

**UPDATED ANALYSIS OF  
DEMOGRAPHICS AND COMMUNITY  
GROWTH PATTERNS AND PROJECTIONS  
OF PUBLIC SCHOOL ENROLLMENTS IN THE  
AVON GROVE SCHOOL DISTRICT  
2009-10**

**Prepared by:**

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**April 6, 2010**

April 6, 2010

Dr. Augustus J. Massaro  
Superintendent  
Avon Grove School District  
375 South Jennersville Road  
West Grove, PA 19390-8401

Dear Dr. Massaro:

The Pennsylvania Economy League, Central PA Division, is pleased to submit the attached report providing an updated analysis of demographics and community growth patterns and offering revised projections of public school enrollments in the Avon Grove School District.

The staff of the district, municipal officials, and a variety of others contributed greatly to the preparation of the study, and their assistance is acknowledged and appreciated. However, the responsibility for any statement of fact or opinion rests solely with the Pennsylvania Economy League.

It is hoped that the findings of this report will be of assistance to the Board of School Directors, the district's administrators and staff, and the general public in addressing the issues that confront them with respect to the future operation of the district.

Sincerely,



Gerald E. Cross  
Executive Director

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## CHAPTER 1

### GENERAL CHARACTERISTICS

The Avon Grove School District is located in the southern portion of Chester County bordering the states of Delaware and Maryland. The district encompasses approximately 62.9 square miles and is comprised of seven municipalities: the boroughs of Avondale and West Grove and the townships of Franklin, London Britain, London Grove, New London, and Penn. (See Map 1-1.)

Between 1980 and 2000 the district experienced a significant increase in population from 12,908 to 23,067—a gain of 10,159 or 78.7 percent. The population of the district rose in both decades with slightly more than half of the overall growth occurring during the 1990s. All of the district's municipalities recorded increases in residents in both decades. The largest gains during the 20-year period occurred in New London Township (3,271 or 249.3 percent), Franklin Township (1,930 or 100.5 percent), London Grove Township (1,734 or 49.1 percent), and London Britain Township (1,251 or 80.9 percent).

As a point of reference Chester County's population was up from 316,660 in 1980 to 433,501 in 2000—a rise of 116,841 or 36.9 percent. The Avon Grove School District's rate of growth was more than twice that of the county during this period. Unlike the district, the population of the county as a whole grew more in the 1980s than in the 1990s. (See Table 1-1 and Graph 1-2.)

During the 1980s the Avon Grove School District experienced an increase in population of 4,524 or 35.0 percent. The largest gains during this period were recorded in New London Township (1,409 or 107.4 percent), London Britain Township (1,125 or 72.8 percent), and Franklin Township (859 or 44.7 percent). The population of the county rose by 59,736 or 18.9 percent during the 1980s. The rate of growth in the Avon Grove School District was almost double that of the county during this period.

Between 1990 and 2000, the district's population grew by 5,635 or 32.3 percent. The largest increases during the 1990s occurred in New London Township (1,862 or 68.4 percent), London Grove Township (1,343 or 34.2 percent), and Franklin Township (1,071 or 38.5

Table 1-1  
 AVON GROVE SCHOOL DISTRICT

	Population Trend 1980 to 2000									
	1980	1990	2000	Change 1980 to 2000		Change 1980 to 1990		Change 1990 to 2000		
				#	%	#	%	#	%	
Avondale Borough	891	954	1,108	217	24.4	63	7.1	154	16.1	
Franklin Township	1,920	2,779	3,850	1,930	100.5	859	44.7	1,071	38.5	
London Britain Township	1,546	2,671	2,797	1,251	80.9	1,125	72.8	126	4.7	
London Grove Township	3,531	3,922	5,265	1,734	49.1	391	11.1	1,343	34.2	
New London Township	1,312	2,721	4,583	3,271	249.3	1,409	107.4	1,862	68.4	
Penn Township	1,888	2,257	2,812	924	48.9	369	19.5	555	24.6	
West Grove Borough	<u>1,820</u>	<u>2,128</u>	<u>2,652</u>	<u>832</u>	45.7	<u>308</u>	16.9	<u>524</u>	24.6	
<b>Total</b>	<b>12,908</b>	<b>17,432</b>	<b>23,067</b>	<b>10,159</b>	<b>78.7</b>	<b>4,524</b>	<b>35.0</b>	<b>5,635</b>	<b>32.3</b>	
<b>Chester County</b>	<b>316,660</b>	<b>376,396</b>	<b>433,501</b>	<b>116,841</b>	<b>36.9</b>	<b>59,736</b>	<b>18.9</b>	<b>57,105</b>	<b>15.2</b>	

SOURCE: U.S. Bureau of the Census.

percent). Between 1990 and 2000 the county’s population rose by 57,105 or 15.2 percent; Avon Grove’s rate of increase during this period was slightly more than two times that of the county as a whole. (See Table 1-1.)

The Avon Grove School District’s total population in the under 18 age group increased by 2,211 or 43.8 percent between 1990 and 2000; the number of residents age 18 to 64 grew by 783 or 7.2 percent; and those 65 and over rose by 471 or 31.3 percent. In 2000, 34.7 percent of the population in the district was under 18 years of age; 55.8 percent was between the ages of 18 and 64; and 9.4 percent was age 65 or over. The percentage of Avon Grove’s population in the under 18 and 65 and over age groups increased between 1990 and 2000, while the percentage of those between 18 and 64 decreased.

Avon Grove’s 2000 population under the age of 18 (34.7 percent) was well above the county figure of 26.2 percent. The proportion of the district’s population in the 18 to 64 age group (55.8 percent) was noticeably below that of the county (62.1 percent), and the same was true for the proportion of Avon Grove’s population age 65 and over (9.4 percent versus 11.7 percent). In 2000, the median age in the district was 36.0 (up from 34.1 in 1990); countywide, the median was 36.8 (up from 33.8 in 1990). Statewide, the median age in 2000 was 38.0 (up from 35.0 in 1990). (See Table 1-2.)

Table 1-2

AVON GROVE SCHOOL DISTRICT

Population by Age Group  
1990 to 2000

	1990		County	2000		County	Change of AGSD Population 1990 to 2000	
	Avon Grove	% of		Avon Grove	% of		#	%
	#	Total		#	Total			
Under 18	5,046	28.9	21.4	7,257	34.7	26.2	2,211	43.8
18-64	10,883	62.4	58.9	11,666	55.8	62.1	783	7.2
65 & Over	<u>1,503</u>	<u>8.6</u>	<u>19.7</u>	<u>1,974</u>	<u>9.4</u>	<u>11.7</u>	<u>471</u>	31.3
<b>Total</b>	<b>17,432</b>	<b>100.0</b>	<b>100.0</b>	<b>20,897</b>	<b>100.0</b>	<b>100.0</b>	<b>3,465</b>	<b>19.9</b>

Note: Not all numbers may add due to rounding.

SOURCE: U. S. Bureau of the Census (Revised).

U.S. Census Bureau estimates as of July 2008, suggest that the population of the Avon Grove School District had grown by 6,752 or 29.3 percent since 2000. Estimated increases occurred in all of the district’s municipalities except Avondale Borough, which recorded an estimated loss of 22 residents (2.0 percent). The largest estimated gains were experienced in Penn Township (2,887 or 102.7 percent), London Grove Township (1,532 or 29.1 percent), and New London Township (1,210 or 26.4 percent). The smallest estimated rise was in West Grove Borough (109 or 4.1 percent). The county’s population is estimated to have increased by 57,988 or 13.4 percent during this period. The school district’s rate of growth—based on these estimates—is a little more than twice that of the county. (See Table 1-3 and Graph 1-1.)

