May 2025 Update

Wallingford-Swarthmore School District

A Comprehensive Analysis of Demographics, Housing and Related Activities, and Other Relevant Factors and Aggregate Districtwide Projections of K-12 Enrollments in the Wallingford -Swarthmore School District

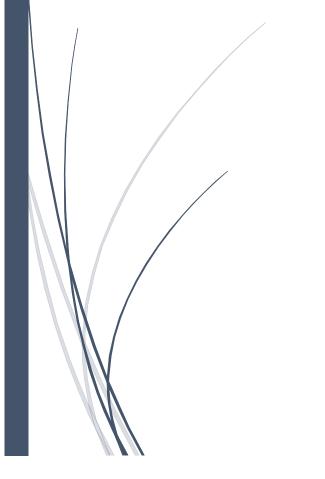




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Chapter 1 Demographic Trends

Introduction

Demographics and enrollment trends in the Wallingford-Swarthmore School District show signs of significant in-migration over the last 10 years despite minimal housing growth. The district's constituent municipalities are mostly built out and present little additional housing development opportunities. However, the ratio of students per housing unit has grown slightly in recent years. Enrollment of district students in other educational programs (e.g., private, parochial, charter and homeschooling) is limited to fewer than five percent of pupils residing in the district.

This report's projections anticipate minimal enrollments growth to continue through 2031-32 before slightly declining in 2032-33 and 2033-34, ending the 10 year period with an additional 99 students.

About Wallingford-Swarthmore School District

The Wallingford-Swarthmore School District is located in southern Delaware County in the Philadelphia metropolitan region of southeastern Pennsylvania. The district encompasses approximately seven square miles and is comprised of four municipalities: Nether Providence Township and the boroughs of Rose Valley, Rutledge, and Swarthmore.

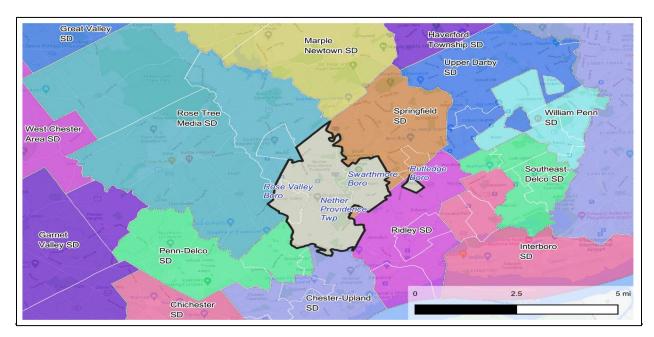


Figure 1.1 Wallingford-Swarthmore and Neighboring School Districts

Population

The total population of the school district grew from approximately 21,200 in 1990 to over 23,000 in 2023. The rate of growth was largest in the 2010s when the district's population grew by 1,270 residents or nearly six percent, compared to growth rates of approximately one percent in each of the prior two decades. These trends are largely consistent with Delaware County overall.

Nether Providence Township accounts for the majority of district residents and population growth since 1990, growing from 13,229 persons to 14,525 persons in 2020. Estimates for 2023 show a drop of 83 residents since 2020. The township and Swarthmore borough experienced population growth in each of the last three decades and drove the district's population increase since 2010. Rose Valley borough experienced population decline between 1990 and 2010 but has since increased to just under 1,200 residents, while Rutledge borough's 982 residents represents an increased estimate from the 2020 census.

Table 1.1 Population Trend, 1990 to 2023

		Nether Providence Twp	Rose Valley Borough	Rutledge Borough	Swarthmore Borough	WSSD Total	Delaware County
Population	1990	13,229	982	843	6,157	21,211	547,651
	2000	13,456	944	860	6,170	21,430	550,864
	2010	13,706	913	784	6,194	21,597	558,979
	2020	14,525	1,017	782	6,543	22,867	576,830
	2023	14,442	1,190	982	6,524	23,138	576,720
Population	1990 - 2000	227	-38	17	13	219	3,213
Change	2000 - 2010	250	-31	-76	24	167	8,115
	2010 - 2020	819	104	-2	349	1,270	17,851
	2020 - 2023	-83	173	200	-19	271	-110
	1990 - 2023	1,213	208	139	367	1,927	29,069
Population	1990 - 2000	1.7%	-3.9%	2.0%	0.2%	1.0%	0.6%
Percent	2000 - 2010	1.9%	-3.3%	-8.8%	0.4%	0.8%	1.5%
Change	2010 - 2020	6.0%	11.4%	-0.3%	5.6%	5.9%	3.2%
_	2020 - 2023	-0.6%	17.0%	25.6%	-0.3%	1.2%	0.0%
	1990 - 2020	9.2%	21.2%	16.5%	6.0%	9.1%	5.3%

As the district's total population has grown, its age distribution has shifted slightly. The population growth among the 65 and over population is estimated to be the district's main driver of population growth since 2010 adding 778, the working age population (ages 18 to 64) also added 704 during the same period. The 2023 estimates for the district's population of residents below 5 years of age is estimated to have increased by 373 children since 2000 while the population aged 5 to 17 years (school aged children) estimated to be lower than in 2000 by 147 residents.

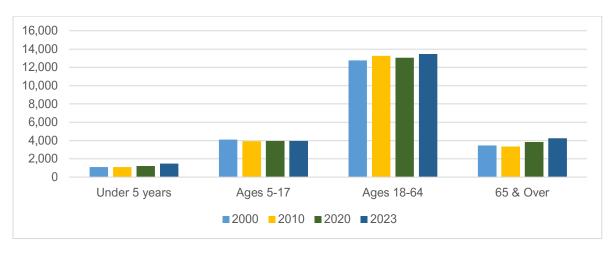
Table 1.2 Population Trends by Age Cohort, 2000 to 2023

	Total Population					
Age Group	2000	2010	2020	2023	Change 2000 - 2023	
Under 5 years	1,101	1,103	1,213	1,474	373	
Ages 5-17	4,089	3,915	3,946	3,942	-147	
Ages 18-64	12,771	13,243	13,063	13,475	704	
65 & Over	3,469	3,336	3,829	4,247	778	
Total	21,430	21,597	22,051	23,138	1,708	
		Percent	of Total			
	2000	2010	2020	2023		
Under 5 years	5.1	5.1	5.5	6.4		
Ages 5-17	19.1	18.1	17.9	17.0		
Ages 18-64	59.6	61.3	59.2	58.2		
65 & Over	16.2	15.4	17.4	18.4		
Total	100.0	100.0	100.0	100.0		

Table 1.3 Population Trend Change by Age Cohort, 2000 to 2023

	Total Change					
	2000 - 2010	2010 - 2020	2020 - 2023	2000 - 2023		
Under 5 years	2	110	261	373		
Aged 5-17	-174	31	-4	-147		
Ages 18-64	472	-180	412	704		
65 & Over	-133	493	418	778		
Total	167	454	1,087	1,708		
		Percent	Change			
	2000 - 2010	2010 - 2020	2020 - 2023	2000 - 2023		
Under 5 years	0.2	10.0	21.5	25.3		
Aged 5-17	-4.3	0.8	-0.1	-3.7		
Ages 18-64	3.7	-1.4	3.2	5.2		
65 & Over	-3.8	14.8	10.9	18.3		
Total	0.8	2.1	4.9	7.4		

Figure 1.2 Population by Age Group 2010 to 2023



District enrollments as a percentage of the area's age 5-17 population cohort have increased from 84.1 percent in 2000 to 89.3 percent in 2023. One possible reason for these shifts could be changes in the availability of private school alternatives over time. Parochial school closures and consolidations have had a notable impact on private school alternatives across the state.

Table 1.4 Population by Age Group, October 1 Enrollments, 2000 to 2023

					Change 2000 - 2023	
	2000	2010	2020	2023	#	%
Population Age 5-17	4,089	3,915	3,946	4,196	107	2.6
Oct 1 Enrollment	3,440	3,432	3,757	3,749	309	9.0
Enrollment % of Population	84.1	87.7	95.2	89.3		

Housing

Wallingford-Swarthmore School District's housing trends are relatively consistent with the population trends identified in the previous section. The district's housing stock grew by 294 units (3.7 percent) since 2000 to an estimated 8,139 units in 2020. Most of the district's housing unit growth has occurred in Nether Providence Township which added 175 units in the 2000s and 43 since 2010.

Table 1.5 Housing Unit Trends, 2000 - 2020

		Total Hous	sing Units		Pe	ercent of Total	I
	2000	2010	2020	Change 2000 - 2020	2000	2010	2020
Nether Providence Twp	5,125	5,300	5,343	218	65.3	65.9	65.6
Rose Valley Borough	351	372	397	46	4.5	4.6	4.9
Rutledge Borough	305	292	294	-11	3.9	3.6	3.6
Swarthmore Borough	2,064	2,081	2,105	41	26.3	25.9	25.9
School District Total	7,845	8,045	8,139	294	100.0	100.0	100.0
Delaware County	216,978	222,902	215,498	-1,480			
		Total C	hange		Percentage Change		
		2000 - 2010	2010 - 2020	2000 - 2020	2000 - 2010	2010 - 2020	2000 - 2020
Nether Providence Twp		175	43	218	3.4	0.8	4.3
Rose Valley Borough		21	25	46	6.0	6.7	13.1
Rutledge Borough		-13	2	-11	-4.3	0.7	-3.6
Swarthmore Borough		17	24	41	0.8	1.2	2.0
School District Total		200	94	294	2.5	1.2	3.7
Delaware County		5,924	-7,404	-1,480	2.7	-3.3	-0.7

The relationship between housing units and district enrollments has been relatively stable since 2000, marginally increasing from 43.8 to 45.6 pupils per 100 units between 2000 and 2020.

Table 1.6 Relationship of Public School Enrollments to Housing Units

	2000	2010	2020	2023
Housing Units	7,845	8,045	8,139	8,247
District Enrollments	3,440	3,597	3,709	3,749
Pupils per 100 Units	43.8	44.7	45.6	45.5

Few notable tracts of undeveloped land exist in the district and thus the catalog of pending developments is small. However, housing development and redevelopment activity should be monitored closely, particularly in this volatile housing market and national and regional shortage of homes.

Housing Turnover

According to the 2023 ACS 5-Year Estimates Detailed Tables, approximately 52.1 percent of the population in occupied housing (owners and renters) in the district moved to their house from 2010 to 2020. This population would be reflected in the student enrollments during the historic period. Additionally, any school age children who moved into the district since 2021 would be included in the grade level progressions.

		Percent of Total
Population	21,095	
Moved in 2021 or later	1,279	6.1
Moved 2010 to 2020	10,999	52.1
Moved in 2000 to 2009	10,944	51.9
Moved in 1999 or earlier	6 411	30.4

Table 1.7 District Population Moved

Birth Patterns

The annual number of resident births in the Wallingford-Swarthmore School District is a significant input for the enrollment projection process and ultimately the planning processes of a district. Furthermore, birth data can include notable year-to-year volatility that can sometimes obscure trends. Births in the Wallingford-Swarthmore School District have been on a slow decline since 1990. Live district births totaled 2,171 in the 1990s, 1,905 in the 2000s, and 1,839 between 2010 and 2019.

