,422	826	1,721	4,901
	2021	1,038	1,429	818	1,735	5,020
Projected	2022	1,072	1,480	800	1,726	5,078
	2023	691	1,570	1,152	1,721	5,134
	2024	662	1,657	1,158	1,699	5,177
	2025	644	1,678	1,225	1,665	5,212
	2026	654	1,685	1,290	1,642	5,270
Extended	2027	672	1,631	1,395	1,640	5,338
	2028	671	1,605	1,440	1,704	5,420
	2029	671	1,603	1,459	1,777	5,510
	2030	671	1,615	1,409	1,902	5,597
	2031	671	1,638	1,357	2,001	5,668

Within Actual & 5 Yr Projection

HIGH

LOW



Appendix

A. Cohort Survival Worksheets

- 1. Standard Projection
- 2. Alt 2 Projection that is Adjusted "K:Gr 1" Projection, using Fall 2019 K: Gr 1 Survival Ratio
- 3. Charter only 3 B:K S/Rs Projection
- 4. Charter plus Cyber only 3 B:K S/Rs Projection
- 5. Adjusted "All / Combined" Projection combining District, Charter and Cyber students as base



	Standard Conort-Survival Enrollment Projection Worksneet		
DISTRICT NAME:	Avon Grove School District		
COUNTY:	Chester		
DATA ISSUES:	Enrollments are from October 1 reports		
"s" = survival rate			
Births	1st 2nd 3rd 4th 5th K-5 K-5 PK PK PK	PK-5	
School 5 Sch Yrs. Year Ago "s"	K Gr. Gr. Gr. Gr. Gr. Subt. SCSE Total SCSE 3 yrs. 4yrs.	Total	otal Gr. Gr. Gr. Subt. SCSE Total Gr. Gr. Gr. Gr. Subt. SCSE Total Subt. Total Total Subt. Score W/SCSE W/SCSE
1.00			
HISTORIC DATA	Half		
2016-17 287 0.861	247	1947	147 394 416 395 1205 0 1205 435 462 443 455 1795 0 1795 0 4947
2017-18 267 1.105	295 266 316 360 373 381 1991 0 1991 0 0	1991	
	1.081 1.090 1.070 1.008 1.059 0.0%		1.029 1.097 0.993 0.0% 1.071 0.995 1.002 0.962 0.0%
2018-19 329 0.900	296 319 290 338 363 395 2001 0 2001 0 0	2001	
2019-20 297 1.111	1.125 1.047 1.148 1.065 1.061 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	2075	1.028 1.064 1.028 0.0% 1.114 0.948 1.000 0.972 0.0% 0.0% 0.05051 5051 5051 5051 5051 5051 5051 5
2010-20	1.027 0.952 1.006 1.042 0.978 0.0%	2070	1.005 1.010 0.998 0.0% 1.045 0.947 1.017 0.974 0.0%
2020-21 329 0.839	276 339 317 336 347 352 1967 0 1967 0 0 0	1967	
	1.232 1.047 1.085 1.048 1.029 0.0%		1.068 1.044 1.010 0.0% 1.084 0.941 0.995 1.005 0.0%
2021-22 332 1.033 6 Yr Average 0.975	343 340 355 344 352 357 2091 0 2091 0 0 0	2091	991 376 404 414 1194 0 1194 451 433 425 426 1735 0 1735 0 5020 5020 5020 5020 5020 5020 5020
Survival Rate 0.975	1.108 1.046 1.096 1.054 1.027 5 Yr 0.00%		1.027 1.050 1.003 5 Yr 0.00% 1.077 0.966 0.996 0.972 5 Yr 0.00%
Change # Students	144 144	144	
Change % Students	7% 7%	7%	% -1% -1% -3% -3% 1%
5-YR PROJECTIONS 2022-23 345 0.975	1.108 1.046 1.096 1.054 1.027 336 380 356 389 363 362 2185 0 2185 0 0	2185	185 366 395 405 1167 0 1167 446 436 431 413 1726 0 1726 0 5078 5078 5078
	1.108 1.046 1.096 1.054 1.027		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2023-24 327 0.975	319 373 398 390 410 372 2261 0 2261 0 0	2261	