Table 1-3

AVON GROVE SCHOOL DISTRICT

Actual and Estimated Population  
2000 to 2008

	Actual 2000	Estimate 2008	Change 2000 to 2008	
			#	%
Avondale Borough	1,108	1,086	-22	-2.0
Franklin Township	3,850	4,550	700	18.2
London Britain Township	2,797	3,133	336	12.0
London Grove Township	5,265	6,797	1,532	29.1
New London Township	4,583	5,793	1,210	26.4
Penn Township	2,812	5,699	2,887	102.7
West Grove Borough	<u>2,652</u>	<u>2,761</u>	<u>109</u>	4.1
<b>District Total</b>	<b>23,067</b>	<b>29,819</b>	<b>6,752</b>	<b>29.3</b>
<b>Chester County</b>	<b>433,501</b>	<b>491,489</b>	<b>57,988</b>	<b>13.4</b>

SOURCE: U.S. Bureau of the Census (Revised).

According to population projections prepared by the Delaware Valley Regional Planning Commission (July 2007), the population of the district is expected to increase from 23,067 in 2000 to 30,683 in 2010 (or by 7,616 or 33.0 percent). Each of the district’s municipalities is projected to grow. The largest increases during this period are expected to occur in Penn Township (2,436 or 86.6 percent), London Grove Township (1,876 or 35.6 percent), and New London Township (1,732 or 37.8 percent). Based on the 2008 Census estimate for the district (an increase of 6,752 or 29.3 percent over 2000), the district is ahead of the straight-line pace necessary to reach the 2010 figure.

The population of the county is projected to rise from 433,501 in 2000 to 505,095 in 2010 (a gain of 71,594 or 16.5 percent); however, the 2008 estimate suggests that the county’s growth is behind the straight-line pace necessary to reach the 2010 figure. Avon Grove’s projected increase is about double that of the county. (See Table 1-4 and Graph 1-1.)

Table 1-4

AVON GROVE SCHOOL DISTRICT

	<u>Actual and Projected Population</u>		<u>Change</u>	
	2000 to 2010		2000 to 2010	
	<u>Actual</u>	<u>Projected</u>	<u>#</u>	<u>%</u>
	2000	2010		
Avondale Borough	1,108	1,149	41	3.7
Franklin Township	3,850	4,832	982	25.5
London Britain Township	2,797	3,208	411	14.7
London Grove Township	5,265	7,141	1,876	35.6
New London Township	4,583	6,315	1,732	37.8
Penn Township	2,812	5,248	2,436	86.6
West Grove Borough	<u>2,652</u>	<u>2,790</u>	<u>138</u>	5.2
<b>District Total</b>	<b>23,067</b>	<b>30,683</b>	<b>7,616</b>	<b>33.0</b>
<b>Chester County Total</b>	<b>433,501</b>	<b>505,095</b>	<b>71,594</b>	<b>16.5</b>

SOURCE: Actual: U.S. Bureau of the Census (Revised).  
 Projected 2010: Delaware Valley Regional Planning Commission (July 2007).

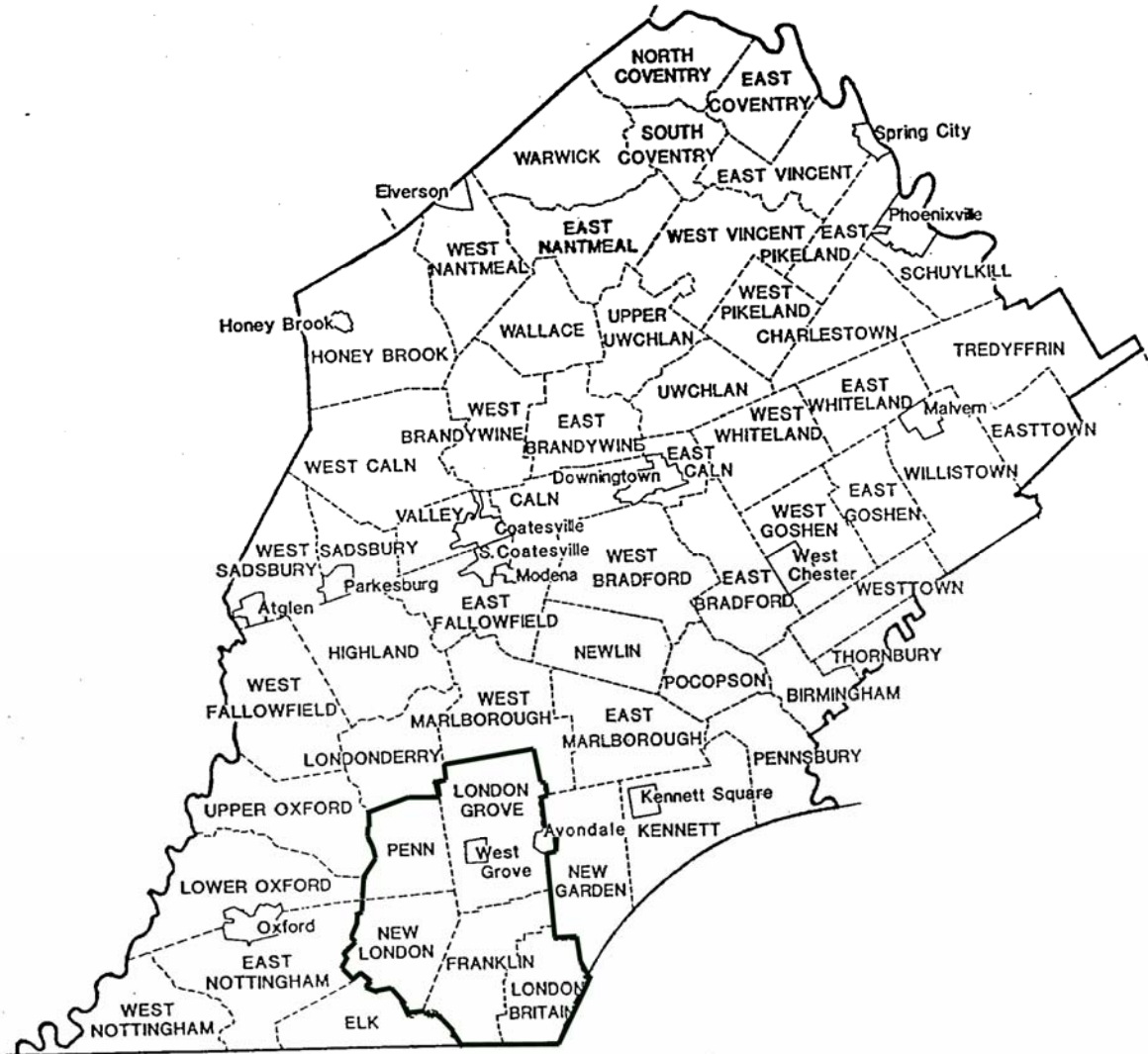


**Public school enrollments over the next ten years will be dependent more on recent and future births, in-migration and the age composition of the child population than on the overall population pattern. If recent experience serves as a valid guide, the trends in public school enrollments will not necessarily directly mirror the pace of growth.**