Table 1.8 Comparison of Birth Trends in Wallingford-Swarthmore School District and Delaware County 1990 to 2023¹

	Wallingford-S	warthmore School	District	D	elaware County		WSSD
	Year to Year Change				% of		
Year	Births	#	%	Births	#	%	County
1990	262			8,447			3.1
1991	245	-17	-6.5	8,247	-200	-2.4	3.0
1992	221	-24	-9.8	7,718	-529	-6.4	2.9
1993	210	-11	-5.0	7,646	-72	-0.9	2.7
1994	205	-5	-2.4	7,379	-267	-3.5	2.8
1995	193	-12	-5.9	6,991	-388	-5.3	2.8
1996	213	20	10.4	7,012	21	0.3	3.0
1997	195	-18	-8.5	6,772	-240	-3.4	2.9
1998	214	19	9.7	7,027	255	3.8	3.0
1999	213	-1	-0.5	6,815	-212	-3.0	3.1
2000	232	19	8.9	6,931	116	1.7	3.3
2001	166	-66	-28.4	6,775	-156	-2.3	2.5
2002	198	32	19.3	6,574	-201	-3.0	3.0
2003	201	3	1.5	6,857	283	4.3	2.9
2004	181	-20	-10.0	6,772	-85	-1.2	2.7
2005	210	29	16.0	6,886	114	1.7	3.0
2006	176	-34	-16.2	6,989	103	1.5	2.5
2007	185	9	5.1	6,880	-109	-1.6	2.7
2008	182	-3	-1.6	7,047	167	2.4	2.6
2009	174	-8	-4.4	6,979	-68	-1.0	2.5
2010	191	17	9.8	6,830	-149	-2.1	2.8
2011	181	-10	-5.2	6,774	-56	-0.8	2.7
2012	161	-20	-11.0	6,598	-176	-2.6	2.4
2013	190	29	18.0	6,571	-27	-0.4	2.9
2014	205	15	7.9	6,750	179	2.7	3.0
2015	192	-13	-6.3	6,551	-199	-2.9	2.9
2016	180	-12	-6.3	6,587	36	0.5	2.7
2017	149	-31	-17.2	6,578	-9	-0.1	2.3
2018	202	53	35.6	6,470	-108	-1.6	3.1
2019	188	-14	-6.9	6,342	-128	-2.0	3.0
2020	158	-30	-16.0	6,271	-71	-1.1	2.5
2021	187	29	18.4	6,395	124	2.0	2.9
2022	180	-7	-3.7	6,491	96	1.5	2.8
2023	150	-30	-16.7	6,022	-469	-7.2	2.5
1990-99	2,171			74,054			2.9
2000-09	1,905	-266	-12.3	68,690	-5,364	-7.2	2.8
2010-19	1,839	-66	-3.5	66,051	-2,639	-3.8	2.8
2020-23	675			25,179			2.7

¹ Source: State Health Data Center, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions. Highest and lowest yearly birth figures for the district and county highlighted in blue and green, respectively.

Figure 1.3 shows that the trajectory of district births, when viewed on a five-year average perspective, have been relatively flat since 2010 despite the year-to-year volatility. Rolling 5-year averages ranged between a high of 186 to a low of 175 during that time.

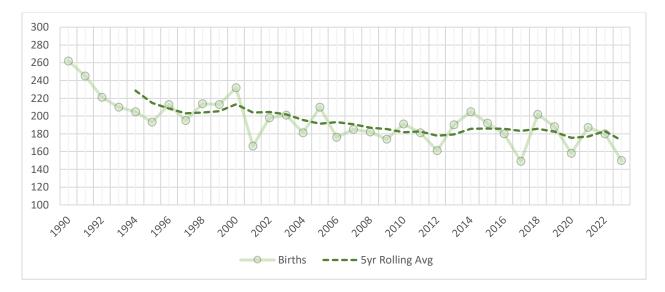


Figure 1.3 Birth Trends in Wallingford-Swarthmore School District

Rolling 13-year cumulative births can be compared to their corresponding school year as a proxy for total possible enrollment before the effects of migration and other educational programs are considered. For example, the 2021-22 school year approximately corresponds with births during the years 2004 through 2016. Rolling 13-year cumulative births hit a low of 2,353 for the years associated with the 2025-26 school year.

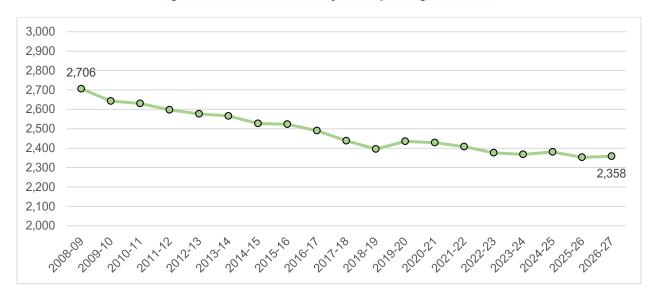


Figure 1.4 Cumulative Births by Corresponding School Year

Birth rates as a function of total population and total housing units have been on a slow decline, which partially counteracts the impact of population and housing growth on future enrollments. District births per 1,000 residents have declined from 10.8 per thousand in 1994 to a low of 7.7 in

2023 using five-year averages. On a per-1,000 housing unit basis, birth rates have declined from 29.2 to 21.1 over the same time period. In practical terms, consider that in 2023 there were 150 births in the district based on Pennsylvania Department of Health preliminary statistics. If the birth rate in 2023 had been similar to the rates in the late 1990s, total births would have been well over 250.

Table 1.9 Estimated Births Per 1,000 Residents and Per 1,000 Housing Units

	Births Per 1,0	00 Residents	Births Per 1,000 Housing Units		
Year	Rate	5-Year Average	Rate	5-Year Average	
1990	12.4		33.5		
1991	11.5		31.3		
1992	10.4		28.2		
1993	9.9		26.8		
1994	9.6	10.8	26.2	29.2	
1995	9.1	10.1	24.6	27.4	
1996	10.0	9.8	27.2	26.6	
1997	9.1	9.5	24.9	25.9	
1998	10.0	9.6	27.3	26.0	
1999	9.9	9.6	27.2	26.2	
2000	10.8	10.0	29.6	27.2	
2001	7.7	9.5	21.1	26.0	
2002	9.2	9.5	25.1	26.0	
2003	9.4	9.4	25.4	25.7	
2004	8.4	9.1	22.8	24.8	
2005	9.8	8.9	26.4	24.2	
2006	8.2	9.0	22.1	24.4	
2007	8.6	8.9	23.2	24.0	
2008	8.4	8.7	22.7	23.5	
2009	8.1	8.6	21.7	23.2	
2010	8.8	8.4	23.7	22.7	
2011	8.3	8.5	22.5	22.8	
2012	7.4	8.2	20.0	22.1	
2013	8.6	8.3	23.5	22.3	
2014	9.3	8.5	25.4	23.0	
2015	8.6	8.5	23.7	23.0	
2016	8.1	8.4	22.2	23.0	
2017	6.6	8.2	18.4	22.6	
2018	8.9	8.3	24.9	22.9	
2019	8.3	8.1	23.1	22.5	
2020	6.9	7.8	19.4	21.6	
2021	8.3	7.8	22.9	21.7	
2022	8.2	8.1	21.9	22.4	
2023	6.9	7.7	18.2	21.1	

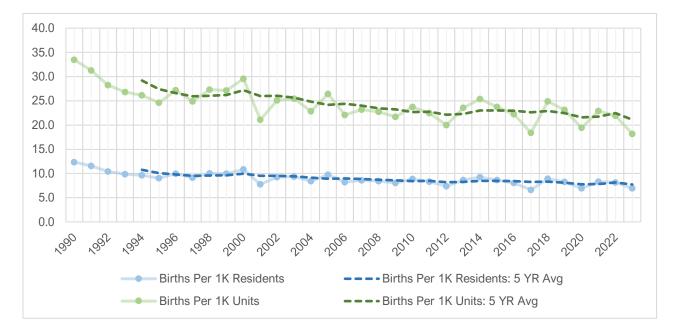


Figure 1.5 Estimated Births Per 1,000 Residents and Per 1,000 Housing Units

Migration Patterns

A comparison of birth and death trends to total population trends can provide an estimate of inmigration, another notable factor that can influence enrollment projections. Since 1990, the population of the Wallingford-Swarthmore School District has grown by 1,927 persons. During that same time, the district experienced net natural population growth each decade. Births exceeded deaths by over 248 in the 1990s whereas births only exceeded deaths by 38 and 42 in the 2000s and 2010s, respectively. Estimates for 2023 show that deaths exceeded birth by 65 for a natural population loss.

The difference between total population change and natural population change is the estimated net migration into or out of the district. Net migration was small in the 1990s and 2000s, estimated at -29 and 129, respectively. In-migration to the district was much higher in the 2010s (+1,228) which is consistent with the other population and housing trends identified in this report. The 2023 estimates in migration of 336 residents since 2020.

	1990 to 1999	2000 to 2009	2010 to 2019	2020 to 2023	1990 to 2023
Total Population (start)	21,211	21,430	21,597	22,867	21,211
Total Population (end)	21,430	21,597	22,867	23,138	23,138
Total Population Change (a)	219	167	1,270	271	1,927
Births	2,171	1,905	1,839	675	5,915
Deaths	1,923	1,867	1,797	740	5,587
Natural Pop. Change (b)	248	38	42	-65	328
Net Migration (a minus b)	-29	129	1.228	336	1.599

Table 1.10 Resident Births, Deaths, and Population Change, 1990-2023

A review of the relationship between the Wallingford-Swarthmore's pupil population and births in the district in the years corresponding to the ages of children in school (essentially, a surrogate for the number of school-age children) can also provide a perspective on the impact of migration. A figure greater than 100 percent indicates an enrollment that is higher than that resulting solely from corresponding births in the district, likely due to net in-migration of this age group. Conversely, a figure of less than 100 percent indicates net out-migration and/or district children enrolling in other educational programs.

WSSD enrollments exceed corresponding district births annually. Enrollments were approximately 138 percent of cumulative births in 2013-14 and grew annually to nearly 155 percent in 2020-21, which is indicative of a strong in-migration of households with school-age children. When other enrollments—defined as students in various private/parochial, homeschooling, full-time vocational/technical schooling and non-district cyber programs—are factored in, total enrollment figures for all district pupils are well above 160 percent of corresponding births.

		WS Enroll		Otl Enroll		Total Enrollments		
	Cumu- lative Births	#	% of Cumu- lative Births	#	% of Cumu- lative Births	#	% of Cumu- lative Births	
2013-14	2,566	3,535	137.8	272	10.6	3,807	148.4	
2014-15	2,527	3,529	139.7	280	11.1	3,809	150.7	
2015-16	2,523	3,561	141.1	277	11	3,838	152.1	
2016-17	2,490	3,591	144.2	310	12.4	3,901	156.7	
2017-18	2,438	3,682	151.0	251	10.3	3,933	161.3	
2018-19	2,396	3,644	152.1	262	10.9	3,906	163	
2019-20	2,435	3,747	153.9	252	10.3	3,999	164.2	
2020-21	2,429	3,757	154.7	255	10.5	4,012	165.2	
2021-22	2,408	3,709	154.0	226	9.4	3,935	163.4	
2022-23	2,376	3,746	157.7					
2023-24	2,368	3,749	158.3					
2024-25	2,380	3,738	157.1					

Table 1.11 Relationship of WSSD and Other Enrollments to Cumulative Births in Corresponding Years

Cumulative births represent the sum of births for the 13-year period corresponding to the school year. For example, pupils in school year 2016-17 reflect births during the years 1999 through 2011.

