



*FutureThink*

*Formerly DeJONG-HEALY*

# FINAL REPORT

Southern Lehigh School District  
Lehigh County  
Enrollment Projections  
April 10, 2013

### INTRODUCTION

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**FutureThink** was contracted to develop enrollment projections for Southern Lehigh School District.

This report contains ten-year enrollment projections. Enrollment projections were developed by analyzing the following data:

- ▶ Historical enrollment
- ▶ Charter school enrollment
- ▶ Non-public enrollment
- ▶ Live birth data
- ▶ Community demographics
- ▶ Housing information

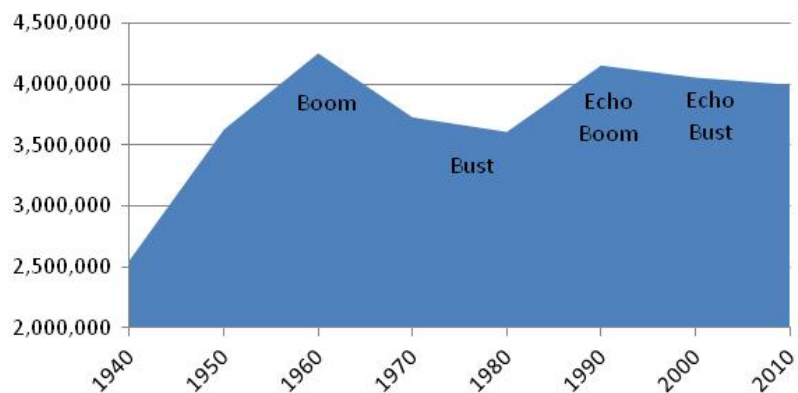
The projections presented in this report are meant to serve as a planning tool for the future, and, with the historical data and anticipated growth, represent the most likely direction of the District.

### ENROLLMENT PROJECTION METHODOLOGIES

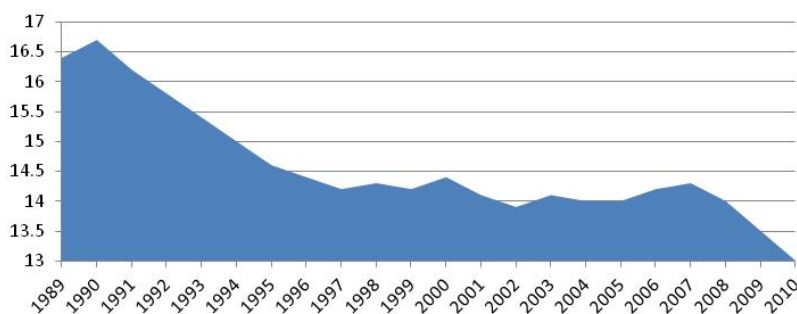
#### Introduction

Tracing the landscape of the country's public school enrollment back over the past fifty years reveals demographic, economic, and social changes. The United States as a whole continues to undergo major shifts in public student enrollment, due in large part to past events including the baby boom, the availability and use of birth control, and the development of suburbs. The baby boom of the late 1940s and 50s was followed by the baby bust of the 1960s and 70s. This gave rise to the echo baby boom of the 1980s, producing children who primarily graduated in the late 90s through 2007.

US Total Live Births



US Population - Live Birth Rate per 1,000 Population



increased again in 2000. However, the birth rate resumed a descending pattern in 2001 and reached an all-time low of 13.0 in 2010.

Nationwide, districts continue to experience the effects of the echo baby bust of the 1990s. From the 1950s to the 1970s, a dramatic downsizing of the family unit occurred. A direct result was the declining school enrollment of the 1970s and 1980s. As of the 2010 Census, the size of a family was at an all-time low of 3.14 persons. The live birth rate increased for the first time in several years in 1998 and

## Southern Lehigh School District

When projecting future enrollments, it will be vital to track the number of live births, the amount of new housing activity, and the change in household composition.

In addition, any of the following factors could cause a significant change in projected student enrollments:

- ▶ Boundary adjustments
- ▶ New school openings
- ▶ Changes/additions in program offerings
- ▶ Preschool programs
- ▶ Change in grade configuration
- ▶ Interest rates/unemployment shifts
- ▶ Magnet/Charter/Private school opening or closure
- ▶ Zoning changes
- ▶ Unplanned new housing activity
- ▶ Planned, but not built, housing

Obviously, certain factors can be gauged and planned for far better than others. For instance, it may be relatively straightforward to gather housing data from local builders regarding the total number of lots in a planned subdivision and calculate the potential student yield. However, planning for changes in the unemployment rate, and how these may either boost or reduce public school enrollment, proves more difficult. In any case, it is essential to gather a wide variety of information in preparation for producing enrollment projections.

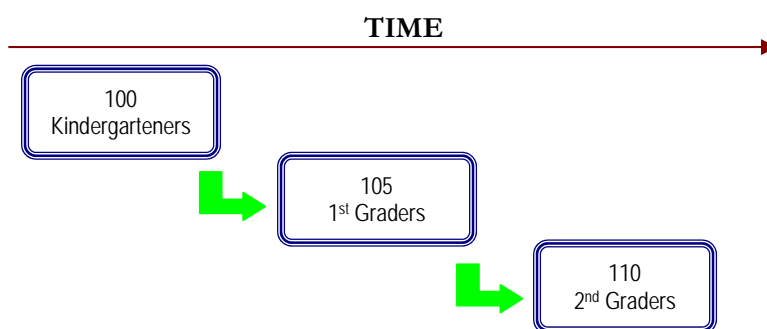
When looking ahead at a school district's enrollment over the next two, five, or ten years, it is helpful to approach the process from a global perspective. For example: How many new homes have been constructed each year? How many births have occurred each year in relation to the resident population? Is housing experiencing a turnover – if so, what is the composition of families moving in/out? Are more or less students attending private school or being home-schooled? What has the unemployment rate trend been over the past ten years? What new educational policies are in place now that could affect student enrollment figures?

The data sets generated from questions such as these have led to the development of general methodologies to project future student enrollments. They are as follows:

## Southern Lehigh School District

## Cohort Survival Method

A cohort is a group of persons [in this case, students]. The cohort survival projection methodology uses previous live birth data and historical student enrollments to “age” a known population or cohort throughout the school grades. For instance, a cohort begins when a group of kindergarteners enrolls in grade K and moves to first grade the following year, second grade the next year, and so on.



A “survival ratio” is developed to track how this group of students grew or shrunk in number as they moved through the grade levels. By determining survival ratios for each grade transition [i.e., 1st to 2nd grade] over a ten-year period of time, patterns emerge and projection ratios can be developed to be used as a multiplier.

For example, if student enrollment has consistently increased from the 8th to the 9th grade over the past ten years, the survival ratios for each year would be greater than 100 percent. Through analysis of the survival ratios, the projection ratio is determined and is multiplied by the current 8th grade to develop a projection for next year’s 9th grade.