2024-25 317 0.975	1.108 1.046 1.096 1.054 1.027 309 353 390 436 411 421 2320 0 2320 0 0 0	2220	1.027 1.050 1.003 1.077 0.966 0.996 0.972 320 382 390 386 1158 0 1158 427 422 429 422 1699 0 1699 0 5177 5177 5177
2024-25 317 0.975	309 353 390 436 411 421 2320 0 2320 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2320	320 382 390 386 1158 0 1158 427 422 429 422 1699 0 1699 0 5177 5177 5177 1.027 1.050 1.003
2025-26 309 0.975	301 343 370 427 459 422 2322 0 0 0	2322	
	1.108 1.046 1.096 1.054 1.027		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2026-27 328 0.975	320 334 358 405 450 472 2339 0 2339 0 0	2339	339 433 454 403 1290 0 1290 421 402 411 408 1642 0 1642 0 5270 5270 5270
Change # Students	248 248	248	48 96 96 -93 -93 250
Change % Students	12% 12%	12%	2% 8% -5% -5% 5.0%
	KEY to Number Colors		The above information is prepared and certified by a qualified demographer.
	99 Standard number with no modifications to methodology99 Provisional, but uncertified births from the NJ Department of Health		Firm Name: Sundance Associates 117 Greenvale Ct. Cherry Hill NJ 08034
	99 Births projected as an average of the prior 6 years, including provisional dataand projected students resulting		Cultural Control of Co
	from this "less accurate" average		Name: George B. Sundell Tel 856-755-0174 Email: GSundell@sundanceassoc.com
	99 Students per Grade Level added for residential development		Signature: Date: November 15, 2021
			Signature. Date: November 10, 2021
6-10 YR PROJECTIONS	NOT CONSIDERED RELIABLE		0.966 0.996 0.972
2027-28 326 0.975 6 Yr Avg	318 354 349 392 427 463 2303 0 2303 0 0 0 0 0 0 0 0 0 0 0 0 0	2303	303 484 455 455 1395 0 1395 434 407 400 399 1640 0 1640 0 5338 5338 5338 5338
2028-29 326 0.975	318 353 371 383 414 438 2276 0 2276 0 0 0	2276	
Continued	1.108 1.046 1.096 1.054 1.027		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2029-30 326 0.975	318 353 369 406 403 425 2274 0 0 0 0 0	2274	
2030-31 326 0.975	1.108 1.046 1.096 1.054 1.027 318 353 369 404 428 414 2286 0 2286 0 0 0	2286	1.027 1.050 1.003 1.077 0.966 0.996 0.972 286 436 473 500 1409 0 1409 549 475 472 406 1902 0 1902 0 5597 5597
3.070	1.108 1.046 1.096 1.054 1.027		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2031-32 326 0.975	318 353 369 404 426 440 2309 0 2309 0 0	2309	309 425 458 474 1357 0 1357 539 531 473 459 2001 0 2001 0 5668 5668 5668
Change # Students	-30 -30	-30	
Change % Students	-1% -1%	-1%	

DISTRICT NAME:		
COUNTY:	Alt 2 : Adjusted B:K Survival Rate : Chester	
DATA ISSUES:	Enrollments are from October 1 reports	
"s" = survival rate	Lindifferts are non October 1 reports	