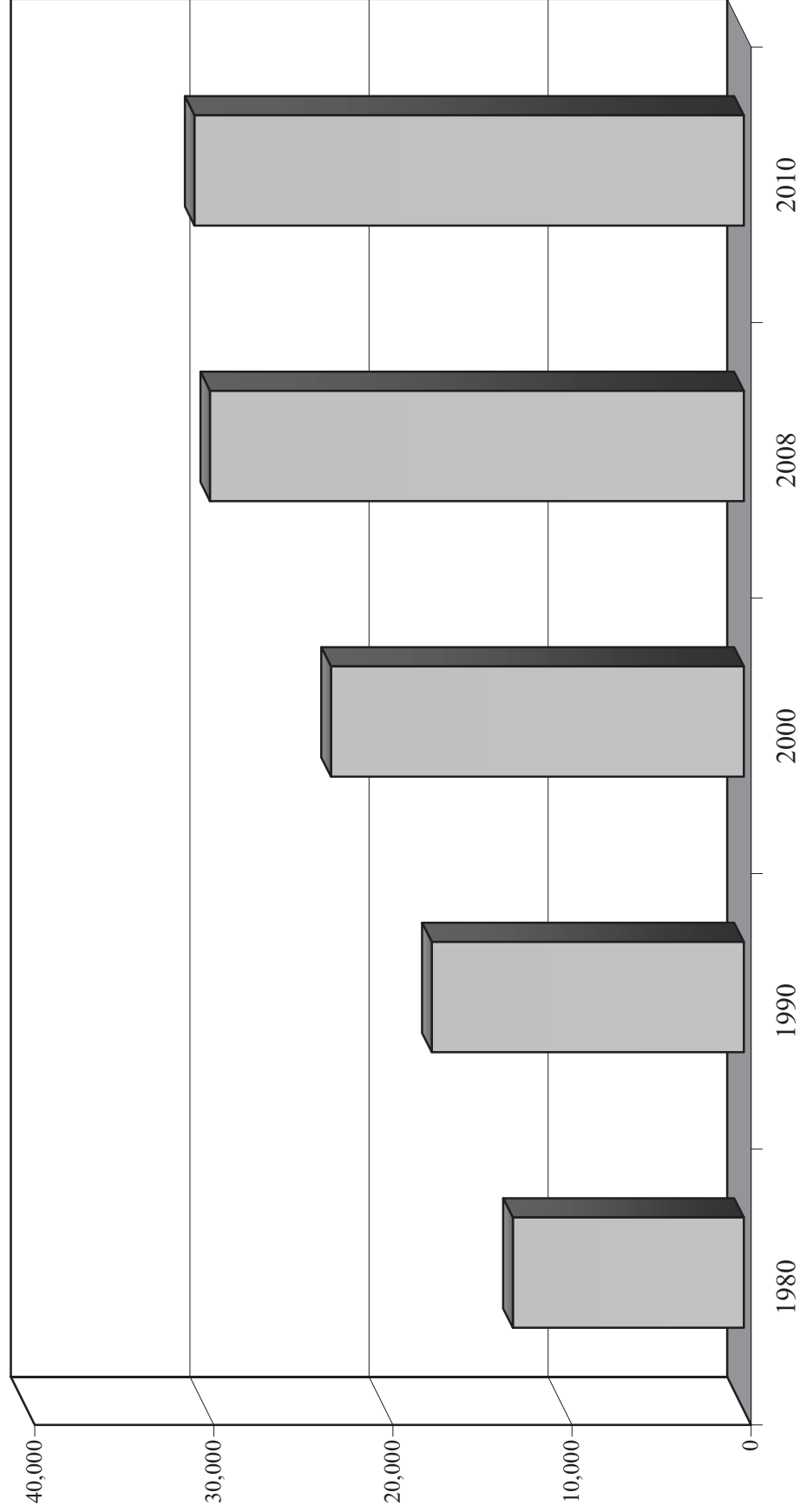
## APPENDIX 1

# Map 1-1

## Avon Grove School District



**Graph 1-1**  
Avon grove School District  
Population Trends and Projections  
1980 to 2010



CHAPTER 2  
HOUSING AND RELATED ACTIVITY

The number of housing units in the Avon Grove School District rose from 4,375 in 1980 to 7,647 in 2000—a growth of 3,272 units or 74.8 percent. Each of the district’s seven municipalities recorded increases in housing units during this period. The largest growth was experienced in New London Township (942 or 210.3 percent), and, in fact, New London accounted for almost 29 percent of the district’s total number of new housing units constructed between 1980 and 2000. (See Table 2-1 and Graph 2-1.)

Table 2-1

AVON GROVE SCHOOL DISTRICT

Reported Change in Number of Housing Units  
by Municipality  
1980 to 2000

Municipality	1980	1990	2000	Reported Change 1980 to 2000		Reported Change 1980 to 1990		Reported Change 1990 to 2000	
				#	%	#	%	#	%
Avondale Borough	324	347	361	37	11.4	23	7.1	14	4.0
Franklin Township	649	942	1,237	588	90.6	293	45.1	295	31.3
London Britain Township	501	901	979	478	95.4	400	79.8	78	8.7
London Grove Township	1,115	1,310	1,698	583	52.3	195	17.5	388	29.6
New London Township	448	922	1,390	942	210.3	474	105.8	468	50.8
Penn Township	671	848	1,093	422	62.9	177	26.4	245	28.9
West Grove Borough	667	780	889	222	33.3	113	16.9	109	14.0
<b>District Total</b>	<b>4,375</b>	<b>6,050</b>	<b>7,647</b>	<b>3,272</b>	<b>74.8</b>	<b>1,675</b>	<b>38.3</b>	<b>1,597</b>	<b>26.4</b>

SOURCE: U.S. Bureau of the Census (Revised)

During the decade of the 1980s the number of housing units in the district grew by 1,675 or 38.3 percent, and between 1990 and 2000 the rise totaled 1,597 or 26.4 percent. The largest increases in the 1980s were recorded in New London Township (474 or 105.8 percent), London Britain Township (400 or 79.8 percent), and Franklin Township (293 or 45.1 percent). In the decade of the 1990s, the largest gains were experienced in New London Township (468 or 50.8 percent), London Grove Township (388 or 29.6 percent), and Franklin Township (295 or 31.3 percent).

In 1980 London Grove Township had the largest number of housing units of any of the district's municipalities (1,115 or 25.5 percent of the district's total), followed by Penn Township (671 or 15.3 percent) and West Grove Borough (667 or 15.2 percent). In 1990, London Grove Township remained the largest of the district's municipalities in terms of housing units (1,310), but its proportion of the total had decreased to 21.7 percent. Given their rapid growth, in 1990 Franklin Township became the district's second largest of the municipalities based on housing units (with 942 or 15.6 percent of the total), and New London Township rose to third largest (with 922 units or 15.2 percent of the total). Penn Township and West Grove Borough fell to fourth and sixth, respectively.

In 2000 London Grove Township still had the greatest number of housing units of any municipality in the district (1,698), and its proportion of the total was up slightly to 22.2 percent. New London Township moved up to second largest with 1,390 units, and its proportion of the district total grew to 18.2 percent. Franklin Township fell to the third largest of the district's municipalities in terms of housing units with 1,237, but its proportionate share increased to 16.2 percent.