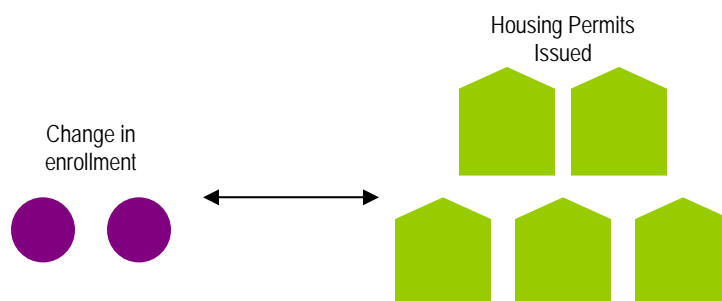
This methodology can be carried through to develop ten years of projection figures. Because there is not a grade cohort to follow for students coming into kindergarten, live birth counts are used to develop a survival ratio. Babies born five years previous to the kindergarten class are compared in number, and a ratio can be developed to project future kindergarten enrollments.

The cohort survival method is useful in areas where population is stable [relatively flat, growing steadily, or declining steadily], and where there have been no significant fluctuations in enrollment, births, and housing patterns from year to year.

## Southern Lehigh School District

## Housing

Enrollment projections can also be determined by analyzing the housing data for the areas that make up a school district. Yield factors can be established by comparing the historic change in enrollment from year to year divided by the total number of building or occupancy permits issued. For example, if student enrollment has increased by approximately 100 students each year and approximately 200 building permits have been issued each year for the past ten years, then the yield factor would be approximately .5 students per building permit.



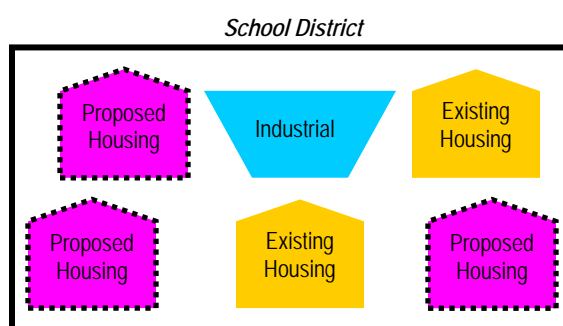
Once yield factors are established, the number of new students per year can be estimated by multiplying the yield factor by the number of projected new housing units. This method is effective when the rate of kindergarten enrollment far exceeds the live birth counts.

If housing demolitions are occurring in a district, these must also be taken into account. For instance, if housing demolitions/withdrawals have increased rapidly over recent years while new housing starts have remained relatively constant over many years, the conclusion may be that some of the new housing starts will simply be replacements for the families displaced by the demolitions. Of course, housing value and household composition would need to be further analyzed to confirm that this is indeed the case. It is possible that enrollment may remain flat or decline even though there is new housing occurring in the area.

## Southern Lehigh School District

### Land-Saturation Analysis

Housing data also drives the land-saturation analysis enrollment methodology. In areas where there is a high rate of development and the future development patterns in the area are clear, a “build-out” scenario can be developed. The scenario takes into consideration the remaining acreage to be developed, planned rate of completion, zoning policies, density per acre, type of housing, and ratios of school-age children per household type. This method is particularly useful in areas experiencing rapid growth.



### Geographic Information Systems

While not a methodology, the need for better tools and easier manipulation of data has led to a new industry standard in planning – GIS [Geographic Information Systems]. GIS technology allows school districts to quickly analyze countless data sets including birth data, housing information, and enrollment statistics.

When paired with enrollment projections, GIS becomes an invaluable information-management and decision-making tool. Often, county or city offices are already implementing GIS technology and data can be shared and expanded among these organizations in the district. GIS tables and maps are included within this report illustrating population, age, and income estimates and projections.

The cohort survival was the primary method used in the development of the enrollment projections for the Southern Lehigh School District.

## Southern Lehigh School District

### HISTORICAL ENROLLMENT

Over the past ten years, student enrollment in the Southern Lehigh School District has increased by 157 students in grades K – 12. Total enrollment for the 2012-13 school year is 3,115 students.

The following tables illustrate the District's enrollment history from 2003-04 through 2012-13.

Southern Lehigh School District  
Historical Enrollment

Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
K	195	208	194	200	199	175	172	179	168	167
1	187	214	233	214	226	211	207	194	207	200
2	214	189	229	230	227	225	222	219	217	211
3	206	222	208	236	243	225	234	223	226	231
4	208	209	230	221	231	246	234	244	233	231
5	226	218	213	236	229	231	258	240	246	244
6	241	243	234	230	249	226	236	265	246	259
7	246	250	247	248	246	262	242	243	270	261
8	246	250	254	265	255	243	263	250	247	267
9	256	265	268	258	276	258	256	281	257	261
10	241	260	266	246	257	269	251	248	289	246
11	268	243	260	258	256	254	275	259	255	276
12	224	261	241	250	262	257	247	256	261	261
K - 12 Total	2,958	3,032	3,077	3,092	3,156	3,082	3,097	3,101	3,122	3,115

Source: Southern Lehigh School District

Southern Lehigh School District  
Historical Enrollment by Grade Group

Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
K - 5	1,236	1,260	1,307	1,337	1,355	1,313	1,327	1,299	1,297	1,284
6 - 8	733	743	735	743	750	731	741	758	763	787
9 - 12	989	1,029	1,035	1,012	1,051	1,038	1,029	1,044	1,062	1,044
K - 12 Total	2,958	3,032	3,077	3,092	3,156	3,082	3,097	3,101	3,122	3,115

Source: Southern Lehigh School District



## Southern Lehigh School District

### CHARTER SCHOOL ENROLLMENT

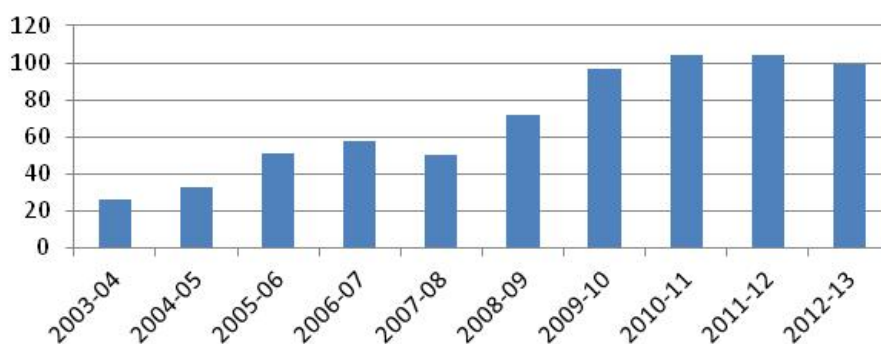
Since 2002-03, the number of Southern Lehigh School District students attending charter schools has increased from 26 to 99 students.