WSSD enrollment numbers are based on October 1 figures as provided by the district for each year and reflect all regular classroom pupils as well as district children enrolled in the half-day program offered by the Delaware County Career and Technology Center and those who participate in the district's cyber/charter program (known as The WSSD Virtual School), and those in the district's alternative education program.

Other Enrollments include children in WSSD who were reported to be in home schools, cyber schools, and charter schools (except those participating in the district's cyber/charter program) and district children enrolled in private/parochial schools who are transported by the district (and perhaps some who are not transported).

Changes in enrollments by grade in the Wallingford-Swarthmore School District can reflect many factors in addition to migration; for example, shifts to and from private/parochial and other schools, special classes, and other educational programs not provided directly by Wallingford-Swarthmore; changes in promotional and other internal district policies; withdrawals—particularly in the high school grades; etc. However, WSSD enrollments as a percentage of estimated total district enrollments has been consistently between 92 and 95 percent since 2013-14.

Table 1.12 Number and Proportion of District Children Enrolled in Wallingford-Swarthmore and Other Schools and Educational Programs

	Enrollment	s by School/Pr	ogram Type		Total Enrollm	nents
		Parochial/	Other		WSSD	Non-WSSD
School Year	WSSD	Private	Programs	#	% of Total	% of Total
2013-14	3,535	258	14	3,807	92.9	7.1
2014-15	3,529	263	17	3,809	92.6	7.4
2015-16	3,561	255	22	3,838	92.8	7.2
2016-17	3,591	289	21	3,901	92.1	7.9
2017-18	3,682	232	19	3,933	93.6	6.4
2018-19	3,644	246	16	3,906	93.3	6.7
2019-20	3,747	237	15	3,999	93.7	6.3
2020-21	3,757	224	31	4,012	93.6	6.4
2021-22	3,709	199	27	3,935	94.3	5.7
2022-23	2,376					
2023-24	2,368					
2024-25	2,380					

Parochial/Private enrollments include district children enrolled in private/parochial schools as well as cyber schools and charter schools (except those participating in the district's cyber/charter program)

Other Program enrollments include children in Wallingford-Swarthmore who were reported to be in home schools and full-time students of the Delaware County Career and Technology Center.

Enrollment Changes by Grade and Class

The following two tables show the progression of students through the school years 2009-10 through 2023-24. The highlights follow the same cohort of pupils through the years. When comparing class sizes to the prior year and grade, enrollment gains are most notable in the first grade, which adds an average of 40 students. Positive gains are typical throughout the elementary grade levels. The district also sees consistent student additions in the sixth, seventh, and ninth grades. This concept will be further explored from the "grade progression ratio" perspective in the next chapter.

Table 1.13 Total Enrollments by Grade, 2009-10 to 2024-25

Year	к	1	2	3	4	5	6	7	8	9	10	11	12	Total
2009-10	210	259	219	239	266	266	240	280	253	316	329	303	327	3,507
2010-11	187	250	256	216	244	271	272	255	281	277	313	320	290	3,432
2011-12	176	218	257	258	220	243	276	284	246	297	282	318	315	3,390
2012-13	222	253	228	275	281	225	261	297	297	266	309	282	327	3,523
2013-14	212	261	267	249	287	292	240	278	293	305	266	303	282	3,535
2014-15	237	231	263	266	251	288	296	245	277	302	307	266	300	3,529
2015-16	234	267	244	277	263	254	298	317	248	277	304	311	267	3,561
2016-17	214	260	280	248	289	272	265	304	318	258	278	297	308	3,591
2017-18	236	273	279	295	253	294	285	284	312	334	257	275	305	3,682
2018-19	209	278	275	289	295	261	292	292	280	319	329	251	274	3,644
2019-20	262	260	281	291	293	300	262	299	305	285	324	330	255	3,747
2020-21	235	292	251	288	287	292	316	260	293	310	280	323	330	3,757
2021-22	217	257	302	263	287	290	306	310	255	315	306	273	328	3,709
2022-23	218	277	278	319	270	284	302	308	313	270	309	306	292	3,746
2023-24	219	260	282	293	324	273	290	301	302	320	269	305	311	3,749
2024-25	224	266	265	284	305	324	289	294	299	298	317	263	310	3,738

Table 1.12 Change in Enrollments by Class, 2010-11 to 2024-25

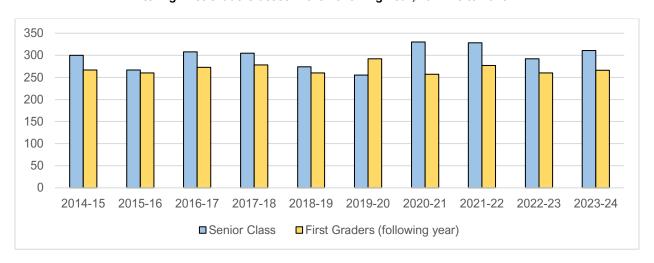
Year	1	2	3	4	5	6	7	8	9	10	11	12	Total 1-12	K- PY12	Total Chang e
2010-11	40	-3	-3	5	5	6	15	1	24	-3	-9	-13	65	-140	-75
2011-12	31	7	2	4	-1	5	12	-9	16	5	5	-5	72	-114	-42
2012-13	77	10	18	23	5	18	21	13	20	12	0	9	226	-93	133
2013-14	39	14	21	12	11	15	17	-4	8	0	-6	0	127	-115	12
2014-15	19	2	-1	2	1	4	5	-1	9	2	0	-3	39	-45	-6
2015-16	30	13	14	-3	3	10	21	3	0	2	4	1	98	-66	32
2016-17	26	13	4	12	9	11	6	1	10	1	-7	-3	83	-53	30
2017-18	59	19	15	5	5	13	19	8	16	-1	-3	8	163	-72	91
2018-19	42	2	10	0	8	-2	7	-4	7	-5	-6	-1	58	-96	-38
2019-20	51	3	16	4	5	1	7	13	5	5	1	4	115	-12	103
2020-21	30	-9	7	-4	-1	16	-2	-6	5	-5	-1	0	30	-20	10
2021-22	22	10	12	-1	3	14	-6	-5	22	-4	-7	5	65	-113	-48
2022-23	60	21	17	7	-3	12	2	3	15	-6	0	19	147	-110	37
2023-24	42	5	15	5	3	6	-1	-6	7	-1	-4	5	76	-73	3
2024-25	47	5	2	12	0	16	4	-2	-4	-3	-6	5	76	-87	-11
Avg Change	41.0	7.5	9.9	5.5	3.5	9.7	8.5	0.3	10.7	-0.1	-2.6	2.1	96.0	-80.6	15.4
Years ↑	15	13	13	11	11	14	12	7	13	6	3	8	15	0	9
Year↓	0	2	2	3	3	1	3	8	1	8	9	5	0	15	6

Another factor that can be an indicator of the pattern of future overall enrollments in a school district is the relationship between senior classes and the first-grade classes that replace them in the following school year. For example, in the 2012-13 school year 253 first graders replaced 315 twelfth graders from the prior school year, producing a net reduction of 62 pupils or -19.7 percent. Student count declines occurred in all but one year under this comparison. Overall, enrollments have not fallen as much as these figures below, another indication of the in-migration in most grade levels identified in the previous section.

Table 1.14 Relationship Between Senior Classes and Entering First Grade Classes in the Following Year, 2011-12 to 2023-24

Senior (Class	First Grad	e Class	Cha	nge
Year	Students	Year	Students	Students	%
2011-12	315	2012-13	253	-62	-19.7
2012-13	327	2013-14	261	-66	-20.2
2013-14	282	2014-15	231	-51	-18.1
2014-15	300	2015-16	267	-33	-11.0
2015-16	267	2016-17	260	-7	-2.6
2016-17	308	2017-18	273	-35	-11.4
2017-18	305	2018-19	278	-27	-8.9
2018-19	274	2019-20	260	-14	-5.1
2019-20	255	2020-21	292	37	14.5
2020-21	330	2021-22	257	-73	-22.1
2021-22	328	2022-23	277	-51	-15.5
2022-23	292	2023-24	260	-32	-11.0
2023-24	311	2024-25	266	-45	-14.5

Figure 1.6 Relationship Between Senior Classes and Entering First Grade Classes in the Following Year, 2012-13 to 2023-24



Chapter 2 Enrollment Trends and Projections

Introduction

The Wallingford-Swarthmore School District experienced net enrollment growth since 2015-16 as total enrollments increased to 3,738 students for the 2024-25 school year. The majority of this enrollment growth came from the elementary grade level, which peaked in 2019-20, followed by two consecutive years of modest enrollment declines with slight increases in 2022-23 through 2024-25. This report's projections anticipate additional enrollment growth over the next ten years.

Unless otherwise stated, all historical enrollment data is based upon October 1 figures as provided by the school district.²

Past Historical Trends

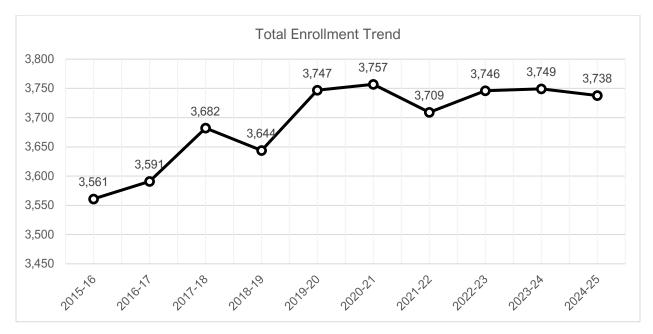
Enrollments in the Wallingford-Swarthmore School District rose from 2014-15 to 2024-25 by 177 students (5.0 percent), ending the ten-year period at a total pupil count of 3,738 students. Enrollments peaked in 2020-21 at 3,757 students. The largest year-to-year changes during this period occurred from 2016-17 to 2017-18 (+91 students or 2.5 percent) and between 2018-19 and 2019-20 (+103 students or 2.8 percent).

² Pupil counts are based on October 1 figures as provided by the district for each year and reflect all regular classroom pupils as well as district children enrolled in the half-day program offered by the Delaware County Career and Technology Center, those who participate in the district's cyber/charter program (known as the WSSD Virtual School) and those in the district's alternative education program. Excluded from the district counts are children residing in the Wallingford-Swarthmore School District who were reported to be in home schooling, cyber schools or charter schools (other than those participating in the district's cyber/charter program), those enrolled in private/parochial schools, district children in full-time Intermediate Unit programs (even if conducted in the district's classrooms), and resident children in juvenile correction facilities, other institutions, and other out-of-district placements, etc.