Based on the reported number of permits issued for new housing units from 2000 through April of 2009, there were 10,352 housing units in the Avon Grove School District at that time—a growth of 2,705 units (35.4 percent) over the 2000 Census. All of the district's municipalities except Avondale Borough recorded new units during this decade. The largest increases were experienced in Penn Township (1,088 units or 99.5 percent—almost double the 2000 figure) and London Grove Township (742 units or 43.7 percent). Penn Township accounted for 40.2 percent of the reported new housing units permitted for construction in the district between 2000 and the end of April 2009; London Grove Township generated 27.4 percent of the total.

It should be noted that the vast majority of new housing units built in the district during the current decade (2,269 or 83.9 percent of the total—an average of 378 units per year) occurred during the period 2000 to 2005; since then the annual figures have dropped to 231 in 2006, 140 in 2007, 49 in 2008, and 16 through April of this year. The experience of this most recent period contrasts notably with that of the earlier portion of the decade totaling just 436 units or 16.1 percent of the total for the entire decade. The number of new units per year during this period averaged only 131.

London Grove Township remains the largest of the district's municipalities in terms of housing units with 2,440, and its share of the district total is up again—from 22.2 percent in 2000

to 23.6 percent. Penn Township is now the district’s second largest municipality with 2,181 units (21.1 percent of the total—up noticeably from 14.3 percent in 2000), and New London Township has fallen to third largest based on housing units with 1,794 units (17.3 percent of the total—down from 18.2 percent in 2000). (Franklin Township dropped to fourth largest with 1,495 units—down from 16.2 percent of the total in 2000 to 14.4 percent in 2009.) (See Table 2-2.)

Table 2-2  
 AVON GROVE SCHOOL DISTRICT  
 Reported Number of Housing Units Authorized by Permit  
 2000 to 2009<sup>1/</sup>

Municipality	New Housing Units <sup>1/</sup>										Est. Total 2009 <sup>1/</sup>	Change 2000-2009 <sup>1/</sup>		% of Units Added 2000-2009 <sup>1/</sup>
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 <sup>1/</sup>		#	%	
Avondale Borough	0	0	0	0	0	0	0	0	0	0	361	NC	NC	---
Franklin Township	43	27	23	15	32	47	40	16	11	4	1,495	258	20.9	9.5
London Britain Twp.	27	19	19	13	20	29	10	10	10	2	1,138	159	16.2	5.9
London Grove Twp.	85	68	91	118	177	85	92	20	5	1	2,440	742	43.7	27.4
New London Twp.	55	51	80	55	33	45	34	29	17	5	1,794	404	29.1	14.9
Penn Township	142	101	112	168	232	229	37	57	6	4	2,181	1,088	99.5	40.2
West Grove Borough	0	2	0	1	2	23	18	8	0	0	943	54	6.1	2.0
<b>District Total</b>	<b>352</b>	<b>268</b>	<b>325</b>	<b>370</b>	<b>496</b>	<b>458</b>	<b>231</b>	<b>140</b>	<b>49</b>	<b>16</b>	<b>10,352</b>	<b>2,705</b>	<b>35.4</b>	<b>100.0</b>

<sup>1/</sup> Through April 2009.

Note: All figures may not add due to rounding.

SOURCE: Respective municipalities.

According to municipal officials there are 34 approved residential developments in the Avon Grove School District, 19 subdivisions that have been formally proposed, and one project that is known to be under discussion or in the early planning stages. In addition, most of the district's member municipalities expect to experience some level of infill, minor subdivision activity, and/or miscellaneous housing construction.

The approved developments represent 1,321 new housing units, and those that have been formally proposed reflect another 3,631 units. The number of units that could result from the sole project that is known to be under discussion or in the early planning stages could be as high as 83. Infill, minor subdivision activity, and/or miscellaneous housing construction is expected to generate about 136 units during the next ten years.

It should be noted that 148 of the approved units are expected to be constructed after 2018—the final year of the ten-year horizon of this study. Further, municipal officials report that

some of the approved and proposed projects (and the one under discussion, as well) may not move forward in a timely fashion, may be scaled back, or may not occur at all due to weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; or because some projects are in bankruptcy or are dormant due to economic conditions or other reasons.

(With minor exceptions, all references to housing units in subdivisions reflect lots which remain available for construction at the end of April 2009—not the total number of units in the subdivision, which would include units already built, those under construction, and those for which building permits have been issued.) (See Table 2-3.)

According to municipal officials, at the time data were collected for PEL's prior study of the Avon Grove School District (the end of June 2007) there were 42 approved residential developments in the district reflecting 4,063 new housing units; 20 proposed subdivisions estimated to generate another 1,505 units, and one project that was known to be under discussion or in the early planning stages that was believed to be capable of producing 29 more units. In addition, infill, minor subdivision activity, and/or miscellaneous housing construction was expected to generate about 196 units during the subsequent ten years. The total number of units in the pipeline at that time was 5,793. There are now 5,171 units in the pipeline—lower by 622 units. The current number in the pipeline has not dropped entirely due to the number of units that were permitted for construction during the interim period (which totaled only 140 between July of 2007 and the end of April of this year). It is down primarily due to weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; or as a result of bankruptcies and other factors, and—as previously stated—the pipeline could be further reduced for the same reasons.

There is one approved subdivision in Avondale Borough and two developments that have been formally proposed. No other project is known to be under discussion or in the early planning stages, but there is the possibility that a few new units may result from infill, minor subdivision activity, and/or miscellaneous housing construction.

The approved project is the initial phase of Carillon (Wilkinson Builders) and involves 58 townhouse units. It is believed that construction will begin in 2010, but the pace of the build-out and the estimated completion date for the project are unknown.

Table 2-3

AVON GROVE SCHOOL DISTRICT

Approved and Proposed Housing Developments  
(as of May 2009)

<u>Development</u>	<u>Type of Housing</u> <sup>1/</sup>	<u>Units to be Completed</u> <sup>2/</sup>	<u>Units Per Year</u> <sup>2/</sup>	<u>Start Date</u> <sup>2/</sup>	<u>Probable Completion Date</u> <sup>2/</sup>
<b><u>APPROVED</u></b>					
<u>Avondale Borough</u>					
Carillon Ph. 1	TH	58	?	2010	?
<u>Franklin Township</u>					
Franklin Chase	SF	11	?	U	?
High Pointe Meadow	SF	5	?	?	?
Insingna	SF	3	?	?	?
Lang	SF	6	?	?	?
Lexington Pointe	SF	37	?	U	?
White Clay Knoll	SF	5	5	U	2010
Wyndermere/Crossan Creek	SF	40	?	U	?
<u>London Britain Township</u>					
Flint Hill Crossing	SF	15	?	U	?
Glen Ridge	SF	5	?	U	?
Meadows II	SF	4	?	U	?
Nivin View	SF	7	?	U	?
Smith	SF	2	?	?	?
Windsor	SF	2	?	U	?
<u>London Grove Township</u>					
Briarlea	SF	20	?	U	?
Dallas Green/DeLuca	SF	75	?	?	?
Fox Chase	SF	40	?	U	?
Hills of London Grove	SF	100	?	U	?
Inniscrone <sup>3/</sup>	SF	250	16	U	<u>5/</u>
Lambourne Hunt	SF	40	?	U	?
Rose Hollow	SF	9	?	?	?
Village Green	SF/TH	47	?	?	?
<u>New London Township</u>					
Cornerstone/McDowell	SF	2	1	U	2010
Downing	SF	2	1	U	2010
Glidden	SF	10	?	?	?
Highland Crest	SF	4	?	U	?
Marshall	SF	1	1	U	?
Speakman	SF	2	?	?	?
Wheatland Farms	SF	113	8	U	<u>5/</u>
Wynstone	SF	9	6	U	2010
<u>Penn Township</u>					
Bartels Tract <sup>3/</sup>	SF/TW	298	?	?	?
Ovations <sup>3/ 4/</sup>	SF/TW	0	-	U	2010
Village of Roseview <sup>3/</sup>	SF	75	5	U	<u>5/</u>
<u>West Grove Borough</u>					
Liberty Court	TH	24	12	U	2010