Southern Lehigh School District  
Charter School Enrollment

Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
K	0	1	1	1	1	2	8	9	3	2
1	2	3	2	3	1	4	7	7	7	5
2	4	3	4	3	2	2	10	3	8	5
3	2	7	4	4	3	1	5	12	4	7
4	0	2	4	4	4	5	3	6	9	5
5	4	0	2	4	1	3	5	3	5	13
6	0	4	1	6	5	3	2	5	3	4
7	2	0	5	4	6	8	6	6	4	2
8	2	2	1	5	1	5	11	4	5	7
9	4	2	9	1	7	10	11	10	13	10
10	2	3	4	10	4	12	11	16	15	12
11	1	3	6	6	13	8	12	11	16	15
12	3	3	8	7	2	9	6	12	12	12
<b>Grand Total</b>	<b>26</b>	<b>33</b>	<b>51</b>	<b>58</b>	<b>50</b>	<b>72</b>	<b>97</b>	<b>104</b>	<b>104</b>	<b>99</b>

Source: Southern Lehigh School District

Southern Lehigh School District  
Students Attending Charter Schools



## Southern Lehigh School District

### NON-PUBLIC ENROLLMENT

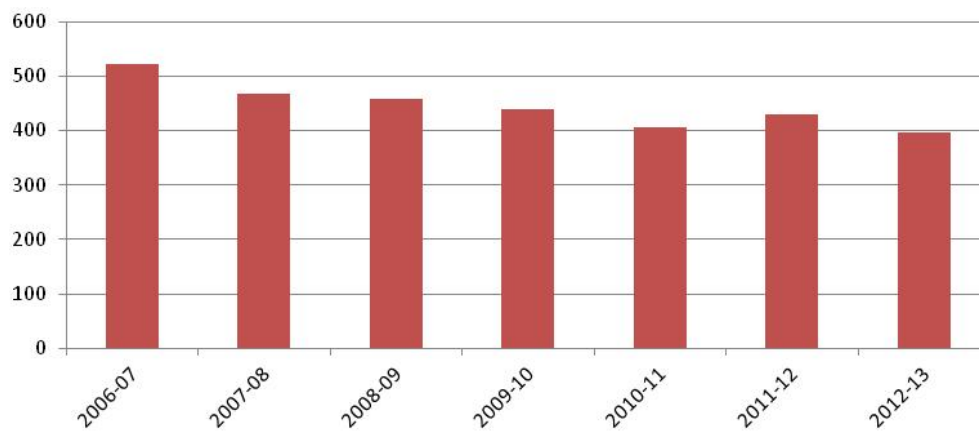
Since 2006-07, the number of non-public students has declined from 522 to 396 students.

Southern Lehigh School District  
Non-Public Enrollment

Grade	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
K	50	47	47	46	40	53	39
1	34	40	39	36	37	36	48
2	51	28	35	38	37	40	34
3	41	51	36	32	33	41	39
4	43	37	44	36	29	33	31
5	54	38	39	41	32	31	30
6	30	41	41	34	40	31	24
7	45	28	31	35	31	38	26
8	44	38	26	32	37	31	39
9	27	28	32	21	23	30	25
10	38	34	28	30	22	22	25
11	31	33	33	26	25	19	18
12	34	25	28	32	20	24	18
<b>K - 12 Total</b>	<b>522</b>	<b>468</b>	<b>459</b>	<b>439</b>	<b>406</b>	<b>429</b>	<b>396</b>

Source: Southern Lehigh School District

Southern Lehigh School District  
Non-Public Enrollment



## Southern Lehigh School District

## LIVE BIRTH DATA

Utilization of live birth data is recommended when projecting future kindergarten enrollments as it provides a helpful overall trend. The live birth counts are used in determining a birth-to-kindergarten survival ratio. This ratio identifies the percentage of children born in a representative area who attend kindergarten in the District five years later. The survival ratios for birth-to-kindergarten as well as grades 1-12 can be found later in this report.

Data is arranged by the residence of the mother.

Live birth counts are different from live birth rates. The live birth count is the actual number of live births. A birth rate is the number of births per 1,000 women in a specified population group.

The following table and graph include the live birth count for Coopersburg Borough, Lower Milford Township, and Upper Saucon Township.

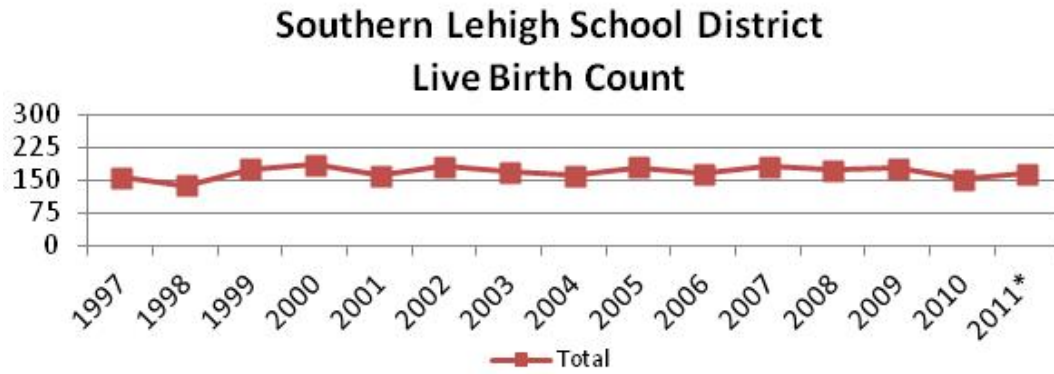
**Southern Lehigh School District  
Live Birth Count  
1997-2011\***

Year	Coopersburg	Lower Milford	Upper Saucon	Total
1997	41	33	84	158
1998	30	22	87	139
1999	28	37	111	176
2000	28	33	126	187
2001	22	32	107	161
2002	23	39	121	183
2003	29	31	109	169
2004	20	35	106	161
2005	31	33	116	180
2006	27	32	107	166
2007	31	37	113	181
2008	18	36	121	175
2009	23	35	119	177
2010	19	29	106	154
2011*	16	21	128	165

Source: Pennsylvania Department of Health, Health Statistics & Research

\* preliminary

## Southern Lehigh School District



### DEMOGRAPHICS

The Southern Lehigh School District is comprised of Coopersburg Borough, Lower Milford Township, and Upper Saucon Township in Lehigh County. General demographic data is included in the following tables for the areas located completely or partially in the District.

#### General Demographic Information

	Lehigh County
Per Capita Income	\$26,406
Median Household Income	\$50,978
Persons Below Poverty	14.8%

Source: US Census, 2011 American Community Survey 1-Year Estimate

#### Total Population

	2000 Census	2010 Census
Lehigh County	312,090	349,497
Coopersburg Borough	2,582	2,386
Lower Milford Township	3,617	3,775
Upper Saucon Township	11,939	14,808

Source: US Census, Census 2000 Summary File 1; 2010 Summary File 1

Also included are block group estimates and projections provided by ESRI Business Information Solutions (ESRI BIS). ESRI BIS uses a time series of estimates from the U.S. Census Bureau that includes the latest estimates and intercensal estimates adjusted for error of closure. The Census Bureau's time series is consistent, but testing has revealed improved accuracy by using a variety of sources to track county population trends.

ESRI BIS also employs a time series of building permits and housing starts plus residential deliveries. Finally, local data sources that tested well against Census 2000 are reviewed. Data sources are integrated and then analyzed by Census Block Groups.

Sources of data include:

- ▶ Supplementary Surveys of the Census Bureau
- ▶ Bureau of Labor Statistics' (BLS) Local Area Unemployment Statistics
- ▶ BLS Occupational Employment Statistics
- ▶ InfoUSA
- ▶ U.S. Bureau of the Census' Current Population Survey
- ▶ National Planning Association Data Service

## Southern Lehigh School District

Below is a list of definitions as they appear on the U.S. Census Bureau website, to aid in interpretation of the following tables and maps.