Births	1st 2nd 3rd 4th 5th K-5 K-5 PK PK PK PK-5	6th 7th 8th 6-8 6-8 6-8 9th 10th 11th 12th 9-12 9-12 PK K-12 PK-12
School 5 Sch Yrs. Year Ago "s"	K Gr. Gr. Gr. Gr. Gr. Subt. SCSE Total SCSE 3 yrs. 4yrs. Total	Gr. Gr. Gr. Subt. SCSE Total Gr. Gr. Gr. Gr. Gr. Subt. SCSE Total Subt. Total Total "s"
roui Ago o		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
HISTORIC DATA	Half	
2016-17 287 0.861	247 289 308 337 377 389 1947 0 1947 0 0 1947 1 1947 Company of the company of t	394 416 395 1205 0 1205 435 462 443 455 1795 0 1795 0 4947 4947 4947 1.003 1.036 0.988 0.988 0.986 0.966 0.968
2017-18 267 1.105		390 408 411 1209 0 1209 423 435 447 419 1724 0 1724 0 4924 4924 4924
2040 40 200	1.081 1.090 1.070 1.008 1.059 0.0%	1.029 1.097 0.993 0.0% 1.071 0.995 1.002 0.962 0.0%
2018-19 329 0.900	296 319 290 338 363 395 2001 0 2001 0 0 2001 1.125 1.047 1.148 1.065 1.061	392 428 405 1225 0 1225 440 421 436 430 1727 0 1727 0 4953 4953 4953 1.028 1.0
2019-20 297 1.111	330 333 334 333 360 385 2075 0 2075 0 0 2075	406 417 440 1263 0 1263 451 417 421 424 1713 0 1713 0 5051 5051 5051
2020-21 329 0.839	1.027 0.952 1.006 1.042 0.978 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	1.005 1.010 0.998 0.0% 1.045 0.947 1.017 0.974 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0
2020-21 329 0.839	276 339 317 336 347 352 1967 0 1967 0 0 1967 1 1967	387 410 416 1213 0 1213 460 427 424 410 1721 0 1721 0 4901 4901 4901 1.068 1.044 1.010 0.0% 1.084 0.941 0.995 1.005 0.0%
2021-22 332 1.033	343 340 355 344 352 357 2091 0 2091 0 0 0 2091	376 404 414 1194 0 1194 451 433 425 426 1735 0 1735 0 5020 5020 5020
6 Yr Average 0.975 Survival Rate 0.975		Note
Change # Students	144 144 144	-11 -11 -60 -60 73
Change % Students	7% 7% 7%	-1% -1% -3% -3% 1%
5-YR PROJECTIONS 2022-23 345 0.975	1.027 1.046 1.096 1.054 1.027 1.046 1.096 1.054 1.027 1.046 1.054 1.054 1.027 1.046 1.054	366 395 405 1167 0 1167 446 436 431 413 1726 0 1726 0 5050 5050 5050
2022-23 343 0.973		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2023-24 327 0.975		371 385 396 1152 0 1152 436 431 434 419 1721 0 1721 0 5078 5078 5078
2024-25 317 0.975	1.027 1.046 1.096 1.054 1.027 309 327 361 404 411 421 2233 0 2233 0 0 0 2233	1.027 1.050 1.003 1.003 1.007 0.966 0.996 0.972 1.009 0 1699 0 5091 5091 5091 5091 5091 5091 5091
0.070		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2025-26 309 0.975		432 402 391 1225 0 1225 416 412 420 417 1665 0 1665 0 5095 5095
2026-27 328 0.975		1.027 1.050 1.003 1.003 1.007 0.966 0.996 0.972 1.007 0.966 0.996 0.972 1.007 0.966 0.906
Change # Students	100 100 100	96 96 -93 -93 103
Change % Students	5% 5% 5% KEY to Number Colors	8% 8% -5% -5% 2.0% The above information is prepared and certified by a qualified demographer.