Table 2-3

AVON GROVE SCHOOL DISTRICT

Approved and Proposed Housing Developments  
(as of May 2009)

<u>Development</u>	<u>Type of Housing</u> <sup>1/</sup>	<u>Units to be Completed</u> <sup>2/</sup>	<u>Units Per Year</u> <sup>2/</sup>	<u>Start Date</u> <sup>2/</sup>	<u>Probable Completion Date</u> <sup>2/</sup>
<b><u>PROPOSED</u></b>					
<u>Avondale Borough</u>					
Carillon (Additional Phases)	TH	192	?	?	?
Thompson St.	TH	22	?	?	?
<u>Franklin Township</u>					
Ashby Hills	SF	7	?	?	?
Davis	SF	4	?	?	?
Handler/Robino	TND	203	?	?	?
Fox Hunt Farms	SF	100	?	?	?
Logan	SF	4	?	?	?
Miller Farm	TH	239	?	?	?
Dolores Morris	SF	13	?	?	?
Woods Edge	SF	22	?	?	?
<u>London Britain Township</u>					
London Britain Station	SF	101	?	?	?
<u>London Grove Township</u>					
Apple Grove	SF	42	?	?	?
Coventry Reserves	SF	20	?	?	?
Powers Property	SF	42	?	?	?
Valley Grove <sup>3/</sup>	PRD	1,500	?	?	?
Westlyn	SF/TW	470	?	?	?
Yeatman Property	TH	374	?	?	?
<u>New London Township</u>					
None	-	-	-	-	-
<u>Penn Township</u>					
Big Elk Assoc. <sup>3/</sup>	SF	236	?	2009	?
<u>West Grove Borough</u>					
West Grove Partners	TH	40	20	2010	2011

Table 2-3

AVON GROVE SCHOOL DISTRICT

Approved and Proposed Housing Developments  
(as of May 2009)

<u>Development</u>	<u>Type of Housing</u> <sup>1/</sup>	<u>Units to be Completed</u> <sup>2/</sup>	<u>Units Per Year</u> <sup>2/</sup>	<u>Start Date</u> <sup>2/</sup>	<u>Probable Completion Date</u> <sup>2/</sup>
<b><u>UNDER DISCUSSION</u></b>					
<u>Avondale Borough</u>					
None	-	-	-	-	-
<u>Franklin Township</u>					
None	-	-	-	-	-
<u>London Britain Township</u>					
None	-	-	-	-	-
<u>London Grove Township</u>					
None	-	-	-	-	-
<u>New London Township</u>					
Stanwell	TH	83	?	?	?
<u>Penn Township</u>					
None	-	-	-	-	-
<u>West Grove Borough</u>					
None	-	-	-	-	-
<b><u>MINOR ACTIVITY</u></b>					
Avondale Borough	SF	6	?	U	?
Franklin Township	SF	10	1	U	2018
London Britain Township	-	-	-	-	-
London Grove Township	SF	50	5	U	2018
New London Township	SF	10	1	U	2018
Penn Township	SF	50	5	U	2018
West Grove Borough	SF	10	?	U	?

1/ Housing codes are as follows: SF = Single-Family Detached; TH = Townhouses; TW = Twins; PRD = Planned Residential Development (single-family detached units, townhouses, and apartments); TND = Traditional Neighborhood Development (single-family detached and townhouse units); ?? = Unknown

2/ Estimating the starting date and build-out at the district's various developments is difficult given the uncertainties involved. It is reported by municipal officials that some approved and proposed projects (and the one under discussion, as well) may not move forward in a timely fashion, may be scaled back, or may not occur at all due to weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; or because some projects are in bankruptcy or are dormant due to economic conditions or other reasons. These figures reflect the judgments of the parties involved based on what was known at the end of April 2009. U = Underway; ? = Unknown

3/ Totally or partially age-restricted or similar in nature.

4/ Permits for all the 30 remaining units have been issued.

5/ Some of the units in these approved subdivisions are expected to be constructed after 2018.

The remaining units at Carillon (192 townhouses) are still in the proposal stage, and it is unknown when these units might be approved or when construction might begin. A proposal has also been submitted for another 22 townhouse units on Thompson Street. However, given that there has been no recent movement on this proposal, borough officials consider this project to be "on hold," and they do not believe that any construction will occur in the near future.

It is estimated that about half a dozen infill lots remain available in the borough, but there has been no movement on any of these parcels given the moratorium on sewer hookups. It is believed that with resolution of the borough's sewer problems construction may occur on some of these lots, but the timing is unknown.

Avondale has been under a sewer moratorium since 1987, and during this period virtually no housing construction has occurred. However, the borough has expanded the capacity of its treatment plant and is in the process of conducting an inflow and infiltration (I & I) study. DEP has lifted the sewer moratorium at least to the extent that the first 58 townhouse units at Carillon can be built. Connections for borough residents who have been waiting for hook-ups (very few, and primarily for non-residential uses) will follow, as will those earmarked for parts of New Garden Township; all will likely occur by the end of the year. Upon completion of the I & I study, and when all necessary improvements have been made to DEP's satisfaction, it is expected that the moratorium will be fully lifted.

Avondale maintains its own water distribution system utilizing two wells, and officials believe that the water supply is adequate to serve the needs of the anticipated new townhouses. However, the borough will be hooking in to the Chester Water Authority line for "backup" purposes.

It is believed that when the approved and proposed projects are completed and when construction on the remaining infill lots has occurred, Avondale Borough will have exhausted almost all of the land available for new housing. However, officials stated that the Ramberger property holds the potential for perhaps ten additional housing units, although there is no reason to believe that there will be any movement on this parcel in the near future.

It was noted that over the years Avondale has experienced turnover of mature owner-occupied and rental units, and this has often resulted in older residents being replaced with younger families with a noticeable number of children. However, it was reported that turnover of this type has slowed.

In Franklin Township there are seven approved subdivisions and eight that have been formally proposed. No other projects are known to be under discussion or in the early planning stages, and the township anticipates only a very modest amount of infill, minor subdivision activity, and/or miscellaneous housing construction.

The approved developments are expected to produce 107 units, and those that have been proposed could generate an additional 592 units. The infill, minor subdivision activity, and/or miscellaneous housing construction will likely average just one unit annually or about ten during the next ten years.

The approved developments all involve single-family detached units and include Franklin Chase (11); High Point Meadow—formerly known as Newlin (five); Insigna (three); Lang (six); Lexington Pointe (37); White Clay Knoll (five); and Wyndermere—formerly known as Crossans Creek (40).