**Household:**

*A household includes all the people who occupy a housing unit as their usual place of residence.*

**Average family size:**

*A measure obtained by dividing the number of members of families by the total number of families (or family householders).*

**Family household (Family):**

*A family includes a householder and one or more people living in the same household who are related to the householder by birth, marriage, or adoption. All people who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in census tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families. A household can contain only one family for purposes of census tabulations. Not all households contain families since a household may comprise a group of unrelated people or one person living alone.*

**Householder:**

*The person, or one of the people, in whose name the home is owned, being bought, or rented. If there is no such person present, any household member 15 years old and over can serve as the householder for the purposes of the census. Two types of householders are distinguished: a family householder and a nonfamily householder. A family householder is a householder living with one or more people related to him or her by birth, marriage, or adoption. The householder and all people in the household related to him are family members. A nonfamily householder is a householder living alone or with nonrelatives only.*

The following tables illustrate the 2000 and 2010 actual population, 2012 estimates, and 5-year population projections based on block groups that comprise the school district (by borough, township, and elementary school boundaries), indicating areas of current and projected growth. The tables have been developed to determine selected age group projections, family size, per capita income, and household income.

## Southern Lehigh School District

Total population in the Southern Lehigh School District is projected to grow by 1,048 people or approximately 5% from 2012 to 2017. Population grew by 15% from 2000 to 2010.

Coopersburg Borough has experienced a decline in population from 2000 to 2012, Lower Milford has increased then declined, and Upper Saucon Township has experienced an increase.

Coopersburg is projected to decline by 1% from 2012 to 2017, and Lower Milford and Upper Saucon are projected to increase by 1% and 7%, respectively.

Total Population	Coopersburg Borough	Lower Milford Township	Upper Saucon Township	Southern Lehigh SD
2000	2,582	3,617	11,967	18,166
2010	2,386	3,775	14,808	20,969
2012	2,334	3,726	15,061	21,121
2017	2,300	3,779	16,090	22,169

Source: US Census, ESRI

Total population by elementary school boundary was also identified. Population in each of the elementary school boundaries has increased from 2000 to 2012 and is projected to increase in 2017 as well. Population in Lower Milford Elementary experienced a decline from 2010 to 2012.

Population is projected to increase by 2% in Lower Milford, 6% in Liberty Bell, and 5% in Hopewell from 2012 to 2017.

Total Population	Lower Milford Elementary	Liberty Bell Elementary	Hopewell Elementary
2000	4,143	7,748	6,282
2010	4,393	8,202	8,377
2012	4,363	8,317	8,443
2017	4,460	8,824	8,888

Source: US Census, ESRI

## Southern Lehigh School District

The age 0-18 population in the Southern Lehigh School District is projected to grow by 185 people or approximately 4% from 2012 to 2017. The age 0-18 population declined by 1% from 2010 to 2012.

Coopersburg Borough, Lower Milford and Upper Saucon townships all experienced a decline in the age 0-18 population from 2010 to 2012.

Coopersburg is projected to decline by 3% from 2012 to 2017, and Lower Milford and Upper Saucon are projected to increase by less than 1% and 5%, respectively.

	Coopersburg Borough	Lower Milford Township	Upper Saucon Township	Southern Lehigh SD
<b>2010 Age 0-18 Population</b>	500	912	3,741	5,153
Age 0-4	106	184	759	1,049
Age 5-9	141	221	985	1,347
Age 10-14	147	280	1,036	1,463
Age 15-18	106	227	961	1,294
<b>2012 Age 0-18 Population</b>	475	879	3,732	5,086
Age 0-4	102	181	765	1,048
Age 5-9	136	217	992	1,345
Age 10-14	140	271	1,036	1,447
Age 15-18	97	210	939	1,246
<b>2017 Age 0-18 Population</b>	459	882	3,930	5,271
Age 0-4	100	183	815	1,098
Age 5-9	132	219	1,050	1,401
Age 10-14	138	277	1,110	1,525
Age 15-18	89	203	955	1,247

Source: US Census, ESRI



## Southern Lehigh School District

The age 0-18 population by elementary school boundary was also identified. Population in each of the elementary areas declined from 2010 to 2012.

The age 0-18 population in Lower Milford Elementary is projected to increase by 1%, in Liberty Bell Elementary by 5%, and in Hopewell Elementary by 4 percent.

	Lower Milford Elementary	Liberty Bell Elementary	Hopewell Elementary
<b>2010 Age 0-18 Population</b>	1,081	1,867	2,205
Age 0-4	213	356	481
Age 5-9	269	478	598
Age 10-14	333	522	608
Age 15-18	266	511	518
<b>2012 Age 0-18 Population</b>	1,049	1,858	2,176
Age 0-4	210	356	480
Age 5-9	266	481	597
Age 10-14	326	522	600
Age 15-18	247	499	499
<b>2017 Age 0-18 Population</b>	1,061	1,951	2,256
Age 0-4	214	379	504
Age 5-9	271	507	622
Age 10-14	334	558	632
Age 15-18	242	507	498

Source: US Census, ESRI

## Southern Lehigh School District

Average family size is projected to increase slightly across the board. Per capita income is projected to increase by approximately 17% in the District overall, and by 17%, 18%, and 16% in Coopersburg, Lower Milford, and Upper Saucon, respectively.

Median and average household incomes are projected to increase by 13% and 18% in the District overall, and by 20% and 18%, 12% and 19%, and 12% and 17% in Coopersburg, Lower Milford, and Upper Saucon, respectively.

	Coopersburg Borough	Lower Milford Township	Upper Saucon Township	Southern Lehigh SD
2012 Average Family Size	2.92	3.03	3.04	3.03
2012 Per Capita Income	\$27,473	\$38,114	\$37,745	\$36,669
2012 Median Household Income	\$50,371	\$83,888	\$85,058	\$79,970
2012 Average Household Income	\$63,666	\$104,497	\$105,173	\$99,795
2017 Average Family Size	2.94	3.05	3.06	3.04
2017 Per Capita Income	\$32,027	\$45,004	\$43,880	\$42,836
2017 Median Household Income	\$60,639	\$93,632	\$95,576	\$90,348
2017 Average Household Income	\$75,088	\$123,868	\$123,134	\$117,558

Source: ESRI

Average family size by elementary school boundary is projected to increase slightly across the board. Per capita income is projected to increase by approximately 18%, 16%, and 17% in Lower Milford, Liberty Bell, and Hopewell, respectively.