	99 Standard number with no modifications to methodology	
	99 Provisional, but uncertified births from the NJ Department of Health 99 Births projected as an average of the prior 6 years, including provisional data,,, and projected students resulting	Firm Name: Sundance Associates 117 Greenvale Ct. Cherry Hill NJ 08034
	99 Births projected as an average of the prior 6 years, including provisional dataand projected students resulting from this "less accurate" average	Name: George B. Sundell Tel 856-755-0174 Email: GSundell@sundanceassoc.com
	99 Students per Grade Level added for residential development	and R Call
		Signature: Date: November 15, 2021
6-10 YR PROJECTIONS	NOT CONSIDERED RELIABLE	0.966 0.996 0.972
2027-28 326 0.975 6 Yr Avg		449 455 455 1359 0 1359 434 407 400 399 1640 0 1640 0 5157 5157 5157 1.027 1.050 1.003 1.003 0 0.996 0.996 0.972
2028-29 326 0.975		440 471 456 1368 0 1368 490 419 405 389 1704 0 1704 0 5204 5204 5204
Continued		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2029-30 326 0.975	318 327 342 376 374 394 2131 0 2131 0 0 2131 0 2131 1 1.027 1.046 1.096 1.054 1.027	417 462 473 1352 0 1352 491 474 418 394 1777 0 1777 0 5259 5259 5259 1 1.027 1.050 1.003
2030-31 326 0.975		404 438 464 1306 0 1306 509 475 472 406 1862 0 1862 0 5309 5309
2024 22		1.027 1.050 1.003 1.077 0.966 0.996 0.972
2031-32 326 0.975	318 327 342 374 395 408 2163 0 2163 0 0 2163 0 2163 0 0 0 2163 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	394 425 439 1258 0 1258 499 492 473 459 1923 0 1923 0 5344 5344 5344
Change # Students	-28 -28 -28	-32 -32 281 281 222
Change % Students	-1% -1% -1%	-3% -3% 15% 15% 4%

DISTRICT NAME:		
COUNTY:	u <mark>sed Cyber 2 that combines Charter and Cyber for Alt 1 Chester</mark>	
DATA ISSUES:	Enrollments are from October 1 reports	
"s" = survival rate	Enrollments are from October Treports	
Births	1st 2nd 3rd 4th 5th K-5 K-5 PK PK PK PK-1	-5 6th 7th 8th 6-8 6-8 6-8 9th 10th 11th 12th 9-12 9-12 PK K-12 K-12 PK-12
School 5 Sch Yrs.	K Gr. Gr. Gr. Gr. Gr. Subt. SCSE Total SCSE 3 yrs. 4yrs. Tota	
Year Ago "s"	"s" "s" "s" (excl. PK)	"S" "S" "S" "S" "S" Excl. SCSE w/ SCSE
HISTORIC DATA		
2016-17 287 0.429	123 98 111 79 59 74 544 0 544 0 0 0 544	
2017-18 267 0.303	0.862	4 0.959 0.891 0.958 0.690 0.892 1.053 1.000 0.842 1.053 1.000 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0
2049 40 220 0 255	1.074 0.991 0.871 0.974 1.014 0.00%	0.930 0.704 1.000 0.0% 0.826 0.870 0.969 1.050 0.0% 0.0% 0.0% 0.765 765 765 765 765
2018-19 329 0.255	84 87 105 81 74 72 503 0 503 0 0 0 503 0 5	3 53 50 49 152 0 152 38 20 31 21 110 0 110 0 765 765 765 0.958 0.958 0.955 0.860 0.958 0.868 0.800 0.968 0.800 0.968
2019-20 297 0.229	68 66 86 81 57 73 431 0 431 0 0 0 431 0 431 0 431 0 431 0 431 0 0 431 0 0 431 0 0 0 0 431 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 69 49 49 43 161 0 161 43 33 16 30 122 0 122 0 714 714 714 0.945 0.945 0.841 1.000 0.0% 0.844 0.884 0.879 1.063 0.0%