With respect to the approved projects it should be noted that the developer of Franklin Chase has withdrawn, and the project is in the hands of a bank. Reportedly, the bank has come to an agreement with another builder, and the remaining 11 units are expected to be completed as market conditions improve. Similarly, Wyndermere has been abandoned by its developer, and a financial institution controls this project. It is actively seeking a builder for the 40 approved units. If it is successful, like Franklin Chase, the project could move forward as market conditions allow.

The Mackie project, which had received conditional approval for 42 units, has been purchased by Natural Land Trust, and the 113-acre site will be preserved as open space and hiking trails.

The proposed developments range in size from 239 townhouses at the Miller Farm down to just four single-family detached units each at the Davis and Logan subdivisions. The other proposed projects include Ashby Hills (seven single-family detached units); Handler/Robino TND (203 units about equally split between single-family detached and town homes); Fox Hunt Farms (100 single-family detached units); Dolores Morris (13 single-family detached units); and Woods Edge (22 single-family detached units). The Goodwin track (where 26 single-family detached units had previously been proposed), like the Mackie project, is now conserved, and, therefore, there will be no housing constructed on this parcel.

Reportedly, an agreement of sale involving the Miller Farm was recently signed by the buyers and sellers, and when this sale is final what was to have been a 239-unit townhouse

development will become part of the township's park system. There is also a pending agreement of sale of the Dolores Morris parcel to a conservation group, which would preclude the construction of the 13 proposed single-family detached units. Because, at this time, the Miller Farm and the Dolores Morris parcel have not yet been formally acquired and preserved, the proposed number of units in these subdivisions is included in the text and tables in this chapter.

It should also be noted that Ashby Hills could be purchased by a conservation group and preserved as open space, or the seven units could be developed as proposed. In fact, municipal officials suggest that as the housing market improves the developer may be leaning more towards seeking final approval and initiating construction thereby making preservation less likely.

Similarly, the Handler/Robino TND (which incorporates both the former Echo Hill and McMaster proposals—58 single-family detached units and 113 townhouses, respectively), could be sold to a conservation group (and, as a result, residential construction would be precluded), but it is also very likely that the project could be developed as proposed.

There is a noteworthy complication with the Handler/Robino project involving a stipulation agreement that requires the construction of a package sewage treatment plant that is also expected to be utilized by Fox Hunt Farms. As such, Fox Hunt Farms will not be able to move forward until Handler/Robino constructs its plant. Obviously, if the Handler/Robino parcel is acquired by a conservation group no housing will be constructed, and, therefore, there would be no need for a treatment plant. There is some ongoing litigation designed to separate Fox Hunt Farms from Handler/Robino which, in turn, would allow Fox Hunt Farms to build its own plant and proceed independently of Handler/Robino. Given the need for DEP approval of a sewage treatment plant, it is believed that construction on these parcels would not begin for at least two years, and there is a possibility that the scope of the projects could be scaled back.

In addition, it should be noted that while the Woods Edge proposal (22 single-family detached units) has been approved, because the developer has not yet raised sufficient funding the plan has not been signed, and, therefore, technically, it is still considered to be proposed. Further, while there are 22 units in the plan, only 13 can be built until an adjoining development on South Guernsey Road in London Grove Township (Dallas Green/DeLuca) is completed and, in so doing, provides a second access road to Woods Edge. Because there is some question as to whether, in fact, the Dallas Green/DeLuca project will proceed as originally planned, construction of the additional nine units in Woods Edge would seem to be doubtful.

It is believed that by the end of 2010 all units at White Clay Knoll will be built. The annual number of units expected to be constructed and the anticipated dates of completion for each of the other approved projects are unknown, and the same is true for each of the proposed projects.

Township officials report that in good economic times they would expect between five and ten units annually of infill, minor subdivision activity, and/or miscellaneous housing construction. Given the state of the economy, however, they believe that just one unit per year is a more realistic expectation until conditions improve.

Officials are not aware of any other parcels where efforts to subdivide are underway or in the early planning stages, but they indicate that there is a potential of perhaps 1,000 additional units in the township with "full build-out," which, of course, is conditioned on a variety of factors including the economy. It is not anticipated that there will be any movement with respect to these additional units anytime in the near future.

The township has no public sewage collection and treatment system; as such, all treatment consists of septic tanks on individual properties or package plants/community systems serving entire subdivisions. Reportedly, soils tend to make on-site treatment somewhat problematic, as do the county and DEP regulations. All subdivision proposals must be approved by DEP, and this (along with the current economic conditions) tends to make long-term estimates of growth rates somewhat difficult.

Most of the water for township residents comes from on-site wells; however, there is limited public water distribution provided by Aqua America and also by the Chester Water Authority (in those areas that are in close proximity to its main water supply line).

Several years ago the township updated its zoning ordinances to require that approximately 55 percent of the land area in a development be designated for "open space." In February 2006 the township's comprehensive plan was updated, and many of the recommendations tended to further limit development activity. It is reported that these recommendations were partially in response to ongoing concerns with respect to the environment in general and quality of life issues as they have been affected by the overall pace of growth in the township. The first round of changes in zoning regulations in keeping with the plan update have been adopted, and it is expected that others will follow.

As evidenced by the recent experience with the Goodwin track and the Mackie parcel and efforts underway to preserve the Dolores Morris property and the Miller Farm (and possibly

Handler/Robino and Ashby Hills), conservation sentiment is very strong in Franklin Township, and the township's leadership is very supportive. Franklin has been successful in generating grants for this purpose and has worked closely with the Natural Land Trust and the Brandywine Conservancy. Officials report that, to the extent possible, they will continue to endeavor to generate grants, and it is likely that more and more parcels will be conserved. Further, it was noted that there are agricultural preservation programs in place including the sale/purchase of development rights and the acquisition of open space by conservancies. The first agricultural easement in the township closed earlier this year, and others are expected.

Clearly, the pace of growth in Franklin Township has slowed (as it has throughout the district as a whole), and the recent downturn in activity is believed to be influenced not only by the overall economy, but also by sewage collection and treatment issues, the township's comprehensive plan and zoning regulations, ongoing efforts to preserve farmland and open space, and perhaps other factors. Although the number of units now in Franklin's pipeline remains about the same as it was at the end of in June of 2007, officials suggest that this figure will drop if all the preservation efforts that are underway go through. Several of the parcels earmarked for preservation appear to be "a sure thing," but the acquisition of other parcels will depend on whether pending grant requests are successful.

In London Britain Township there are six approved subdivisions and one that has been formally proposed. No other residential project is known to be under discussion or in the early planning stages, and the township does not anticipate any noticeable infill, minor subdivision activity, or miscellaneous housing construction.

The approved developments total 35 single-family detached units and range in size from two units at both the Smith and Windsor parcels to 15 units at Flint Hill Crossings. The other approved projects include Glen Ridge (five units), Meadows II (four units), and Nevin View (seven units). While all projects except Smith are considered to be underway, given the economy, construction at these subdivisions has essentially stopped, and there is no estimate of when the remaining units will be built. The Smith project is considered dormant, Meadows II is in bankruptcy, and Windsor is reportedly "financially unstable." These factors further increase the uncertainty regarding the pace of the build-out of the units in these subdivisions.

The sole proposed development (London Britain Station) has the potential to generate 101 single-family detached units. There has been no recent movement on this project, and the developer has submitted several "extension letters" to the township. As such, the timing of the

approval, the starting date, the annual number of units to be constructed, and the expected date of completion for this project are unknown.