Change Enrollment % **School Year** # 2015-16 3.561 2016-17 3,591 30 8.0 2017-18 3,682 91 2.5 2018-19 3,644 -38 -1.0 2019-20 3,747 103 2.8 10 0.3 2020-21 3,757 -48 2021-22 3,709 -1.3 2022-23 37 1.0 3,746 2023-24 3 0.1 3,749 -11 2024-25 -0.3 3,738 Change 2015-16 to 2024-25 177 5.0

Table 2.1 Total Enrollments (Grades K-12), 2015-16 to 2024-25

Figure 2.1 Total Enrollments (Grades K-12)



Enrollments by grade level are presented in Table 2.2 and Figure 2.2 below. K-5 enrollments grew from 1,539 in 2015-16 to a period-high 1,687 pupils in 2019-20. Two consecutive years of marginal decline brought elementary enrollments to a count of 1,616 students for the 2021-22 school year. K-5 added 30 pupils in 2022-23, 5 in 2023-24 and 17 in 2024-25 bringing the total to 1,668 in 2024-25, which represents a net gain of 129 students (8.4 percent) compared to the 2014-15 enrollments.

Grades 6-8 enrollments varied throughout this time period, fluctuating between a low of 863 in 2015-16 to a high of 923 in 2022-23. Middle school student count ended the ten-year historical period at 882 students, 19 students more than the 2014-15 school year, including 52 added in 2022-23.

High school enrollments saw modest net enrollment growth over the last ten years, ending the period at 1,188 students (+29 or 2.5 percent). Two of the largest classes in the last ten years graduated in 2020-21 (330 students) and 2021-22 (328 students) adding to the decline.

Table 2.2 Enrollments by Grade Level 2015-16 to 2024-25

	K-5	Chai	nge	6-8	Change		9-12	Chan	ge
School Year	Enrollment	#	%	Enrollment	#	%	Enrollment	#	%
2015-16	1,539			863			1,159		
2016-17	1,563	24	1.6	887	24	2.8	1,141	-18	-1.6
2017-18	1,630	67	4.3	881	-6	-0.7	1,171	30	2.6
2018-19	1,607	-23	-1.4	864	-17	-1.9	1,173	2	0.2
2019-20	1,687	80	5.0	866	2	0.2	1,194	21	1.8
2020-21	1,645	-42	-2.5	869	3	0.3	1,243	49	4.1
2021-22	1,616	-29	-1.8	871	2	0.2	1,222	-21	-1.7
2022-23	1,646	30	1.9	923	52	6.0	1,177	-45	-3.7
2023-24	1,651	5	0.3	893	-30	-3.3	1,205	28	2.4
2024-25	1,668	17	1.0	882	-11	-1.2	1,188	-17	-1.4
Change 2015-16 to 2024-25		129	8.4		19	2.2		29	2.5

Figure 2.2 Enrollments by Grade Level 2015-16 to 2024-25

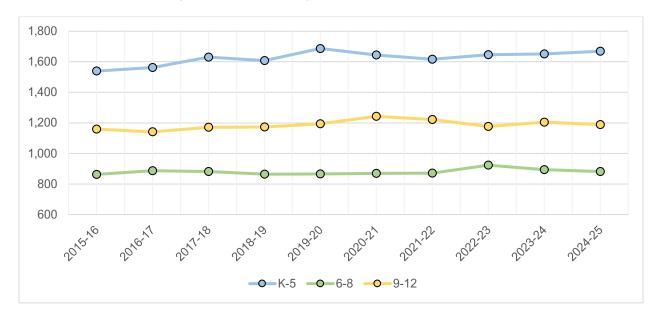
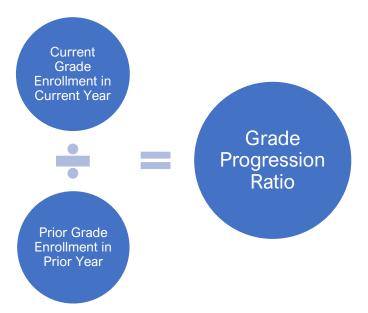


Table 2.3 Total Enrollments by Grade, 2015-16 to 2024-25

School Year	К	1	2	3	4	5	6	7	8	9	10	11	12	Total
2015-16	234	267	244	277	263	254	298	317	248	277	304	311	267	3,561
2016-17	214	260	280	248	289	272	265	304	318	258	278	297	308	3,591
2017-18	236	273	279	295	253	294	285	284	312	334	257	275	305	3,682
2018-19	209	278	275	289	295	261	292	292	280	319	329	251	274	3,644
2019-20	262	260	281	291	293	300	262	299	305	285	324	330	255	3,747
2020-21	235	292	251	288	287	292	316	260	293	310	280	323	330	3,757
2021-22	217	257	302	263	287	290	306	310	255	315	306	273	328	3,709
2022-23	218	277	278	319	270	284	302	308	313	270	309	306	292	3,746
2023-24	219	260	282	293	324	273	290	301	302	320	269	305	311	3,749
2024-25	224	266	265	284	305	324	289	294	299	298	317	263	310	3,738

Grade Progression Ratio History

Enrollment projections for the Wallingford-Swarthmore School District were prepared using the "grade progression" technique, which is based on the ratio of enrollments in a given grade in a given year to enrollments in the next lower grade in the preceding year. The grade progression formula was developed by reviewing the recent experience in the district with respect to pupil progression and refining that information using the various demographic and housing data and the other indicators that were analyzed, as well as the expected impact of schools and educational programs other than those operated directly by the Wallingford-Swarthmore School District. This approach is generally designed to detect such factors as in- or out-migration of pupils; transfers of pupils into and out of any special classes and programs, private/parochial and other schools, full-time CTC program, and/or any other educational programs not directly operated by the district; changes in promotional and other internal district policies; withdrawals—particularly in the high school grades; etc.



By way of example, if grade 2 enrollments were 98 in the 2018-19 school year and grade 1 had 100 pupils in the prior school year (2017-18), the grade progression ratio from grade 1 to grade 2 would be 0.98. Ratios below 1.00 are generally indicative of net out-migration, transfers out of the school system or to special classes or programs, failure to promote pupils from the prior grade, and/or dropouts in the high school grades. Ratios above 1.00 usually indicate net in-migration, transfers into the school system from private/parochial and other schools or special classes and programs, and/or the failure to promote pupils to the next grade.

The district typically experiences a large enrollment increase in the first grade, which is common for districts that offer half-day kindergarten. The district averages small class increases between elementary school years as well, with five-year averages ranging from 1.0380 for grade 3 to a low of 1.0015 for grade 5.

The small above-neutral progression ratios continue through most of the district's recent enrollment history with the exception of the tenth and eleventh grades, which is a common trend in enrollment data. Eighth grade also showed a slight decrease in students.

3 Year 4 Year 2 Year 5 Year 2023-24 2020-21 2021-22 **Grades** 2022-23 2024-25 Average **Average** Average **Average** 1/K 1.1145 1.0936 1.2765 1.1927 1.2146 1.2036 1.2279 1.1943 1.1784 2/1 0.9654 1.0342 1.0817 1.0181 1.0192 1.0186 1.0397 1.0383 1.0237 3/2 1.0249 1.0478 1.0563 1.0540 1.0071 1.0305 1.0391 1.0413 1.0380 4/3 0.9863 0.9965 1.0266 1.0157 1.0410 1.0283 1.0277 1.0199 1.0132 1.0000 5/4 0.9966 1.0105 0.9895 1.0111 1.0056 1.0002 1.0028 1.0015 6/5 1.0533 1.0479 1.0414 1.0211 1.0586 1.0399 1.0404 1.0423 1.0445 7/6 0.9924 0.9810 1.0065 0.9967 1.0138 1.0052 1.0057 0.9995 0.9981 8/7 0.9799 0.9808 1.0097 0.9805 0.9934 0.9869 0.9945 0.9911 0.9889 9/8 1.0164 1.0751 1.0588 1.0224 0.9868 1.0046 1.0226 1.0358 1.0319 10/9 0.9825 0.9871 0.9810 0.9963 0.9906 0.9935 0.9893 0.9887 0.9875 11/10 0.9969 0.9750 1.0000 0.9871 0.9777 0.9824 0.9883 0.9849 0.9873 12/11 1.0000 1.0155 1.0696 1.0163 1.0164 1.0164 1.0341 1.0295 1.0236

Table 2.4 Grade Progression Ratio by Grade Groupings

In practice, enrollment projections typically utilize a three-, four-, or five-year average of grade progression ratios. The graphic below shows how these averages would affect a class of 100 students entering kindergarten. The three year average grows by 100 students to 147 by senior year, four year averages net 142 twelfth graders, and five year averages net 134 seniors. The progression ratios for the last two years increased the class by 134 students.

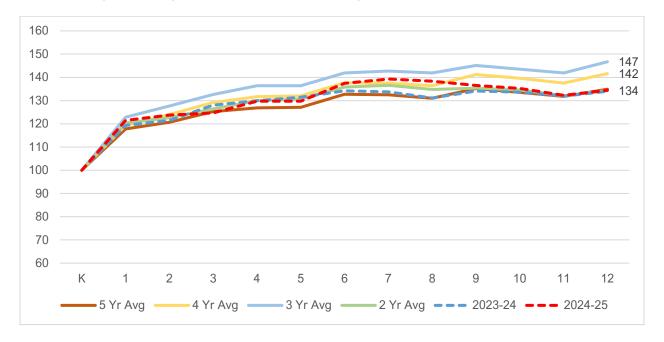


Figure 2.3 Progression Examples of 100 Kindergarten Students under Different Ratios

In practice, these patterns would not necessarily materialize as outlined due to changes in progression ratios over time. However, the theoretical impact of the progression ratios based on these points of reference reveals the effect of the migration of school-age children, transfers out of or into district classrooms, to or from private/parochial and other schools and special classes and programs, changes in promotional and other internal district policies, dropouts, and so forth.

Kindergarten Enrollment to Births Ratio History

Another vital enrollment projection input is ratio of kindergarten enrollments and resident births five years earlier. These ratios (or "cohort survival rates") are analyzed and—along with the number of births in the district—are used to calculate future kindergarten enrollments. This approach, like the grade progression technique, detects net in- and out-migration and the impact of private/parochial and other schools as well as special classes and programs.

A figure below 1.0 suggests that kindergarten entries are lower than the number of births in the district five years earlier, indicating net out-migration in the pre-school ages and/or families opting to enroll their children in kindergarten classes or programs provided by entities other than the public school district. Conversely, a figure of greater than 1.0 suggests more kindergarten entries than births in the district five years earlier indicating in-migration of children that outweighs any role that non-district schools and educational programs and special classes and programs may play.

The best available source of data on births in the district is the annual compilations by the Pennsylvania Department of Health. However, it should be noted that birth figures for purposes of the projection model are based on the school year and age eligibility requirements rather than the calendar year as reported elsewhere in this study. Wallingford-Swarthmore requires that children be five years of age by September 1 to enter kindergarten that year.

The ratio of kindergarten entries to births has averaged around 1.24 in the last several years. Put another way, the school district typically experiences five kindergarten enrollees for every four live births in the district for the corresponding time period. The district's 2023-24 cohort survival ratio was the lowest at 1.1347 (219 kindergarten students compared to 193 births in the corresponding period of September 2017 to August 2018). The 2022-23 cohort was the highest at 1.3885 (218 kindergarten students compared to the low of 157 births in the corresponding period of September 2016 to August 2017).