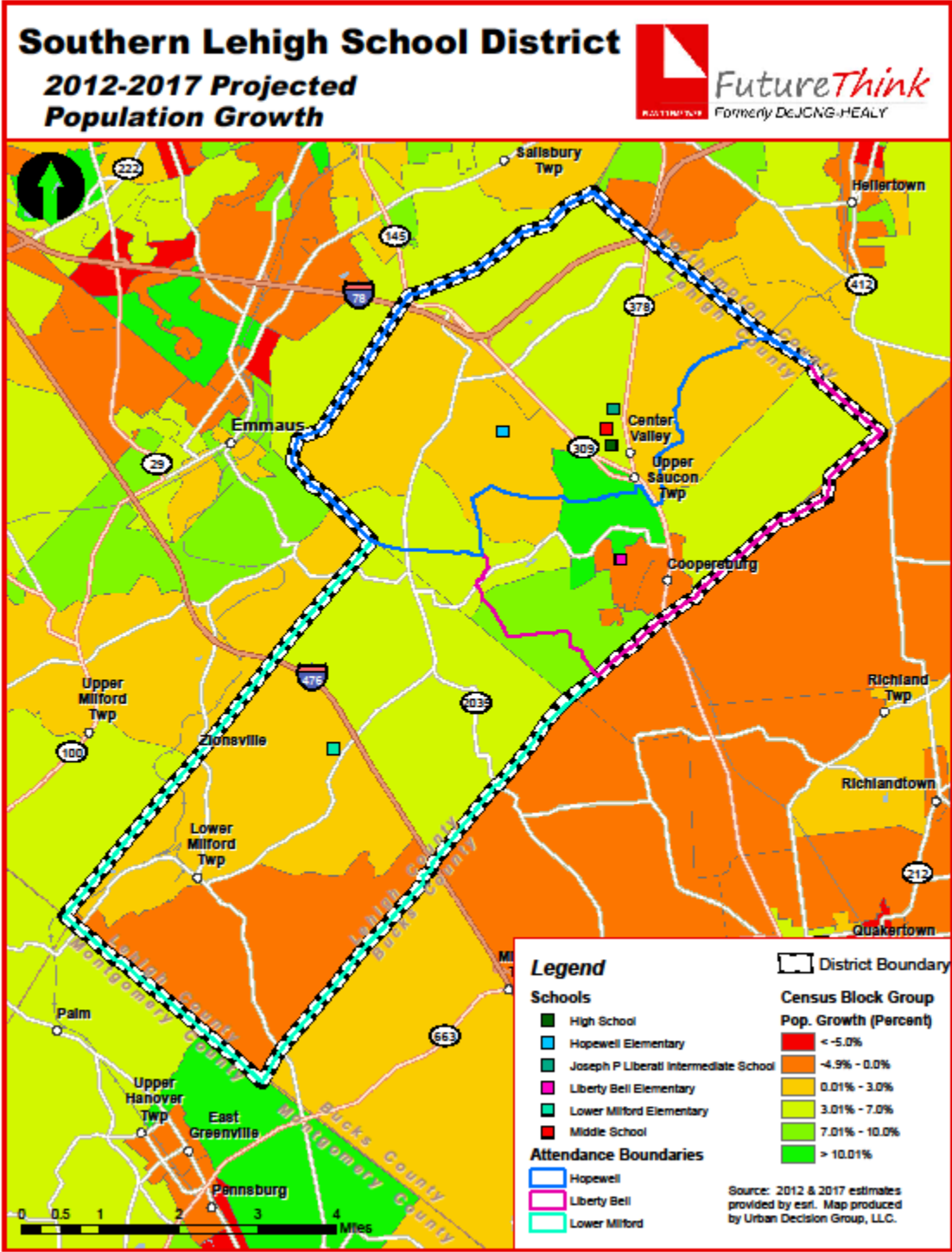
Median and average household income is projected to increase by approximately 11% and 18%, 14% and 17%, 14% and 18% in Lower Milford, Liberty Bell, and Hopewell, respectively.

	Lower Milford Elementary	Liberty Bell Elementary	Hopewell Elementary
2012 Average Family Size	3.09	3.08	2.95
2012 Per Capita Income	\$38,347	\$34,340	\$38,103
2012 Median Household Income	\$84,920	\$73,846	\$84,046
2012 Average Household Income	\$105,894	\$91,503	\$104,076
2017 Average Family Size	3.11	3.10	2.97
2017 Per Capita Income	\$45,125	\$39,798	\$44,699
2017 Median Household Income	\$94,535	\$83,824	\$96,052
2017 Average Household Income	\$125,202	\$107,436	\$122,890

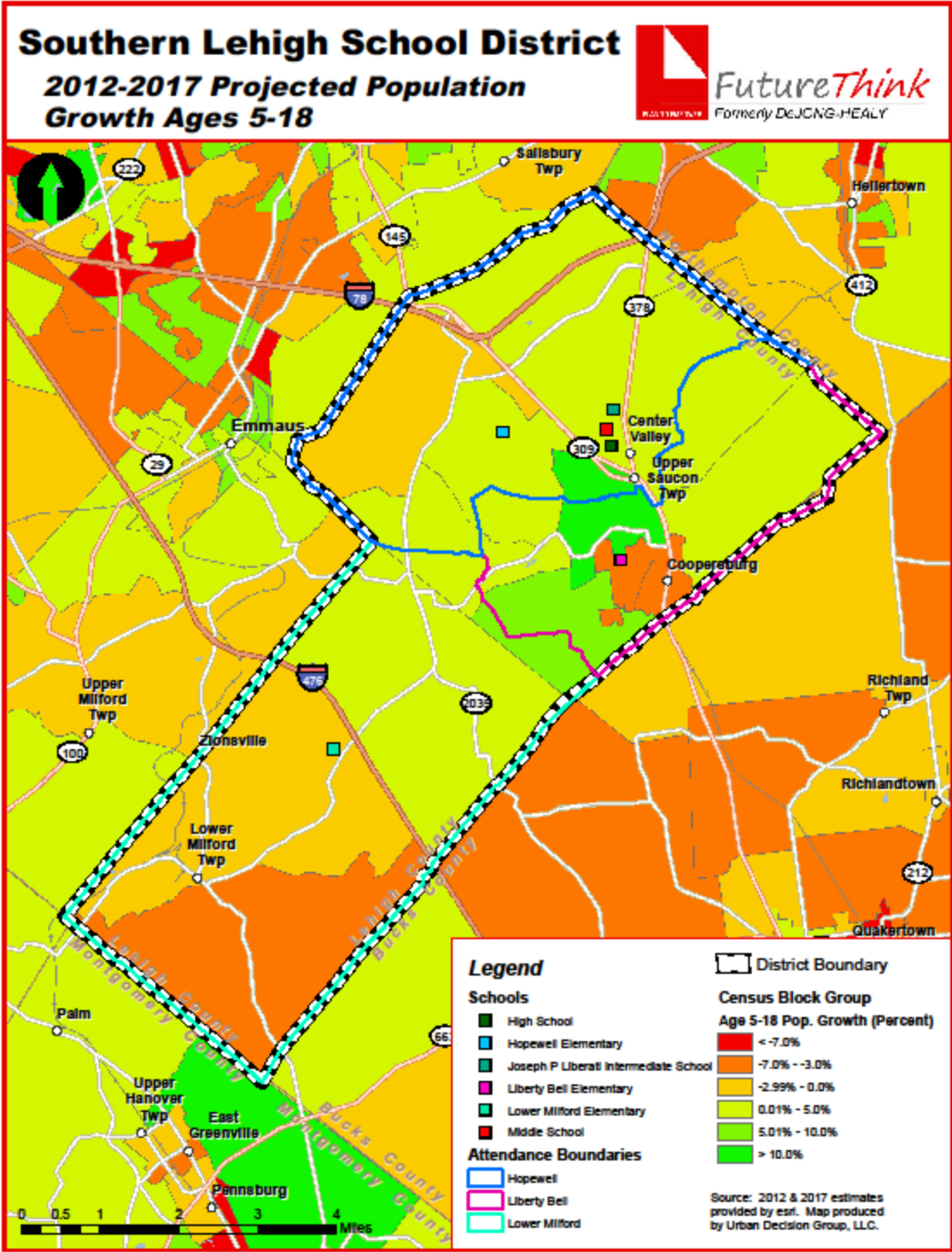
Source: ESRI

The maps on the following pages illustrate the data identified in the tables. The color coding identifies areas within the District that may be increasing or decreasing at different rates than others.