There is no widespread public sewage collection and treatment system in London Britain, nor is there any public water supply. There is, however, a community sewerage system constructed by the developer to service the Windsor subdivision (it is operated by the township), and if the proposed London Britain Station project moves forward the developer will construct a community sewerage system as well as a community water system to serve its residents. Reportedly, perking is not a major problem in the sections of the township that rely on on-site septic systems.

London Britain officials noted that there are ongoing efforts to preserve farmland/open space in the township, and, to date, in excess of 25 percent of the township's land area has been preserved through purchases by White Clay Creek Wildlife Preserve and the Brandywine Conservancy, the use of agricultural easements, and/or the sale development rights under county and/or state preservation programs. Reportedly, the acquisition of development rights of four other parcels is pending.

Nonetheless, tracts of land remain that have the potential to generate additional housing, although no development plans for these parcels have been submitted to township officials, and it is not believed that any activity is imminent.

It was reported that in the past there has been a fair amount of turnover of mature housing in the township, some of which involved empty-nesters giving way to young families with school-age and/or pre school-age children. However, this has declined dramatically in recent months. It was also stated that the township has been experiencing a noticeable number of foreclosures.

Officials indicated that the update of the township's comprehensive plan has been approved, but it is believed that it will have no material effect on future housing development in London Britain, which is expected to continue at a very modest pace.

In London Grove Township there are eight approved subdivisions and six that have been formally proposed. No other project is known to be under discussion or in the early planning stages, but the township expects to experience a noticeable amount of infill, minor subdivision activity, and/or miscellaneous housing construction.

The approved developments reflect 581 units, the proposed projects have the potential to generate 2,448 units, and the infill, minor subdivision activity, and/or miscellaneous housing

construction will likely produce about five units per year, on average, or a total of 50 during the next ten years.

The approved developments range in size from nine single-family detached units at Rose Hollow to 250 townhouse and single-family detached units at Inniscrone (about 120 of which will be age-restricted). The other approved projects (all of which involve single-family detached units except where noted) include Brierlea (20); Dallas Green/DeLuca (75); Fox Chase (40); Hills of London Grove (100); Lambourne Hunt (40); and Village Green (47 single-family detached and townhouse units).

It should be noted that the township recently purchased Inniscrone's golf course, but it will continue as a golf course (or as open space)—it will not be subdivided for housing. Reportedly, the purchase was made largely to help the township generate revenue, but it may also serve as a logical place to spray effluent from the London Grove Township Municipal Authority's treatment plant. The township will hire a third party to operate the course.

The proposed projects range in size from 20 single family detached units at Coventry Reserves up to 1,500 single-family detached units, townhouses, and apartments at Valley Grove (a PRD). About 60 percent of the units at Valley Grove will be age-restricted or limited in terms of the number of bedrooms and, therefore, they will appeal primarily to empty-nesters and/or young professionals. Movement on this potential project by the developer (Wilkinson) has been slow.

The other proposed projects include Apple Grove (42 single-family detached units); the Powers Property (also 42 single-family detached units); Westlyn (470 single-family detached and twin units, plus some commercial space—all of which may be on the "back burner" for the developer); and the Yeatman Property (374 townhouses).

Public Sewage collection and treatment service is provided by the township's municipal authority, but it is only available in the areas south of Route 1, and not all parcels in this part of the township are connected to the system. Lack of capacity at the authority's treatment plant has become a major factor affecting residential construction, as evidenced by the downturn in permits for new housing units that began several years ago—although the economy has certainly been a contributing factor in the most recent years.

It is reported that as an interim "solution" to the sewage treatment issues faced by the township, the process of re-rating the authority's treatment plant is underway. If DEP approves, the re-rating would likely create about 190 additional EDUs. The first 30 or 35 of these EDUs

are earmarked for the Avon Grove Charter School which is now using a septic system, but because its enrollment has grown, is out of compliance with township regulations. Further, perhaps 50 to 60 additional EDUs are earmarked for commercial development along Route 41. Given this, only about 95 to 110 EDUs would be available to facilitate residential construction.

A second and still only partial "solution" involves improvements to the authority's plant. The cost would be about \$15 million, and the authority has applied to PennVest for grant to cover two-thirds of this; the remaining \$5 million would be borne locally. These improvements would result in an additional 190 EDUs.

It is likely that the long-term remedy for this problem will involve Wilkinson constructing a sewage treatment plant to serve the Valley Grove and/or Westlyn projects. This would directly address the needs of one or both of these subdivisions, but would also allow other developers/developments to tie-in (at their expense), thereby providing the capacity they need to move forward. At this point, Wilkinson is reportedly focusing on a plant that would be adequate to serve just Westlyn and allow for perhaps an additional 200 EDUs—unless other developers come forward with the financing to construct a larger plant.

Because of the sewerage situation, work has been halted on essentially all residential development in the township. As such, the pace of the build-out and the expected dates of completion of most of the projects in the township are uncertain. The major exception is Inniscrone, which has its own treatment plant that reportedly has sufficient treatment capacity to support continued construction. In view of this, ground has been broken for Phases V and VI, and Ryan Homes is expected to build about 100 units at the rate of 16 a year; these are not among the age-restricted units at this development. At this pace it would take at least 15 years to complete the entire project.

Two of the proposed developments (Coventry Reserves and Apple Grove) will also rely on community treatment systems, and, therefore, will not be affected by the sewerage issues that are limiting residential activity elsewhere in the township.

Virtually all of the infill, minor subdivision activity, and miscellaneous housing construction is expected to occur in the area the township that utilizes on-site treatment, and, as such, these units would be able to be built; the same will be the case for units in some of the smaller approved and proposed subdivisions in the township.

Briarlea, Fox Chase, Hills of London Grove, and Lambourne Hunt, which will need treatment capacity at the authority's plant in order to move forward, could receive some EDUs as

a result of the ongoing process of re-rating the plant. However, given that after the first 30 or 35 of the 190 EDUs resulting from the re-rating process are utilized by the charter school and perhaps 50 to 60 additional EDUs are allocated for commercial development along Route 41, only about 95 to 110 EDUs would be available to facilitate construction at these residential subdivisions. Because the number of units expected to be built at these subdivisions exceeds the number of EDUs that will be available, township officials indicate that it will be up to the developers to "work out who gets what"; if they fail, the authority will arbitrarily determine who gets the EDUs.

It should also be noted that the proposed Powers Property project will need EDUs from the township plant before construction can begin, and, reportedly, this project is not likely to receive any EDUs as a result of the re-rating of the plant. Therefore, it must wait for mid-term fix or for the Wilkinson treatment plant. Similarly, the Dallas Green/DeLuca project is not expected to get any EDUs from the re-rating, and it, too, must wait for subsequent steps to generate additional EDUs. Further, it is rumored that a large portion of this parcel may end up being preserved, and, as a result, new construction would be limited to just five very large estate lots.

Officials indicated that the update of the township's comprehensive plan could be approved by early fall; necessary zoning changes would follow. The biggest change involves an attempt to limit growth to several specific parts of the township. This, however, would not affect any project that has been approved or proposed at this time. It is believed that the new comprehensive plan and the resulting zoning changes would have little direct material impact on overall growth and development in the township.

London Grove has a voter-approved earned income tax dedicated to open space preservation efforts and an open space committee. However, most preservation activity is focused on areas north of Route 1, where, reportedly, there would likely be very little if any high density development, anyway.