2020-21 329 0.146	48 60 59 73 62 57 359 0 359 0 0 359	9 69 58 49 176 0 176 35 38 29 17 119 0 119 0 654 654 654
2021-22 332 0.163	1.042	1 0.947 0.957 0.983 0.0% 0.918 0.914 1.105 0.931 0.0% 0.0% 146 0 654 654 654 654
3 Yr Average 0.254	% Pop % 1Yr 384YO % 1Yr 4YO	% Pop
Survival Rate 0.179	0.929 0.958 0.815 0.824 0.984 5 Yr 0.00% 0% 0%	0.948 0.863 0.960 5 Yr 0.00% 0.805 0.876 0.961 1.002 5 Yr 0.00%
Change # Students	-213 -213 -213 -213	
Change % Students 5-YR PROJECTIONS	-39% -39% -39% -39% -39%	% 25% 25% 47% 47% -17%
2022-23 345 0.179	62 50 48 47 44 56 307 0 307 0 0 307	7 56 47 63 166 0 166 46 39 31 42 158 0 158 0 631 631 631
	0.929 0.958 0.815 0.824 0.984	0.948
2023-24 327 0.179	59 57 48 39 39 43 285 0 285 0 0 285 0 285 0 285 0 285 0 285 0 0 285 0 0 285 0 0 285 0 0 0 285 0 0 0 0 285 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 53
2024-25 317 0.179	57 54 55 39 32 38 276 0 276 0 0 276	
	0.929 0.958 0.815 0.824 0.984	0.948
2025-26 309 0.179	55 53 52 45 32 32 269 0 269 0 0 269 0 269 0 269 0 269	9 36
2026-27 328 0.179	59 51 51 42 37 32 272 0 272 0 0 272 0 0 272	
Change # Students	-59 -59 -59	9 -82 -82 -4 -4 -145
Change % Students	-18% -18% -18%	
	KEY to Number Colors	The above information is prepared and certified by a qualified demographer.
	99 Standard number with no modifications to methodology	First Name of Complete Add Company of Character Add Company of Characte
	 99 Provisional, but uncertified births from the NJ Department of Health 99 Births projected as an average of the prior 6 years, including provisional dataand projected students resulting 	Firm Name: Sundance Associates 117 Greenvale Ct. Cherry Hill NJ 08034
	from this "less accurate" average	Name: George B. Sundell Tel 856-755-0174 Email: GSundell@sundanceassoc.com
	99 Students per Grade Level added for residential development	Com B Sagle
		Signature: Date:
6-10 YR PROJECTIONS	NOT CONSIDERED RELIABLE	0.876 0.961 1.002
2027-28 326 0.254	83 55 49 41 35 36 299 0 299 0 0 299	
6 Yr Avg 2028-29 326 0.254	0.929	0.948
Continued	0.929	0.948
2029-30 326 0.254	83 77 74 43 33 33 343 0 343 0 0 343	
0000 04	0.929 0.958 0.815 0.824 0.984	0.948
2030-31 326 0.254	83 77 74 60 35 33 362 0 362 0 362 0 362 0 362 0 362 0 362 0 362	2 32 28 29 88 0 88 0 88 20 18 20 23 81 0 531 531 531 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2031-32 326 0.254	83 77 74 60 50 35 378 0 378 0 378	
Change # Students	106 106 106	6 -10 -10 -64 -64 33
Change % Students	28% 28% 28%	

DISTRICT NAME:	Avon Grove School District
COUNTY:	used thisCharter + Cyber for Alt 1 Chester
DATA ISSUES: "s" = survival rate	Enrollments are from October 1 reports
Births	1st 2nd 3rd 4th 5th K-5 K-5 K-5 PK PK PK PK PK-5 6th 7th 8th 6-8 6-8 6-8 9th 10th 11th 12th 9-12 9-12 9-12 PK K-12 PK-12
School 5 Sch Yrs.	K Gr. Gr. Gr. Gr. Gr. Subt. SCSE Total SCSE 3 yrs. 4yrs. Total Gr. Gr. Subt. SCSE Total Gr.