Table 2.5 Ratios of Kindergarten Entries to Births

Birth Year	Births	School Year	Kinder- garten Enrollments	Ratio (K/Births)
2008-09	182	2014-15	237	1.3022
2009-10	178	2015-16	234	1.3146
2010-11	185	2016-17	214	1.1568
2011-12	170	2017-18	236	1.3882
2012-13	165	2018-19	209	1.2667
2013-14	206	2019-20	262	1.2718
2014-15	202	2020-21	235	1.1634
2015-16	177	2021-22	217	1.2260
2016-17	157	2022-23	218	1.3885
2017-18	193	2023-24	219	1.1347
2018-19	185	2024-25	224	1.2108
2019-20	167	2025-26		
2020-21	185	2026-27		
2021-22	179	2027-28		
2022-23	168	2028-29		
3 yr Avg	177			1.2447

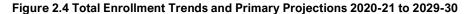
Enrollment Projections – Primary Period

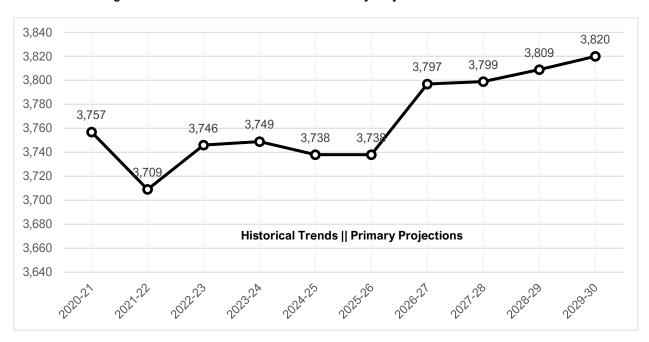
The primary projection period's methodology assumes overall migration and related patterns will remain consistent with recent trends, that the role of schools and educational programs other than those operated directly by Wallingford-Swarthmore will be compatible with expected patterns, and that the district will continue its current practices relative to kindergarten, CTC, and special education programs and maintain other key programs, practices, and policies. Kindergarten entries are forecasted based on actual live birth data for district municipalities and the three-year average for births-to-kindergarten cohort survival rates. Similarly, three year average grade progression ratios are used for grade progressions.

Primary projections anticipate small fluctuations in the district's total enrollment count, with a period low of 3,738 in 2024-25 to a high of 3,820 students in 2029-30, a figure that represents a total student count increase of 82 students (2.2 percent) from current enrollments.

Change # **School Year Enrollment** % 2024-25 (Actual) 3,738 0 2025-26 3,738 0.0 2026-27 3,797 59 1.6 2 0.1 2027-28 3,799 10 0.3 2028-29 3,809 2029-30 3,820 11 0.3 Change 2024-25 to 2029-30 82 2.2

Table 2.6 Total Enrollment Projections (Grades K-12) 2024-25 to 2029-30





Projected enrollment patterns vary by grade level; the forecast suggests net increases in 6-8 and 9-12 over the period as shown in Table 2.7 below.

Table 2.7 Projected Enrollments by Grade Level, 2024-25 to 2029-30

	K-5	Cha	nge	6-8	Cha	nge	9-12	Chan	ge
School Year	Enrollment	#	%	Enrollment	#	%	Enrollment	#	%
2024-25 (Actual)	1,668			882			1,188		
2025-26	1,632	-36	-2.2	920	38	4.3	1,186	-2	-0.2
2026-27	1,634	2	0.1	945	25	2.7	1,218	32	2.7
2027-28	1,646	12	0.7	960	15	1.6	1,193	-25	-2.1
2028-29	1,652	6	0.4	917	-43	-4.5	1,240	47	3.9
2029-30	1,654	2	0.1	908	-9	-1.0	1,258	18	1.5
Change 2022-23	to 2027-28	-14	-0.8		26	2.9		70	5.9

Figure 2.5 Enrollment Trends and Primary Projections by Grade Level 2020-21 to 2029-30

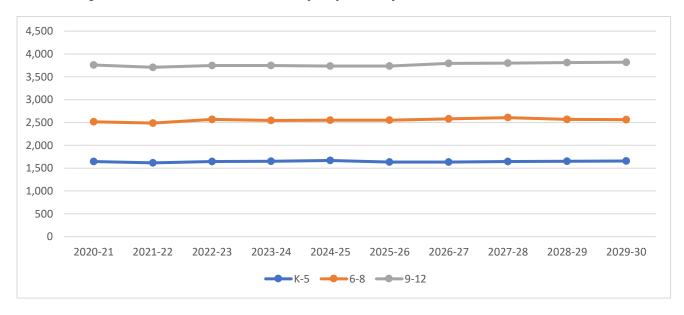


Table 2.8 Projected Enrollments by Grade

School Year	К	1	2	3	4	5	6	7	8	9	10	11	12	Total
2024-25	224	266	265	284	305	324	289	294	299	298	317	263	310	3,738
2025-26	208	275	277	275	292	305	337	291	292	306	295	313	272	3,738
2026-27	230	255	286	288	283	292	317	339	289	299	303	292	324	3,797
2027-28	223	282	265	297	296	283	304	319	337	296	296	299	302	3,799
2028-29	209	274	293	275	305	296	294	306	317	345	293	293	309	3,809
2029-30	220	257	285	304	283	305	308	296	304	324	341	290	303	3,820
Change	-4	-9	20	20	-22	-19	19	2	5	26	24	27	-7	82
% Change	-1.8	-3.4	7.5	7.0	-7.2	-5.9	6.6	0.7	1.7	8.7	7.6	10.3	-2.3	2.2

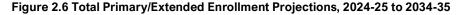
Enrollment Projections – Extended Period

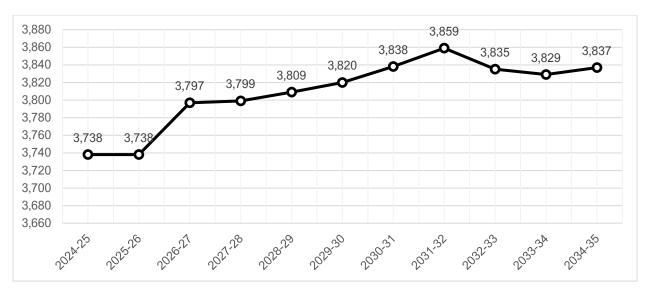
Extended projections require estimating future births for kindergarten entries, which adds another level of projection uncertainty due to the volatility of yearly births (as further explored in Chapter 1). These projections fix estimated births at the three-year average of 177 births annually.

The extended projections anticipate enrollment to remain relatively stable, increasing by 17 students over the five years. Enrollments are forecasted to total 3,837 pupils by 2034-35.

Change **School Year Enrollment** # % 2029-30 3,820 2030-31 3,838 18 0.5 21 0.5 3,859 2031-32 -24 -0.6 2032-33 3,835 2033-34 3,829 -6 -0.2 8 2034-35 3,837 0.2 Change 2027-28 to 2032-33 17 0.4

Table 2.9 Extended Total Enrollment Projections (Grades K-12) 2029-30 to 2034-35





Grades K-5 pickup nine students in the extended forecast, while grades 6-8 add 32 students. High school numbers decrease in the extended forecast from a high of 1,274 in 2031-32 to 1,234 anticipated in 2034-35, a net loss of 24 students.

Table 2.10 Extended Enrollment Projections by Grade Level, 2029-30 to 2034-35

	K-5	Char	nge	6-8	Char	nge	9-12	Chan	ge
School Year	Enrollment	#	%	Enrollment	#	%	Enrollment	#	%
2029-30	1,654			908			1,258		
2030-31	1,648	-6	-0.4	921	13	1.4	1,269	11	0.
2031-32	1,664	16	1.0	921	0	0.0	1,274	5	0.
2032-33	1,652	-12	-0.7	938	17	1.8	1,245	-29	-2.
2033-34	1,648	-4	-0.2	937	-1	-0.1	1,244	-1	-0.
2034-35	1,663	15	0.9	940	3	0.3	1,234	-10	-0.
Change 2029-30) to 2034-35	9	0.5		32	3.5		-24	-1.

Figure 2.7 Primary and Extended Enrollment Projections by Grade Level 2024-25 to 2034-35



Enrollment Projections Alternative Scenarios

The above projections were developed using three year average progression ratios and the average birth rate for the last three years. In contrast, Table 2.12 provides a greater range of enrollment possibilities using a combination of the minimum and maximum progressions for each grade, as well as the minimum (167), maximum (206) and average (177) annual number of births.

Using the alternative projections scenario creates a wider range of possible enrollments for any given school year. This range varies from a low of 237 in 2025-26 (3,602 students to 3,839 students) to a high of 1,996 in 2034-35. Minimum enrollment by 2034-35 is estimated at 2,779. Maximum enrollment is estimated at 4,774 or significantly above the actual 2024-2025 enrollment. These compare with the preferred enrollment estimate of 3,837 an increase of about 100 students over the 2024-2025 enrollment.

The estimates using only the minimum and maximum birth rates show a smaller range starting in 2028-29 at 22, growing to a 331 variance by 2034-35. Minimum enrollment by 2034-35 is estimated at 3,747. Maximum enrollment is estimated at 4,079.

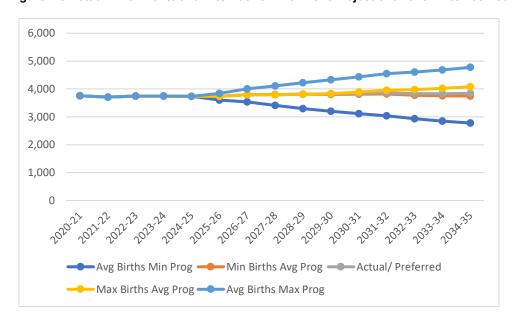
Table 2.11 Minimum/Maximum Progression Ratios, SY 2021-22 to 2024-25

Grades	Minimum	Preferred 3 year Avg	Maximum
B/K	1.1347	1.2447	1.3885
1/K	1.0936	1.2765	1.2765
2/1	0.9654	1.0817	1.0817
3/2	1.0071	1.0563	1.0563
4/3	0.9863	1.0410	1.0410
5/4	0.9895	1.0111	1.0111
6/5	1.0211	1.0586	1.0586
7/6	0.9810	1.0138	1.0138
8/7	0.9799	1.0097	1.0097
9/8	0.9868	1.0751	1.0751
10/9	0.9810	0.9963	0.9963
11/10	0.9750	1.0000	1.0000
12/11	1.0000	1.0696	1.0696

Table 2.12 Actual Enrollments and Alternative Enrollment Projections 2020-21 to 2034-35

School Year	Avg Births & Min Prog	Min Births & Avg Prog	Actual/ Preferred	Max Births & Avg Prog	Avg Births & Max Prog	Range Prog Chg	Range Birth Min Max
2020-21	3,757	3,757	3,757	3,757	3,757	0	0
2021-22	3,709	3,709	3,709	3,709	3,709	0	0
2022-23	3,746	3,746	3,746	3,746	3,746	0	0
2023-24	3,749	3,749	3,749	3,749	3,749	0	0
2024-25	3,738	3,738	3,738	3,738	3,738	0	0
2025-26	3,602	3,738	3,738	3,738	3,839	237	0
2026-27	3,531	3,796	3,797	3,796	4,002	471	0
2027-28	3,410	3,798	3,799	3,798	4,107	697	0
2028-29	3,300	3,809	3,809	3,809	4,225	925	0
2029-30	3,203	3,808	3,820	3,830	4,328	1,125	22
2030-31	3,118	3,812	3,838	3,888	4,438	1,320	76
2031-32	3,043	3,820	3,859	3,957	4,554	1,511	137
2032-33	2,933	3,778	3,835	3,978	4,610	1,677	200
2033-34	2,844	3,757	3,829	4,022	4,686	1,842	265
2034-35	2,779	3,747	3,837	4,079	4,774	1,996	331

Figure 2.8 Actual Enrollments and Alternative Enrollment Projections 2020-21 to 2034-35



By grade level, the K-5 range estimate is 743 in 2034-35, resulting in projections from 1,265 students to 2,008 students; grade 6-8, range is 589, projected students from 627 to 1,216; grades 9-12, range is 664, projected students from 886 to 1,551.