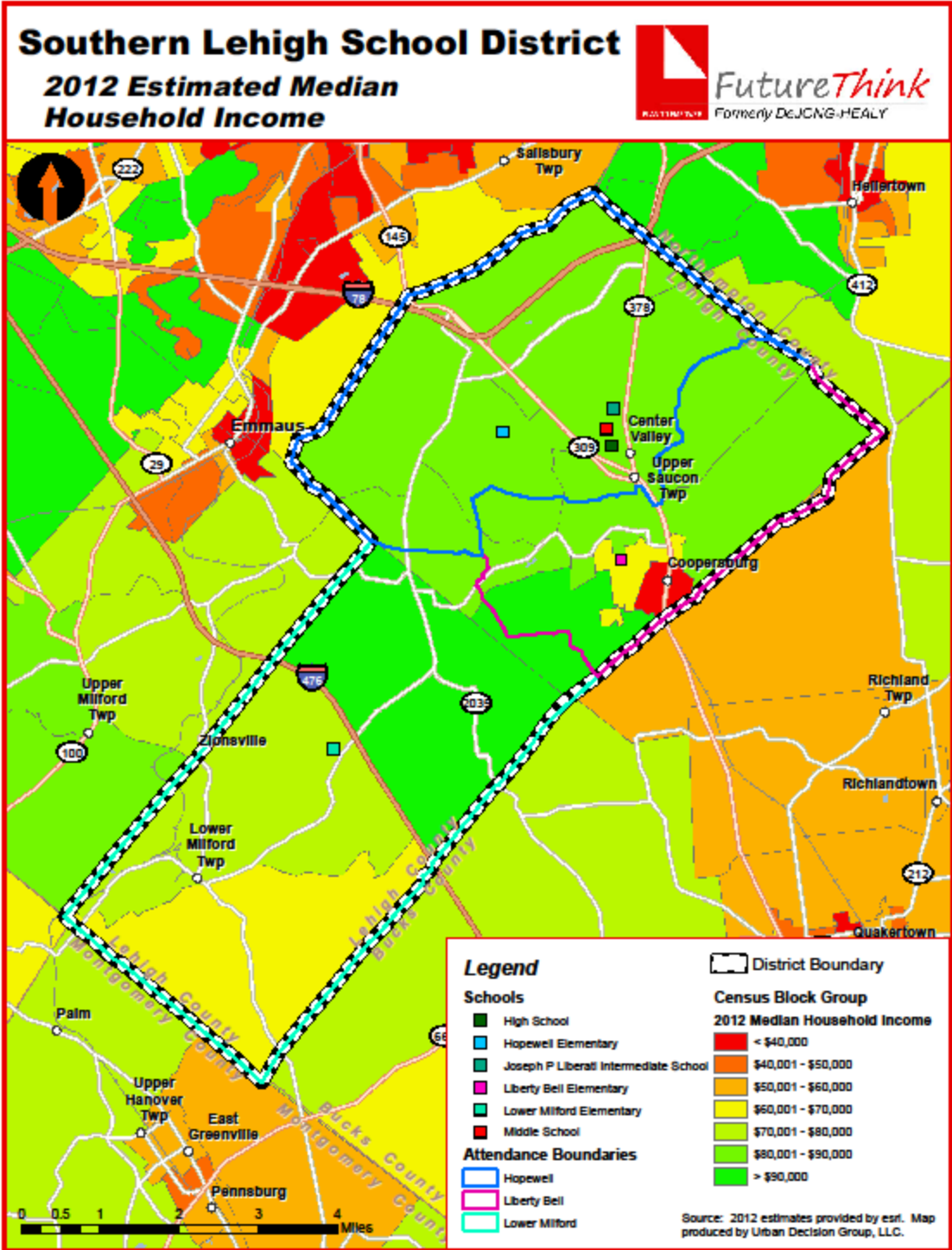
Southern Lehigh School District



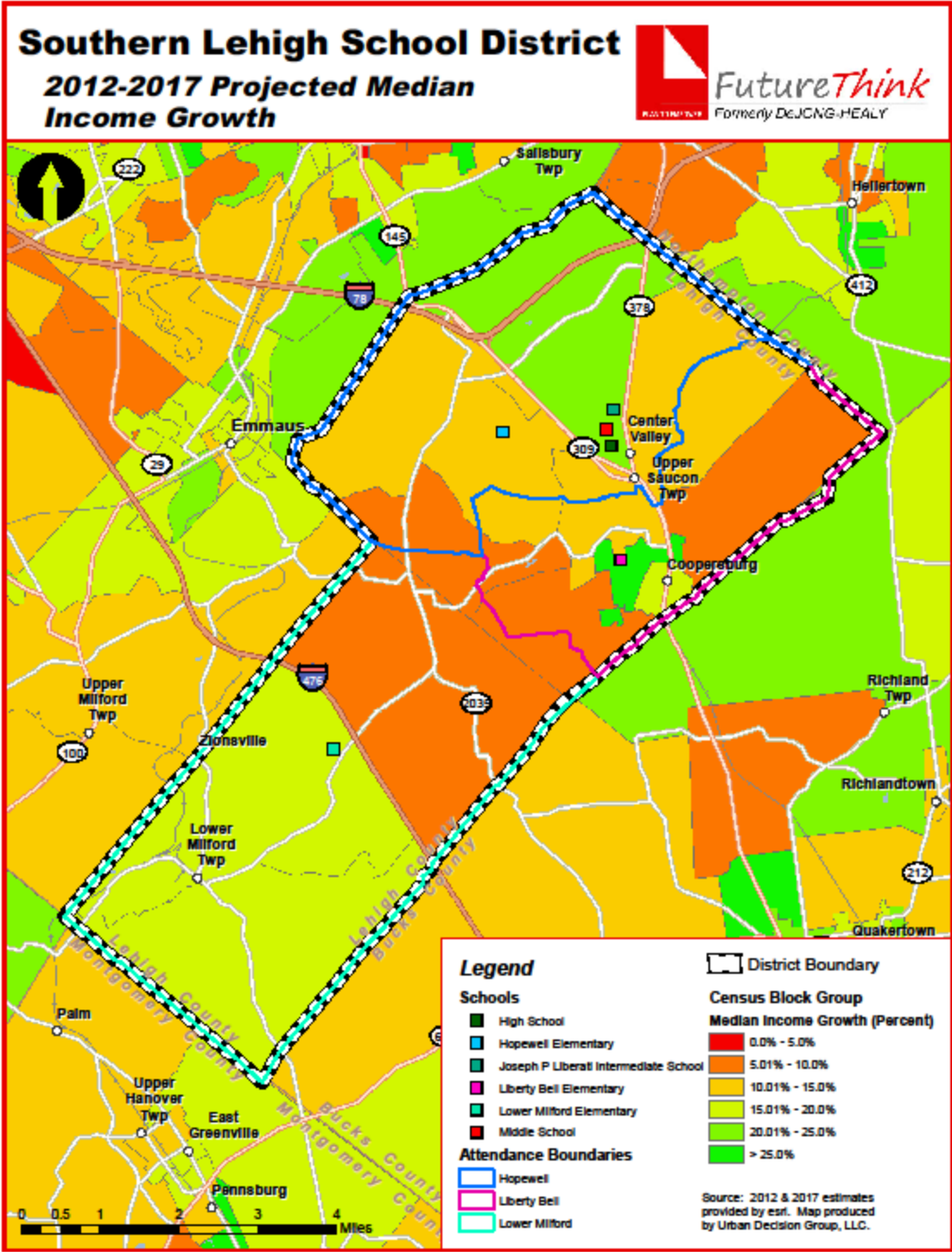
Southern Lehigh School District



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### HOUSING INFORMATION

The charts below illustrate the number of single-family and multi-family dwelling building permits issued each year in Coopersburg, Lower Milford, Upper Saucon, and Lehigh County.