Year Ago "s"	"S" "S" "S" "S" "S" "S" "S" "S" "S" Excl. SCSE w/ SCSE
HISTORIC DATA	
2016-17 287 0.429	123 100 112 80 62 74 551 0 0 0 551 58 52 46 156 0 156 44 26 31 29 130 0 130 0 837 837
	0.870 0.930 0.696 0.900 0.968 Both 0.973 0.931 0.981 0.0% 0.674 0.886 1.077 1.000 0.0%
2017-18 267 0.303	81 107 93 78 72 60 491 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2018-19 329 0.261	1.074 1.000 0.871 0.987 1.042 0.0% 0.967 0.736 1.000 0.804 0.935 1.179 1.000 0.804 0.935 0.935 0
	0.802 0.989 0.776 0.728 0.974 0.0% 0.973 0.966 0.906 0.906 0.906 0.906 0.906
2019-20 297 0.229	68 69 86 83 59 75 440 0 440 0 0 0 440 73 56 48 177 0 177 52 41 29 48 170 0 170 0 787 787
2020 24 220 0.452	0.897
2020-21 329 0.152	50 61 65 77 66 61 380 0 380 0 380 0 380 0 1.000 0.892 0.831 0.955 0.965 0.006 1.000 0.892 0.831 0.955 0.967 1.014 1.048 0 0.909 0.923 1.152 0.949 0.909 0.923 1.152 0.949
2021-22 332 0.178	59 53 61 58 64 63 358 0 358 0 0 0 0 0 358 59 72 65 196 0 196 50 36 53 37 176 0 176 0 730 730
3 Yr Average 0.259	% Pop
Survival Rate 0.186 Change # Students	0.941 0.972 0.826 0.848 0.994 5 Yr 0.00% 0 0 0 0.965 0.899 0.983 5 Yr 0.00% 0 0.832 0.926 1.072 1.026 5 Yr 0.00% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Change % Students	-35% -35% -35% 26% 26% 35% 35% 35% -13%
5-YR PROJECTIONS	0.941 0.972 0.826 0.848 0.994
2022-23 345 0.186	64 55 52 50 49 64 335 0 335 0 0 335 61 53 71 185 0 185 54 46 39 54 193 0 193 0 713 713
2023-24 327 0.186	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.832 0.926 1.072 1.026 0.832 0.926
2023-24 327 0.100	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.983 0.832 0.926 1.072 1.026
2024-25 317 0.186	59 57 59 45 36 43 298 0 298 0 0 298 0 0 156 0 156 43 55 54 51 203 0 203 0 657 657
	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.983 0.926 1.072 1.026
2025-26 309 0.186	58 56 56 49 38 36 291 0 291 0 0 291 0 0 138 45 40 59 55 199 0 627 627 0.941 0.972 0.826 0.848 0.994 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
2026-27 328 0.186	61 54 54 46 41 38 294 0 294 0 0 294 35 37 42 113 0 113 45 41 43 60 190 0 190 0 597 597 597
Change # Students	-64 -64 -64 -83 -83 14 14 -133 130 140 14 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15
Change % Students	-18% -18% -18% -18% -42% -42% 8% 8% -18.2% KEY to Number Colors The above information is prepared and certified by a qualified demographer.