By grade level, using the three year average progression ratios and the minimum and maximum births, the range of K-5 enrollments grows from 22 beginning in year 2029-30 to 331 in year 2034-35. There is no variance from the preferred in the 6-8 and 9-12 ratios, as birthrates associated with those grade levels have already occurred.

Table 2.13 K-5 Actual Enrollments and Alternative Enrollment Projections, 2020-21 to 2034-35

School Year	Avg Births & Min Prog	Min Births & Avg Prog	Actual/ Preferred	Max Births & Avg Prog	Avg Births & Max Prog	Range Prog Chg	Range Birth Min Max
2020-21	1,645	1,645	1,645	1,645	1,645	0	0
2021-22	1,616	1,616	1,616	1,616	1,616	0	0
2022-23	1,646	1,646	1,646	1,646	1,646	0	0
2023-24	1,651	1,651	1,651	1,651	1,651	0	0
2024-25	1,668	1,668	1,668	1,668	1,668	0	0
2025-26	1,540	1,632	1,632	1,632	1,689	149	0
2026-27	1,453	1,634	1,634	1,634	1,756	304	0
2027-28	1,386	1,646	1,646	1,646	1,834	448	0
2028-29	1,323	1,653	1,652	1,653	1,903	580	0
2029-30	1,278	1,643	1,654	1,666	1,957	679	22
2030-31	1,254	1,623	1,648	1,699	1,990	736	76
2031-32	1,266	1,624	1,664	1,760	2,011	745	137
2032-33	1,257	1,593	1,652	1,793	1,993	736	200
2033-34	1,255	1,573	1,648	1,838	1,989	734	265
2034-35	1,265	1,571	1,663	1,902	2,008	743	331

Figure 2.9 K-5 Actual Enrollments and Alternative Enrollment Projections, 2020-21 to 2034-35

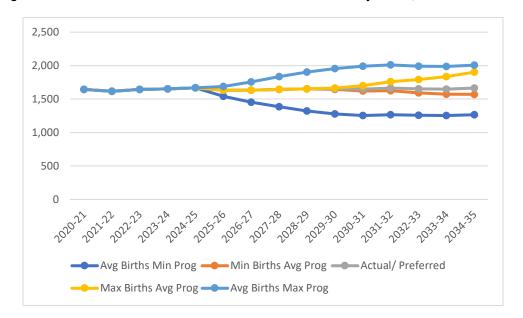


Table 2.14 6-8 Actual Enrollments and Alternative Enrollment Projections 2020-21 to 2034-35

School Year	Avg Births & Min Prog	Min Births & Avg Prog	Actual/ Preferred	Max Births & Avg Prog	Avg Births & Max Prog	Range Prog Chg	Range Birth Min Max
2020-21	869	869	869	869	869	0	0
2021-22	871	871	871	871	871	0	0
2022-23	923	923	923	923	923	0	0
2023-24	893	893	893	893	893	0	0
2024-25	882	882	882	882	882	0	0
2025-26	902	920	920	920	933	30	0
2026-27	911	945	945	945	970	59	0
2027-28	903	960	960	960	998	95	0
2028-29	840	917	917	917	967	127	0
2029-30	791	907	908	907	979	188	0
2030-31	746	921	921	921	1,027	281	0
2031-32	681	922	921	922	1,093	411	0
2032-33	648	941	938	941	1,172	525	0
2033-34	626	940	937	940	1,213	586	0
2034-35	627	941	940	941	1,216	589	0

Figure 2.10 Actual Enrollments and Alternative Enrollment Projections 2020-21 to 2034-35

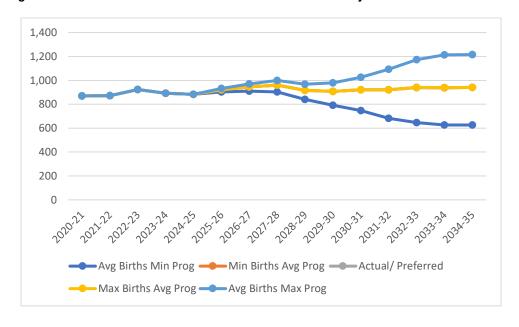
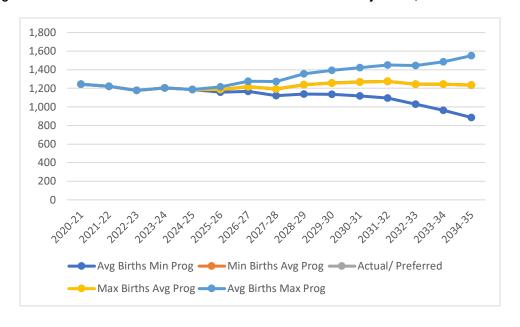


Table 2.15 9-12 Actual Enrollments and Alternative Enrollment Projections, 2020-21 to 2034-35

School Year	Avg Births & Min Prog	Min Births & Avg Prog	Actual/ Preferred	Max Births & Avg Prog	Avg Births & Max Prog	Range Prog Chg	Range Birth Min Max
2020-21	1,243	1,243	1,243	1,243	1,243	0	0
2021-22	1,222	1,222	1,222	1,222	1,222	0	0
2022-23	1,177	1,177	1,177	1,177	1,177	0	0
2023-24	1,205	1,205	1,205	1,205	1,205	0	0
2024-25	1,188	1,188	1,188	1,188	1,188	0	0
2025-26	1,159	1,186	1,186	1,186	1,217	57	0
2026-27	1,168	1,217	1,218	1,217	1,275	108	0
2027-28	1,120	1,192	1,193	1,192	1,274	154	0
2028-29	1,137	1,239	1,240	1,239	1,355	218	0
2029-30	1,134	1,257	1,258	1,257	1,392	258	0
2030-31	1,118	1,268	1,269	1,268	1,421	303	0
2031-32	1,095	1,274	1,274	1,274	1,450	355	0
2032-33	1,028	1,244	1,245	1,244	1,444	416	0
2033-34	963	1,245	1,244	1,245	1,485	522	0
2034-35	886	1,235	1,234	1,235	1,551	664	0

Figure 2.11 9-12 Actual Enrollments and Alternative Enrollment Projections, 2020-21 to 2034-35



Projection Variance

Comparing the projections prepared in 2022-23 to current projections, actuals for 2024-25 are down 109 or 2.8% students from the numbers projected for this school year. These actuals are down across all grade level groupings. K-5 enrollments are down 56 students or 3.2%; 6-8 is down 24 students or 2.6% and 9-12 are down 29 or 2.4%. When these actuals are factored into the grade progression, they slightly lower the progressions in eight of the 13 steps.

In addition to the lower progression ratios, average births are a down as well in the district. The five year average birth rate in the district is down by 14 from 191 to 177. This figure affects the extended projections in the district.

As a result of these factors, projections in the district are down 184 students in 2032-34 from the 2022 projection.

Table 2.16 Grade Level Projection Variance

Grades	2025 3 year average	Pre Covid 5 Year Average	Variance
B/K	1.2447	1.2632	-0.0185
1/K	1.2765	1.1871	0.0894
2/1	1.0817	1.0392	0.0425
3/2	1.0563	1.0434	0.0128
4/3	1.0410	1.0132	0.0277
5/4	1.0111	1.0224	-0.0113
6/5	1.0586	1.0246	0.0340
7/6	1.0138	1.0423	-0.0285
8/7	1.0097	1.0144	-0.0048
9/8	1.0751	1.0262	0.0489
10/9	0.9963	1.0014	-0.0051
11/10	1.0000	0.9918	0.0082
12/11	1.0696	1.0067	0.0629

Table 2.17 2025 Updated Projections

		K-5			6-8			9-12		Total		
School Year	Enroll ment	Chan ge	% Chg									
2022-23	1,646			923			1,177			3,746		
2023-24	1,651	5	0.3	893	-30	-3.3	1,205	28	2.4	3,749	3	0.1
2024-25	1,668	17	1.0	882	-11	-1.2	1,188	-17	-1.4	3,738	-11	-0.3
2025-26	1,632	-36	-2.2	920	38	4.3	1,186	-2	-0.2	3,738	0	0.0
2026-27	1,634	2	0.1	945	25	2.7	1,218	32	2.7	3,797	59	1.6
2027-28	1,646	12	0.7	960	15	1.6	1,193	-25	-2.1	3,799	2	0.1
2028-29	1,652	6	0.4	917	-43	-4.5	1,240	47	3.9	3,809	10	0.3
2029-30	1,654	2	0.1	908	-9	-1.0	1,258	18	1.5	3,820	11	0.3
2030-31	1,648	-6	-0.4	921	13	1.4	1,269	11	0.9	3,838	18	0.5
2031-32	1,664	16	1.0	921	0	0.0	1,274	5	0.4	3,859	21	0.5
2032-33	1,652	-12	-0.7	938	17	1.8	1,245	-29	-2.3	3,835	-24	-0.6
2033-34	1,648	-4	-0.2	937	-1	-0.1	1,244	-1	-0.1	3,829	-6	-0.2
2034-35	1,663	15	0.9	940	3	0.3	1,234	-10	8.0-	3,837	8	0.2

Table 2.18 2022 Projections

		K-5			6-8			9-12			Total	
	Enroll	Chan	%	Enroll	Chan	%	Enroll	Chan	%	Enroll	Chan	%
	ment	ge	Chg	ment	ge	Chg	ment	ge	Chg	ment	ge	Chg
2022-23	1,646			923			1,177			3,746		
2023-24	1,683	37	2.2	918	-5	-0.5	1,205	28	2.4	3,806	60	1.6
2024-25	1,724	41	2.4	906	-12	-1.3	1,217	12	1.0	3,847	41	1.1
2025-26	1,686	-38	-2.2	940	34	3.8	1,236	19	1.6	3,862	15	0.4
2026-27	1,695	9	0.5	959	19	2.0	1,280	44	3.6	3,934	72	1.9
2027-28	1,689	-6	-0.4	998	39	4.1	1,266	-14	-1.1	3,953	19	0.5
2028-29	1,703	14	8.0	958	-40	-4.0	1,312	46	3.6	3,973	20	0.5
2029-30	1,682	-21	-1.2	986	28	2.9	1,320	8	0.6	3,988	15	0.4
2030-31	1,671	-11	-0.7	989	3	0.3	1,353	33	2.5	4,013	25	0.6
2031-32	1,692	21	1.3	985	-4	-0.4	1,369	16	1.2	4,046	33	0.8
2032-33	1,684	-8	-0.5	969	-16	-1.6	1,366	-3	-0.2	4,019	-27	-0.7