#### # of Building Permits Issued for Single Family Dwellings

Year	Coopersburg	Lower Milford	Upper Saucon	Lehigh County
2002	0	16	115	1,350
2003	0	15	208	1,383
2004	0	11	177	1,634
2005	0	12	108	1,497
2006	0	6	106	1,346
2007	0	2	97	1,025
2008	0	7	56	738
2009	0	5	77	659
2010	0	0	52	487
2011	0	2	112	407
2012*	0	4	54	343
2013**	0	0	1	26

Source: SOCDS Building Permits Database

\* preliminary

\*\* preliminary through January 2013

#### # of Building Permits Issued for Multi-Family Dwellings

Year	Coopersburg	Lower Milford	Upper Saucon	Lehigh County
2002	0	0	0	84
2003	0	0	0	41
2004	0	0	0	16
2005	0	0	0	234
2006	0	0	0	55
2007	0	0	0	23
2008	0	0	0	29
2009	0	0	0	150
2010	0	0	0	102
2011	0	0	2	2
2012*	0	0	0	2
2013**	0	0	0	0

Source: SOCDS Building Permits Database

\* preliminary

\*\* preliminary through January 2013

### HOUSING DEVELOPMENT

New housing development is current occurring and expected to occur in the future primarily in Upper Saucon Township. Coopersburg Borough is essentially built out. Lower Milford Township averages about 2 new homes a year and that trend is expected to continue.

The following table illustrates the projected new housing in Upper Saucon Township provided by Sharyn Heater, Director of Community Development. There is not a projected timeline for development, but Ms. Heater indicated that the Whispering Pines and Blue Belle Farms/Weyhill Estates subdivisions are moving pretty quickly and that permits are already up this year, due in part to the Liberty Village townhouse development. All projects currently under review are age-restricted communities.

**New Housing in Upper Saucon Township**

Subdivision Name	Dwelling Type	Location	Houses*	Status
1760 Taylor Drive	Detached Houses	Taylor Drive	7	Unbuilt
Blue Belle Farms/Weyhill Estates	Detached Houses	Weyhill Drive	125	Under Construction
Blue Ridge Chase	Detached Houses	Cumorah Drive	20	Under Construction
Blue Ridge West Estates	Detached Houses	Blue Church Road/Spring Drive	60	Under Construction
Brinley Court	Townhouses	South Main Street	214	Under Construction
Deer Run	Detached Houses	Taylor Drive	3	Unbuilt
Epernay	Detached Houses	Landis Mill Road	30	Unbuilt
Liberty Village	Townhouses	Liberty Road	200	Under Construction
Locust Manor	Detached Houses	Blue Church Road South	3	Under Construction
Locust Valley Estates Phase II	Detached Houses	Locust Valley Road	26	Under Construction
Mountain Glen**	Detached Houses	Oakhurst Drive	29	Under Construction
North 40 Estates	Detached Houses	Spring Drive	16	Unbuilt
Saucon Way	Detached Houses	Flint Hill Road	2	Under Construction
Strawberry Hill	Detached Houses	Blue Church Road South	17	Unbuilt
Tivoli Gardens	Detached Houses	Chestnut Hill Road	14	Under Construction
Toscana	Detached Houses	Flint Hill Road	43	Unbuilt
Tuscany Hill	Detached Houses	Blue Church Road South	3	Under Construction
Whispering Pines	Detached Houses	Liberty Road	75	Under Construction
<b>Total</b>			<b>887</b>	

Source: Upper Saucon Township, Sharyn Heater, April 3, 2013

\* For developments currently under construction, approximate number of lots yet to be built

\*\* This is currently an age-restricted community; however, new developer proposes to remove age restricting



## Southern Lehigh School District

### SURVIVAL RATIOS

The chart below demonstrates the changes in enrollment as students move through the system. Percentages greater than 100 indicate that there are more students than there were in the previous grade the previous year. In other words, there was growth and new students entered the system. Percentages less than 100 indicate that there was decline with students leaving the system.

- ▶ Birth to Kindergarten: This ratio indicates the number of children born in the area who attend kindergarten in the District 5 years later. Percentages less than 100% result from movement out of the district, attendance at a non-public or charter school, or residence in another district within the same area.
- ▶ Grades 8-9: The higher than usual percentage often is a result of school district promotion policies. Often in school districts, students are promoted from 8<sup>th</sup> to 9<sup>th</sup> grade and after one year in 9<sup>th</sup> grade do not have sufficient credits to be classified as 10<sup>th</sup> graders and are counted again as 9<sup>th</sup> graders the following year. There may also be students who attended private or charter schools or are home schooled through grade 8 and then attend public schools for high school education.

The following table illustrates the survival ratios used in developing the enrollment projections for the Southern Lehigh School District.

from	to	birth -> K	K->1	1->2	2->3	3->4	4->5	5->6	6->7	7->8	8->9	9->10	10->11	11->12
2003	2004	118.2%	109.7%	101.1%	103.7%	101.5%	104.8%	107.5%	103.7%	101.6%	107.7%	101.6%	100.8%	97.4%
2004	2005	103.7%	112.0%	107.0%	110.1%	103.6%	101.9%	107.3%	101.6%	101.6%	107.2%	100.4%	100.0%	99.2%
2005	2006	124.2%	110.3%	98.7%	103.1%	106.3%	102.6%	108.0%	106.0%	107.3%	101.6%	91.8%	97.0%	96.2%
2006	2007	108.7%	113.0%	106.1%	105.7%	97.9%	103.6%	105.5%	107.0%	102.8%	104.2%	99.6%	104.1%	101.6%
2007	2008	103.6%	106.0%	99.6%	99.1%	101.2%	100.0%	98.7%	105.2%	98.8%	101.2%	97.5%	98.8%	100.4%
2008	2009	106.8%	118.3%	105.2%	104.0%	104.0%	104.9%	102.2%	107.1%	100.4%	105.3%	97.3%	102.2%	97.2%
2009	2010	99.4%	112.8%	105.8%	100.5%	104.3%	102.6%	102.7%	103.0%	103.3%	106.8%	96.9%	103.2%	93.1%
2010	2011	101.2%	115.6%	111.9%	103.2%	104.5%	100.8%	102.5%	101.9%	101.6%	102.8%	102.8%	102.8%	100.8%
2011	2012	92.3%	119.0%	101.9%	106.5%	102.2%	104.7%	105.3%	106.1%	98.9%	105.7%	95.7%	95.5%	102.4%
	average	106.47%	112.985%	104.14%	104.0%	102.82%	102.9%	104.4%	104.6%	101.8%	104.721%	98.171%	100.496%	98.680%
	standard deviation	9.144%	3.929%	3.946%	3.044%	2.304%	1.676%	2.930%	1.993%	2.429%	2.296%	3.162%	2.764%	2.801%

## ENROLLMENT PROJECTIONS

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Three enrollment projections (most likely/moderate, low and high) were developed after analyzing the data collected in this report.