	99 Standard number with no modifications to methodology
	99 Provisional, but uncertified births from the NJ Department of Health Firm Name: Sundance Associates 117 Greenvale Ct. Cherry Hill NJ 08034
	99 Births projected as an average of the prior 6 years, including provisional dataand projected students resulting from this "less accurate" average Name: George B. Sundell Tel 856-755-0174 Email: GSundell@sundanceassoc.com SUNDANCE
	99 Students per Grade Level added for residential development
	99 Students per Grade Level added for residential development Signature: Date:
	$O^{-\epsilon}$
6-10 YR PROJECTIONS	NOT CONSIDERED RELIABLE
2027-28 326 0.259	84 57 53 45 39 41 319 0 319 0 0 319 36 31 36 104 0 104 35 42 44 44 165 0 165 0 588 588
6 Yr Avg	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.832 0.926 1.072 1.026
2028-29 326 0.259	84 79 56 43 38 39 340 0 340 0 0 340 0 103 30 32 45 46 153 0 153 0 595 595 595 595 595 595 595 595 595 5
2029-30 326 0.259	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.832 0.926 1.072 1.026 0.832 0.926
3.200	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.983 0.926 1.072 1.026
2030-31 326 0.259	84 79 77 64 39 37 381 0 381 0 0 381 0 0 116 0 601 601
2024 22	0.941 0.972 0.826 0.848 0.994 0.965 0.899 0.983 0.926 1.072 1.026
2031-32 326 0.259	84 79 77 64 54 39 398 0 398 0 398 0 398 0 398 0 398 0 609 609
Change # Students	104 104 104 -12 -12 -12 -80 -80 12
Change % Students	26% 26% -12% -12% -73% -73% 2%

Sta	andard Conort-Survival Enrollment Projection Worksheet							
DISTRICT NAME: CO	OMBINED Avon Grove Schools: for Alt 1 "All"							
COUNTY: Ch	hester							
DATA ISSUES: En	nrollments are from October 1 reports							
"s" = survival rate	·							
Births School 5 Sch Yrs.	1st 2nd 3rd 4th 5th K-5 K-5 K-5 PK K Gr. Gr. Gr. Gr. Subt. SCSE Total SCSE	PK PK PK-5 3 yrs. 4yrs. Total		6-8 6-8 6-8 9th 10th Subt. SCSE Total Gr. Gr.	11th 12th 9-12 9-12 Gr. Gr. Subt. SCSE	9-12 PK K-12 K-12 Total Subt. Subt. Total		
Year Ago "s"	"s" "s" "s" "s" (excl. PK)		"s" "s" "s"	"S" "S"	"s" "s"	excl. SCSE w/ SCSE	SE	
HISTORIC DATA								
2016-17 287 1.289 3	370 389 420 417 439 463 2498 0 2498 0 1.008 1.051 1.043 1.067 1.005 1.005	0 0 2498 Both	0.998 1.022 0.987	1361 0 1361 479 488 0.0% 1.029 0.990	0.973 0.949 1925 0 0.0%	1925 0 5784 5784	5784	
2017-18 267 1.408 3	376 373 409 438 445 441 2482 0 2482 0 1.080 1.064 1.024 1.005 1.056	0 0 2482	462 462 462 1.020 1.041 0.994	1386 0 1386 454 474 0.0% 1.041 0.991	1.017	1853 0 5721 5721	5721	
2018-19 329 1.161 3	382 406 397 419 440 470 2514 0 2514 0 1.052 1.034 1.048 1.000 1.045 0.0%	0 0 2514		1390 0 1390 481 450 0.0% 1.096 0.952		1871 0 5775 5775	5775	
2019-20 297 1.340 3	398 402 420 416 419 460 2515 0 2515 0	0 0 2515	479 473 488	1440 0 1440 503 458	450 472 1883 0	1883 0 5838 5838	5838	
2020-21 329 0.991 3	1.005 0.950 0.983 0.993 0.986 0.0% 326 400 382 413 413 413 2347 0 2347 0	0 0 2347	0.996 0.985 0.996 472 471	1401 0 1401 1.023 0.940 473	1.011 0.984 0.0% 0.0% d63 443 1878 0	1878 0 5626 5626	5626	
2021-22 332 1.211 40	1.206 1.040 1.052 1.007 1.017 0.0% 402 393 416 402 416 420 2449 0 2449 0	0 0 2449	1.053 1.039 1.015 479 479	1390 0 1390 1.064 0.940 469	1.011 1.000 0.0% 478 463 1911 0	1911 0 5750 5750	5750	