Table 2.19 2025 Projection vs. 2022 Projection Variance

		K-	5	6-8	3	9-1	2	Tot	al
School		Chan	%	Chan	%	Chan	%	Chan	%
Year		ge	Chg	ge	Chg	ge	Chg	ge	Chg
2022-23	Actual	0		0		0			
2023-24	Actual	-32	-1.9	-25	-2.7	0	0.0	-57	-1.5
2024-25	Actual	-56	-3.2	-24	-2.6	-29	-2.4	-109	-2.8
2025-26		-54	-3.2	-20	-2.1	-50	-4.0	-124	-3.2
2026-27		-61	-3.6	-14	-1.5	-62	-4.8	-137	-3.5
2027-28		-43	-2.5	-38	-3.8	-73	-5.8	-154	-3.9
2028-29		-51	-3.0	-41	-4.3	-72	-5.5	-164	-4.1
2029-30		-28	-1.7	-78	-7.9	-62	-4.7	-168	-4.2
2030-31		-23	-1.4	-68	-6.9	-84	-6.2	-175	-4.4
2031-32		-28	-1.7	-64	-6.5	-95	-6.9	-187	-4.6
2032-33		-32	-1.9	-31	-3.2	-121	-8.9	-184	-4.6

Chapter 3 Projections By School and Municipality

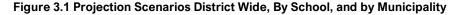
Introduction

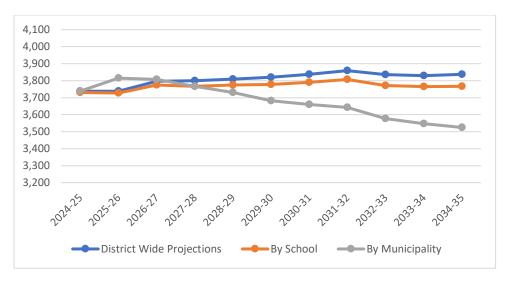
The tables and figures below present school district projections by area using two sets of numbers. One set used the grade progression ratio within the individual schools throughout the district. The second set of numbers is by municipality using the three year average district wide grade progression ratio applied in Chapter 2.

Projections generally show an increase in student population through 2029-2030. The districtwide and by school figures vary throughout the extended period, while the by municipality scenario decreases to a low of 3,525 in 2034-35.

Year	District Wide Projections	By School	Variance from District Wide	By Municipality	Variance from District Wide
2024-25	3,738	3,730	0.0%	3,738	0.0%
2025-26	3,738	3,727	-1.0%	3,815	2.1%
2026-27	3,797	3,774	-0.4%	3,807	0.3%
2027-28	3,799	3,767	0.2%	3,766	-0.9%
2028-29	3,809	3,774	0.7%	3,730	-2.1%
2029-30	3,820	3,777	0.4%	3,681	-3.6%
2030-31	3,838	3,790	1.9%	3,661	-4.6%
2031-32	3,859	3,807	1.4%	3,643	-5.6%
2032-33	3,835	3,771	1.9%	3,577	-6.7%
2033-34	3,829	3,765	1.8%	3,547	-7.4%
2034-35	3,837	3,766	1.8%	3,525	-8.1%

Table 3.1 Projection Scenarios District Wide, By School, and by Municipality





Projection Scenarios by Grade

Table 3.2 K- 5 Projection Scenarios

Year	District Wide Projections	By School	Variance from District Wide	By Municipality	Variance from District Wide
2024-25	1,668	1,666	1.9%	1,668	0.1%
2025-26	1,632	1,628	1.9%	1,665	2.3%
2026-27	1,634	1,628	1.9%	1,642	0.9%
2027-28	1,646	1,634	1.9%	1,624	-0.6%
2028-29	1,652	1,637	1.9%	1,606	-1.9%
2029-30	1,654	1,640	1.9%	1,588	-3.1%
2030-31	1,648	1,623	1.9%	1,573	-3.1%
2031-32	1,664	1,635	1.9%	1,589	-2.8%
2032-33	1,652	1,622	1.9%	1,577	-2.8%
2033-34	1,648	1,619	1.9%	1,573	-2.8%
2034-35	1,663	1,633	1.9%	1,587	-2.8%

Table 3.2 K- 5 Projection Scenarios

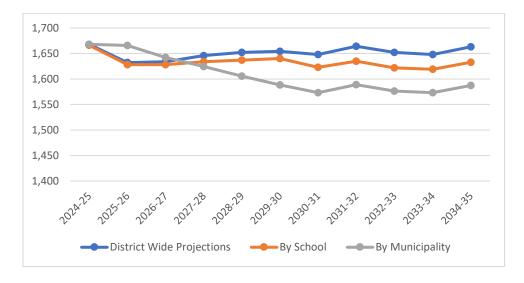


Table 3.3 Grade 6-8 Projection Scenarios

Year	District Wide Projections	By School	Variance from District Wide	By Municipality	Variance from District Wide
2024-25	882	879	-0.3%	882	0.0%
2025-26	920	916	-0.4%	933	1.4%
2026-27	945	935	-1.1%	943	-0.2%
2027-28	960	950	-1.0%	949	-1.2%
2028-29	917	906	-1.2%	890	-3.0%
2029-30	908	895	-1.4%	874	-3.8%
2030-31	921	914	-0.8%	867	-5.9%
2031-32	921	912	-1.0%	842	-8.5%
2032-33	938	928	-1.1%	840	-10.4%
2033-34	937	914	-2.5%	828	-11.6%
2034-35	940	913	-2.9%	830	-11.7%

Figure 3.3 Grade 6-8 Projection Scenarios

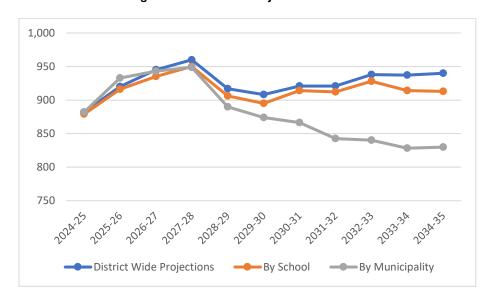
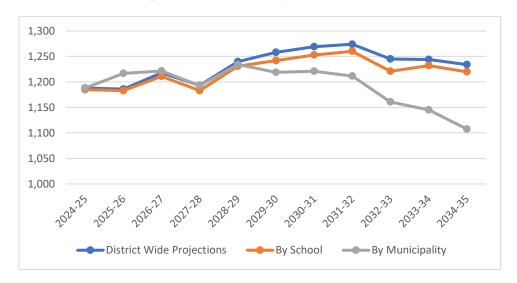


Table 3.4 Grade 9-12 Projection Scenarios

Year	District Wide Projections	By School	Variance from District Wide	By Municipality	Variance from District Wide
2024-25	1,188	1,185	-0.3%	1,188	0.0%
2025-26	1,186	1,183	-0.3%	1,217	2.6%
2026-27	1,218	1,211	-0.6%	1,222	0.3%
2027-28	1,193	1,183	-0.8%	1,193	0.0%
2028-29	1,240	1,231	-0.7%	1,234	-0.5%
2029-30	1,258	1,242	-1.3%	1,219	-3.1%
2030-31	1,269	1,253	-1.3%	1,221	-3.8%
2031-32	1,274	1,260	-1.1%	1,212	-4.9%
2032-33	1,245	1,221	-1.9%	1,161	-6.8%
2033-34	1,244	1,232	-1.0%	1,145	-7.9%
2034-35	1,234	1,220	-1.1%	1,108	-10.2%

Figure 3.4 Grade 9-12 Projection Scenarios



Projections by Grade and Building

Assumptions

- Oct. 1, 2024-25, enrollments are used as the baseline
- Progression ratios are based on the three year average ratio for the school.
- Kindergarten enrollment is derived by applying the average three year average birth to kindergarten ratio to total births, then allocating this figure by the three year average percentage of kindergarten enrollments by school.
- 2024-2025 district wide enrollments include eight out of district placements

Table 3.5 Total Projected Enrollment by School and by District, 2024-25 to 2034-35

Year	K-5	6-8	9-12	Total By School Enrollment	District Wide Projections	Variance	% Variance
2024-25	1,666	879	1,185	3,730	3,738	-8	-0.2%
2025-26	1,628	916	1,183	3,727	3,738	-11	-0.3%
2026-27	1,628	935	1,211	3,774	3,797	-23	-0.6%
2027-28	1,634	950	1,183	3,767	3,799	-32	-0.8%
2028-29	1,637	906	1,231	3,774	3,809	-35	-0.9%
2029-30	1,640	895	1,242	3,777	3,820	-43	-1.1%
2030-31	1,623	914	1,253	3,790	3,838	-48	-1.3%
2031-32	1,635	912	1,260	3,807	3,859	-52	-1.3%
2032-33	1,622	928	1,221	3,771	3,835	-64	-1.7%
2033-34	1,619	914	1,232	3,765	3,829	-64	-1.7%
2034-35	1,633	913	1,220	3,766	3,837	-71	-1.9%

K-5 projections at the school level produce a slightly lower figure than the districtwide projections as the individual school grade progression varies from the districtwide figure.

Table 3.6 K-5 Projected Enrollment by School and by District, 2024-25 to 2034-35

	Nether Providence Elementary	Wallingford Elementary	Swarthmore Rutledge	Total Enrollment	District Wide Projections	Variance	% Variance
2024-25	479	609	578	1,666	1,668	-2	-0.1%
2025-26	466	597	565	1,628	1,632	-4	-0.2%
2026-27	457	615	556	1,628	1,634	-6	-0.4%
2027-28	463	627	544	1,634	1,646	-12	-0.7%
2028-29	463	637	537	1,637	1,652	-15	-0.9%
2029-30	461	639	540	1,640	1,654	-14	-0.8%
2030-31	454	645	524	1,623	1,648	-25	-1.5%
2031-32	462	659	514	1,635	1,664	-29	-1.7%
2032-33	458	650	514	1,622	1,652	-30	-1.8%
2033-34	458	647	514	1,619	1,648	-29	-1.8%
2034-35	463	655	515	1,633	1,663	-30	-1.8%

Middle school projections by school are slightly lower than district wide projections as the 5th grade enrollment feeding the middle school is lower than the district wide projections.

Table 3.7 Middle School Projected Enrollment by School and by District, 2024-25 to 2034-35

Year	Strath Haven MS	Total Enrollment	District Wide Projections	Variance	% Variance
2024-25	879	879	882	-3	-0.3%
2025-26	916	916	920	-4	-0.4%
2026-27	935	935	945	-10	-1.1%
2027-28	950	950	960	-10	-1.0%
2028-29	906	906	917	-11	-1.2%
2029-30	895	895	908	-13	-1.4%
2030-31	914	914	921	-7	-0.8%
2031-32	912	912	921	-9	-1.0%
2032-33	928	928	938	-10	-1.1%
2033-34	914	914	937	-23	-2.5%
2034-35	913	913	940	-27	-2.9%

These lower figures through grade 8 carry through to high school with slightly lower figures than the aggregate.