The **Most Likely/Moderate** projection indicates an increase of 3% over the next ten years. This projection is based on approximately 200 new detached homes being built and occupied in the District (in addition to the homes currently under construction in Upper Saucon) during this time period.

The **Low** projection indicates a decrease of less than 1% over the next ten years. This projection is based on development occurring at the rate it has in the past.

The **High** projection indicates an increase of 6.5% over the next ten years. This projection is based on approximately 400 new detached homes being built and occupied in the District (in addition to the homes currently under construction in Upper Saucon) during this time period.

## Southern Lehigh School District

The Most Likely/Moderate projections indicate an increase of 98 students in grades K through 12 from the 2012-13 to the 2022-23 school year. An increase of approximately 4% is projected at the elementary school level.

Southern Lehigh School District  
Projected Enrollment - Most Likely/Moderate

Grade	2012-13 Actual	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K	167	180	182	158	170	178	179	179	180	180	181
1	200	196	210	213	185	198	208	209	210	210	211
2	211	213	209	224	227	197	211	222	223	223	224
3	231	220	222	217	233	236	205	220	231	231	232
4	231	241	229	231	226	242	245	213	229	240	241
5	244	239	249	236	238	233	250	253	220	236	248
6	259	254	248	258	245	248	242	260	263	229	245
7	261	272	267	261	271	258	260	254	273	276	240
8	267	265	276	270	264	275	261	264	257	276	280
9	261	281	279	290	284	278	289	275	277	271	291
10	246	259	279	276	287	281	275	286	272	274	268
11	276	251	264	284	281	293	286	280	291	277	279
12	261	273	248	260	280	277	289	283	276	288	273
<b>K - 12 Total</b>	<b>3,115</b>	<b>3,144</b>	<b>3,162</b>	<b>3,178</b>	<b>3,191</b>	<b>3,194</b>	<b>3,200</b>	<b>3,198</b>	<b>3,202</b>	<b>3,211</b>	<b>3,213</b>

Source: FutureThink

Southern Lehigh School District  
Projected Enrollment by Grade Group - Most Likely/Moderate

Grade	2012-13 Actual	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K - 3	809	809	823	812	815	809	803	830	844	844	848
4 - 6	734	734	726	725	709	723	737	726	712	705	734
7 - 8	528	537	543	531	535	533	521	518	530	552	520
9 - 12	1,044	1,064	1,070	1,110	1,132	1,129	1,139	1,124	1,116	1,110	1,111
<b>K - 12 Total</b>	<b>3,115</b>	<b>3,144</b>	<b>3,162</b>	<b>3,178</b>	<b>3,191</b>	<b>3,194</b>	<b>3,200</b>	<b>3,198</b>	<b>3,202</b>	<b>3,211</b>	<b>3,213</b>

Source: FutureThink

Southern Lehigh School District  
Projected Enrollment



## Southern Lehigh School District

The Low projections indicate a decrease of 16 students in grades K through 12 from the 2012-13 to the 2022-23 school year. However, a slight increase is projected at the elementary school level.

Southern Lehigh School District  
Projected Enrollment - Low

Grade	2012-13 Actual	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K	167	177	179	156	167	175	176	176	177	177	178
1	200	195	206	208	181	194	204	204	205	206	206
2	211	213	207	218	220	192	206	216	217	217	218
3	231	219	220	214	226	228	199	213	223	224	225
4	231	240	227	228	222	234	237	206	221	232	232
5	244	239	248	234	235	229	241	244	212	228	239
6	259	252	247	256	242	243	236	249	252	219	235
7	261	272	264	258	268	253	255	247	261	264	230
8	267	264	275	267	261	271	256	257	250	264	267
9	261	281	278	289	281	275	285	269	271	263	278
10	246	257	276	273	284	276	270	280	264	266	258
11	276	250	260	280	277	288	280	273	283	268	269
12	261	272	246	256	276	273	283	276	269	279	264
K - 12 Total	3,115	3,131	3,133	3,137	3,140	3,131	3,128	3,110	3,105	3,107	3,099

Source: FutureThink

Southern Lehigh School District  
Projected Enrollment by Grade Group - Low

Grade	2012-13 Actual	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K - 3	809	804	812	796	794	789	785	809	822	824	827
4 - 6	734	731	722	718	699	706	714	699	685	679	706
7 - 8	528	536	539	525	529	524	511	504	511	528	497
9 - 12	1,044	1,060	1,060	1,098	1,118	1,112	1,118	1,098	1,087	1,076	1,069
K - 12 Total	3,115	3,131	3,133	3,137	3,140	3,131	3,128	3,110	3,105	3,107	3,099

Source: FutureThink

## Southern Lehigh School District

The High projections indicate an increase of 205 students in grades K through 12 from the 2012-13 to the 2022-23 school year. An increase of approximately 6% is projected at the elementary school level.

Southern Lehigh School District  
Projected Enrollment - High

Grade	2012-13 Actual	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K	167	181	183	159	170	179	179	180	181	181	182
1	200	196	212	214	186	200	210	210	211	212	212
2	211	214	210	226	229	199	214	224	225	226	226
3	231	222	225	220	237	240	209	224	235	236	236
4	231	241	231	234	229	247	250	218	233	245	246
5	244	240	250	239	243	238	256	259	226	242	254
6	259	255	250	261	250	253	248	267	270	235	252
7	261	274	270	264	276	264	268	262	283	286	249
8	267	266	280	275	269	281	269	273	267	288	291
9	261	283	282	296	291	285	298	285	289	283	305
10	246	260	281	280	294	289	283	296	283	287	281
11	276	253	267	289	288	302	297	291	304	291	295
12	261	277	254	267	289	288	303	297	292	304	291
<b>K - 12 Total</b>	<b>3,115</b>	<b>3,162</b>	<b>3,195</b>	<b>3,224</b>	<b>3,251</b>	<b>3,265</b>	<b>3,284</b>	<b>3,286</b>	<b>3,299</b>	<b>3,316</b>	<b>3,320</b>

Source: FutureThink

Southern Lehigh School District  
Projected Enrollment by Grade Group - High

Grade	2012-13 Actual	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
K - 3	809	813	830	819	822	818	812	838	852	855	856
4 - 6	734	736	731	734	722	738	754	744	729	722	752
7 - 8	528	540	550	539	545	545	537	535	550	574	540
9 - 12	1,044	1,073	1,084	1,132	1,162	1,164	1,181	1,169	1,168	1,165	1,172
<b>K - 12 Total</b>	<b>3,115</b>	<b>3,162</b>	<b>3,195</b>	<b>3,224</b>	<b>3,251</b>	<b>3,265</b>	<b>3,284</b>	<b>3,286</b>	<b>3,299</b>	<b>3,316</b>	<b>3,320</b>

Source: FutureThink

## CONCLUSION

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As with any projection, the District should pay close attention to live birth counts, charter school enrollment, non-public enrollment, and housing growth. Each of these factors will have an impact on future student enrollment. Watch for changing enrollment trends especially at the elementary level, faster than expected new housing starts, sharp increases or decreases in charter school and non-public school enrollment, and significant changes in the economy.

**FutureThink** is pleased to have had the opportunity to provide the District with enrollment projection services. We hope this document will provide the necessary information to make informed decisions about the future of the Southern Lehigh School District.