6 Yr Average 1.233 Survival Rate 1.233	1.070 1.028 1.030 1.014 1.022 5 Yr 0.00%	4YO % 1Yr 4YO		% Pop 5 Yr 0.00% 1.051 0.963	1.002 0.975 5 Yr 0.00%			
Change # Students	-49 -49	-49	1.501	29 29	-14	-14	-34	
Change % Students	-2% -2%	-2%		2% 2%	-1%	-1%	-1%	
5-YR PROJECTIONS 2022-23 345 1.233 43	1.070 1.028 1.030 1.014 1.022 426 430 404 429 408 425 2521 0 2521 0	0 0 2521	427 447 477	1351 0 1351 503 482	470 466 1922 0	1922 0 5794 5794	5794	
207 4 222	1.070 1.028 1.030 1.014 1.022	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.017 1.028 1.001	1.051 0.963	1.002 0.975	4007	5045	
2023-24 327 1.233 40	403 455 442 416 435 417 2569 0 2569 0 1.070 1.028 1.030 1.014 1.022	0 0 2569	432 439 448 1.017 1.028 1.001	1319 501 484 1.051 0.963	483 459 1927 0 1.002 0.975	1927 0 5815 5815	5815	
2024-25 317 1.233 3 9	391 432 468 456 422 444 2613 0 2613 0 1.070 1.028 1.030 1.014 1.022	0 0 2613	424 444 440 1.017 1.028 1.001	1308 0 1308 470 482 1.051 0.963	486 472 1909 0 1.002 0.975	1909 0 5830 5830	5830	
2025-26 309 1.233 3 6	381 418 444 482 462 431 2619 0 2619 0	0 0 2619	452 436 445	1332 0 1332 462 453	483 474 1871 0	1871 0 5823 5823	5823	
2026-27 328 1.233 40	1.070 1.028 1.030 1.014 1.022 405 408 430 457 489 472 2661 0 2661 0	0 0 2661	1.017 1.028 1.001 439 464 436	1339 0 1339 1.051 0.963 467 445	1.002 0.975 454 471 1837 0	1837 0 5838 5838	5838	
Change # Students	212 212	212		-51 -51	-74	-74	88	
Change % Students	9% 9%	9%		-4% -4%	-4%	-4%	1.5%	
KE	EY to Number Colors 99 Standard number with no modifications to methodology		The above information is prepared and certified by a qualified demographer.					
	99 Provisional, but uncertified births from the NJ Department of Health		Firm Name: Sundance Associates	117 Greenvale Ct. Cherry Hill NJ 08034				
	99 Births projected as an average of the prior 6 years, including provisional dataand projected studer from this "less accurate" average	nts resulting		l 856-755-0174 Email: GSundell@sundanceassoc.co	m SUNDANCE			
	99 Students per Grade Level added for residential development		Signature: April B	Siale				
			Signature:	Date: Novem	nber 15, 2021			
	OT CONSIDERED RELIABLE 402 433 419 443 464 500 2661 0 2661 0	0 0 2661	480 451 465	1396 0 1396 458 450	446 443 1796 0	1796 0 5854 5854	5854	
6 Yr Avg	1.070 1.028 1.030 1.014 1.022		1.017 1.028 1.001	1.051 0.963	1.002 0.975	333.		
2028-29 326 1.233 40 Continued	402 431 445 432 450 474 2634 0 2634 0 1.070 1.028 1.030 1.014 1.022 0	0 0 2634	508 494 452 1.017 1.028 1.001	1454 0 1454 488 441 1.051 0.963	451 435 1815 0 1.002 0.975	1815 0 5903 5903	5903	
	402 431 443 459 438 459 2632 0 2632 0	0 0 2632	482 523 494	1499 0 1499 474 470	442 440 1827 0	1827 0 5958 5958	5958	
2030-31 326 1.233 4	1.070 1.028 1.030 1.014 1.022 402 431 443 456 465 448 2645 0 2645 0	0 0 2645		1486 0 1486 1.051 0.963 519 457		1879 0 6009 6009	6009	
2031-32 326 1.233 4	1.070 1.028 1.030 1.014 1.022 402 431 443 456 463 475 2670 0 2670 0	0 0 2670	1.017 1.028 1.001 455 480 496	1432 0 1432 1.051 0.963 500	1.002 0.975 458 460 1967 0	1967 0 6069 6069	6069	
1 11								
Change # Students	9 9	9		92 92	130	130	231	