Table 3.8 High School Projected Enrollment by School and by District, 2024-25 to 2034-35

9-12	Strath Haven HS	Total Enrollment	District Wide Projections	Variance	% Variance
2024-25	1,185	1,185	1,188	-3	-0.3%
2025-26	1,183	1,183	1,186	-3	-0.3%
2026-27	1,211	1,211	1,218	-7	-0.6%
2027-28	1,183	1,183	1,193	-10	-0.8%
2028-29	1,231	1,231	1,240	-9	-0.7%
2029-30	1,242	1,242	1,258	-16	-1.3%
2030-31	1,253	1,253	1,269	-16	-1.3%
2031-32	1,260	1,260	1,274	-14	-1.1%
2032-33	1,221	1,221	1,245	-24	-1.9%
2033-34	1,232	1,232	1,244	-12	-1.0%
2034-35	1,220	1,220	1,234	-14	-1.1%

Projections by Municipality

Assumptions

- Oct. 1, 2024-25, enrollments are allocated by municipality based on the 2023 population of 5-17 year olds in the municipality.
- Progression ratios are based on the three year average ratio for the district.

The projections by municipality produce significantly lower results than the aggregate.

Table 3.9 Municipal Projections, 2024-25 to 2034-35

Year	Nether Providence Twp	Rose Valley Borough	Rutledge Borough	Swarthmore Borough	Total Enrollment	District Wide Projections	Variance	% Variance
2024-25	2,488	260	198	792	3,738	3,738	0	0.0%
2025-26	2,543	256	198	819	3,815	3,738	77	2.1%
2026-27	2,553	247	195	812	3,807	3,797	10	0.3%
2027-28	2,537	241	192	797	3,766	3,799	-33	-0.9%
2028-29	2,526	229	186	788	3,730	3,809	-79	-2.1%
2029-30	2,509	217	179	775	3,681	3,820	-139	-3.6%
2030-31	2,511	208	174	768	3,661	3,838	-177	-4.6%
2031-32	2,515	199	170	760	3,643	3,859	-216	-5.6%
2032-33	2,487	185	163	742	3,577	3,835	-258	-6.7%
2033-34	2,483	175	158	731	3,547	3,829	-282	-7.4%
2034-35	2,484	165	153	723	3,525	3,837	-312	-8.1%

Table 3.10 Total Enrollment

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2024-25	185	224	266	265	284	305	324	289	294	299	298	317	263	310	3,738
2025-26	167	208	286	288	280	296	308	343	293	297	321	297	317	281	3,815
2026-27	185	230	256	288	286	282	300	306	343	293	296	317	297	312	3,807
2027-28	179	223	283	258	286	288	286	298	307	344	292	292	317	292	3,766
2028-29	168	209	274	286	256	288	292	284	298	307	343	288	291	312	3,730
2029-30	177	220	257	276	284	258	293	290	285	299	306	338	288	287	3,681
2030-31	177	220	271	259	275	286	262	291	291	285	298	302	338	284	3,661
2031-32	177	220	271	273	258	277	290	260	291	291	284	294	302	333	3,643
2032-33	177	220	271	273	272	260	281	288	260	292	290	280	293	297	3,577
2033-34	177	220	271	273	272	273	263	279	289	261	290	286	280	289	3,547
2034-35	177	220	271	273	272	273	278	262	279	289	260	286	286	276	3,525

Table 3.11 Nether Providence Township Projected Enrollment

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2024-25	142	148	178	177	189	203	215	193	196	199	198	211	175	206	2,488
2025-26	114	142	189	193	187	197	205	228	196	198	214	197	211	187	2,543
2026-27	135	168	175	190	191	188	200	204	228	196	197	211	197	208	2,553
2027-28	125	156	207	176	189	193	191	198	204	228	195	194	211	194	2,537
2028-29	121	151	192	208	175	190	196	190	199	205	227	192	194	208	2,526
2029-30	128	159	185	193	207	176	193	194	190	199	204	224	192	191	2,509
2030-31	128	159	196	187	192	209	179	192	195	190	198	201	224	190	2,511
2031-32	128	159	196	198	186	193	212	178	192	195	190	195	201	221	2,515
2032-33	128	159	196	198	196	187	196	210	178	193	194	187	195	198	2,487
2033-34	128	159	196	198	196	198	190	195	211	178	192	191	187	192	2,483
2034-35	128	159	196	198	196	198	201	188	195	211	177	189	191	184	2,484

Table 3.12 Rose Valley Borough Projected Enrollment

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2024-25	8	16	18	18	20	21	23	20	20	21	21	22	18	22	260
2025-26	4	5	20	19	19	21	21	24	20	20	23	21	22	19	256
2026-27	8	10	6	21	19	19	21	21	24	20	20	22	21	22	247
2027-28	11	14	12	6	20	19	19	21	21	24	20	20	22	21	241
2028-29	5	6	17	12	6	21	20	19	21	21	24	20	20	22	229
2029-30	7	9	8	17	12	6	21	20	19	21	21	24	20	20	217
2030-31	7	9	11	8	17	12	6	21	20	19	21	21	24	20	208
2031-32	7	9	11	11	8	17	13	6	21	20	19	21	21	24	199
2032-33	7	9	11	11	11	8	17	12	6	21	20	19	21	20	185
2033-34	7	9	11	11	11	11	8	17	12	6	21	19	19	20	175
2034-35	7	9	11	11	11	11	11	8	17	12	6	20	19	19	165

Table 3.13 Rutledge Borough Projected Enrollment

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2024-25	6	12	14	14	15	16	17	15	16	16	16	17	14	16	198
2025-26	5	6	15	15	15	16	16	18	15	16	17	16	17	15	198
2026-27	9	11	8	15	15	15	16	16	18	15	16	17	16	17	195
2027-28	9	11	14	8	15	15	15	16	16	18	15	16	17	16	192
2028-29	6	7	14	14	8	15	15	15	16	16	18	15	16	17	186
2029-30	7	9	9	14	14	8	16	15	15	16	16	18	15	16	179
2030-31	7	9	11	9	14	14	8	16	15	15	16	16	18	15	174
2031-32	7	9	11	11	9	14	14	8	16	15	15	16	16	17	170
2032-33	7	9	11	11	11	9	14	14	8	16	15	15	15	16	163
2033-34	7	9	11	11	11	11	9	14	14	8	16	15	15	15	158
2034-35	7	9	11	11	11	11	11	9	14	14	8	15	15	15	153

Table 3.14 Swarthmore Borough Projected Enrollment

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12
2024-25	29	48	56	56	60	65	69	61	62	63	63	67	56	66	792
2025-26	44	55	61	61	59	62	66	73	62	63	68	63	67	60	819
2026-27	33	41	67	62	60	60	63	65	73	62	62	67	63	66	812
2027-28	34	42	51	68	61	61	60	63	65	73	62	61	67	62	797
2028-29	36	45	52	51	68	62	62	60	63	65	73	61	61	66	788
2029-30	35	44	55	52	51	68	63	61	60	63	65	72	61	61	775
2030-31	35	44	54	56	52	51	69	62	61	60	63	64	72	60	768
2031-32	35	44	54	54	55	53	52	69	62	61	60	62	64	71	760
2032-33	35	44	54	54	54	56	53	51	69	62	61	59	62	63	742
2033-34	35	44	54	54	54	54	56	53	51	69	62	60	59	61	731
2034-35	35	44	54	54	54	54	55	56	53	52	68	61	60	58	723

Chapter 4 Perspective on Accuracy

Perspective on Enrollment Projection Accuracy

Accurate projections of public school enrollments for periods of five to 10 years or more are difficult, at best, because of so many unpredictable variables. Furthermore, such efforts are highly dependent on accurate and complete data from state, county, school, and municipal officials, as well as the candid views of developers, real estate professionals, and others. The resulting projections cannot rise above inaccurate and incomplete data.

The difficulty of generating accurate projections increases as the focus moves from a large base (such as a state) down to counties, to local school districts, and to individual buildings within districts. Generally, the larger the area involved, the greater the accuracy in terms of the amount of percentage deviation from the projection because differences in smaller areas within the larger area tend to balance each other out.

The best way to assess the potential accuracy of PEL's projections of public school enrollments is by comparing the projections in other districts that relied on similar methodologies with the actual enrollments that resulted. The mechanism for doing this is known as the Mean Absolute Percentage Error (or MAPE—which is also known as the Mean Absolute Percentage Deviation).

The calculation of the MAPE involves taking the absolute value of the difference between the actual enrollment figure (A_t) for a given year and the figure PEL projected (F_t) for that district in that year and dividing it by the actual figure (A_t) . The resulting figures for each year in all districts are then summed—without regard to signs—and divided by the number of data points (n). MAPE can be calculated and analyzed for the entire projection system (e.g., including all projection years) or by each individual projection year (e.g., $t = 1, t = 2 \dots, t = 10$).

$$MAPE = \frac{1}{n} \sum_{t=1}^{n} \left| \frac{A_t - F_t}{A_t} \right|$$

The MAPE and its companion, the Mean Absolute Deviation (which measures absolute values rather than percentage deviation), are the most widely used statistical measurement of average error in quantitative forecast models and indicator of expected accuracy. Use of the percentage deviation is preferable to the absolute deviation given that figures reflect school districts with enrollments ranging from about 1,000 to over 20,000, so there would be an issue of scale when dealing with absolute values; this is not the case with percentages.

Accuracy of PEL Enrollment Studies Catalog

Since 1986, on more than 220 occasions PEL has examined demographics, housing and related activity, and enrollment trends in Pennsylvania school districts and, using the techniques employed in this analysis, generated projections of enrollments covering a 10-year period. We regularly evaluate the accuracy of these projections by determining the MAPEs. Projections generated more than 10 years ago have all 10 years on which to judge accuracy; some projections allow only eight or

nine years' experience to be viewed; some six, five, and so forth; for others there has been only one year of actual figures on which to make judgments regarding PEL's accuracy.

Based on actual enrollments through the 2021-22 school year (and based over 2,000 data points) the average MAPE for the first five years of projections is just over +/-3.2% (essentially, about +/-1% the first year, +/-2.0% the second year, etc., and by the fifth year, the figure is about +/-5%). For years six through 10, our calculations are based on 944 data points and the difference between the projected and actual figures averages +/-8.1 percent. The overall average MAPE reflecting 1,974 data points in all 10 projected years is +/-5.5 percent. The literature indicates that accuracy of +/-5.0% after five years is acceptable.

Table 2.11 Mean Absolute Percentage Error (MAPE) of Pennsylvania Economy League School Enrollment Projection Studies, 1987-Present

Projection Year	1	2	3	4	5	6	7	8	9	10
MAPE	1.4%	2.2%	3.0%	4.1%	5.0%	6.0%	7.0%	8.3%	9.2%	10.3%