London Grove Township appears to have sufficient land to support the pace of development it recorded prior to the point where the sewage treatment issues surfaced (over 100 units per year, on average), but, obviously, its ability to reestablish this pace is severely hampered not only by the economy, but even more so by sewage capacity issues. In view of this it is believed that the construction of new housing units will be relatively slow until the sewerage issues are resolved.

In New London Township there are eight approved developments and one that is known to be under discussion or in the early planning stages. No formally proposed project is pending, but the township expects to record a very modest amount of infill, minor subdivision activity, and miscellaneous housing construction.

The approved developments total 143 new single-family detached housing units, and the project that is known to be under discussion or in the early planning stages could result in up to 83 townhouse units. The infill, minor subdivision activity, and miscellaneous housing construction will likely generate an average of just one single-family detached unit per year or a total of ten units over the next ten years.

The approved developments range in size from 113 units remaining to be constructed at Wheatland Farms down to just one unit remaining at the Marshall tract. The others include Cornerstone/McDowell Farm, Downing, and Speakman (each two units), Glidden (ten units), Highland Crest (four units); and Wynstone (nine units).

Cornerstone/McDowell, Downing, and Wynstone are expected to be fully built-out in 2010; construction at Wheatland Farms is estimated to average about eight units per year and, on this basis, completion of the project is not likely to occur until after the ten-year horizon of this study (2018). While several of the other approved projects are underway, others have yet to begin, the pace of construction and the estimated time of completion for all these projects are unknown. It should be noted that while the Speakman property has been subdivided into two lots for single-family units, it does not appear that there is any intent to build on these lots.

The Hudson/Paddock and Newstead subdivisions (which were listed as approved projects in PEL's January 2008 report) have now been fully built-out.

There is no operating sewage collection and treatment system in the township, but construction of a community system primarily to serve the Wheatland Farms subdivision is likely. At the time of the previous PEL study it was believed that construction of this plant would occur in a more timely fashion and that it would be designed to serve not only Wheatland, but the Cox and Harkins projects, perhaps existing properties in the village area (including those experiencing failing on-lot systems), and maybe even the Stanwell project. Because the plant has not yet been built, and no sewage collection and treatment services were available, the Cox project (which had been conditionally approved for 106 single-family detached units) and the Harkins/Tomaseillo subdivision (which was conditionally approved for 92 single-family units) were subsequently "denied", and both are now considered dead.

It should also be noted that in PEL's prior study, Stanwell was listed as a proposed project involving 83 townhouse units. Subsequently, the developer filed for bankruptcy. However, it is understood that several lot owners have been discussing resurrecting the project. While it is still possible that 83 townhouse units could be approved for this parcel, it is more likely that if the project goes forward it would be scaled back. Any construction is at least several years down the road. This project is now considered to be under discussion, with a potential build-out of 83 townhouse units.

In PEL's January 2008 study, Twin Chimneys was listed as a proposed subdivision with 42 single-family detached units; however, the proposal was recently denied by the township. Similarly, a project involving 29 single-family units on School Road was cited as being under discussion or in the early planning stages; it is now considered to be dead.

Municipal officials indicated that there are some agricultural easements in the township that encompass a sizeable amount of land, and the Brandywine Conservancy has acquired some acreage for preservation purposes. Still, plenty of potentially developable land remains to sustain housing growth. An example is the Bramble Tract—an eight-acre tract across from School Road Property) where a residential development was previously under discussion. Township officials indicated that there is no reason to believe that any construction at the Bramble parcel is imminent.

Overall, given the economy, sewerage issues, and other factors residential construction in New London Township is expected to maintain the slowed pace of the recent past.

In Penn Township there are three subdivisions that have been approved and one that have been formally proposed. No other project is known to be under discussion or in the planning stage, but the township anticipates just a modest level of infill, minor subdivision activity, and miscellaneous housing construction.

The approved developments are expected to result in 373 new housing units, and the proposed project could generate 236 more units. The infill, minor subdivision activity, and miscellaneous housing construction will likely produce about five units annually or a total of 50 over the next ten years.

The approved developments include the Bartels Tract (298 age-restricted single-family detached and twin units) and the Village at Roseview (75 age-restricted single-family detached units). Ovarions is not yet complete, but the permits for the final 30 age-restricted single-family detached and twin units were previously issued; therefore, no housing counts for Ovarions are

included with the figures on tables 2-3 and 2-4—they are, however, included with the permit figures listed on Table 2-2. It is believed that the remaining units at Ovations will be built in 2010, while construction at the Village of Roseview will not be completed for about 15 years. It is reported that the Bartels Project is "on hold"; as such, it is unknown if and when construction will begin, what the pace of the build-out will be, or when the project is expected to be completed.

The project that has been proposed is Big Elk Associates (236 age-restricted single-family detached units). It is believed that the project will be approved sometime this year, and construction will begin by year end. The number of units expected to be constructed annually and the estimated completion date are unknown.

A previously proposed subdivision on Hutchinson Road (Thompson Farm—58 single-family detached units) is considered "dead" for now and is being actively farmed.

All 609 of the approved/proposed housing units in Penn Township are age-restricted, although the same is not necessarily true for the 50 units of infill, minor subdivision activity, and/or miscellaneous housing construction. Reportedly, 550 acres in the township are designated exclusively for age-restricted housing. According to township officials, the vast majority of recently constructed housing in the township is also age-restricted.

Public sewage collection and treatment is available only in the areas of the township south of the Route 1 Bypass that are zoned for age-restricted housing and commercial activity, and there are no plans on the part of the township to expand sewerage services to areas north of the Bypass, where much of the land is dedicated to agricultural use, and the minimum residential lot size is two acres—in fact, the township's Act 537 Plan precludes expansion of service to the areas north of the Bypass. Sewage capacity has been expanded to 350,000 gallons per day, and, reportedly, this is sufficient to meet the township's anticipated needs for residential construction. There may, however, be some capacity issues affecting commercial and agricultural activity.

Water services are provided to about 50 percent of the township by the Chester Water Authority.

It was noted that residential construction in Penn Township has slowed dramatically in the past several years, and that the economy is primarily responsible; however, zoning changes precluding cluster housing and other factors have also played a role. Further, the school district has purchased the Waltman and Futuna farms for the construction of new classroom facilities,

thereby taking these parcels out of play as sites for possible housing, and the development rights for some farms have been sold.

It was reported that the township has devoted considerable energy to promoting agricultural activity, and Penn Township has become the home to numerous nurseries; in addition, the township is considering buying and preserving more farms. It is believed that land available for high density residential development is nearly fully consumed, and, as a result, most of the future construction will involve commercial enterprises—but there will still be some housing growth.

With regard to the rumored construction of a new Catholic high school in southern Chester County, the archdiocese owns 300 acres in Penn Township that have been rezoned for use as a cemetery and a school building. However, it was pointed out that sewer lines are not available in this area, and there has been no contact between the archdiocese and the township with respect to using this parcel for a new high school.

Overall, residential construction in Penn Township is expected to be quite slow during the next several years.

In West Grove Borough there is one approved subdivision—Liberty Court, where 24 townhouses will be built. It is believed that all units will be constructed in 2010. There is also one proposed project—West Grove Partners/Guernsey Road, where 40 townhouses are expected to be built, likely in 2010 and 2011. This subdivision was listed in PEL's January 2008 report as approved, but the project was revised, and the new plan is now in the review stage. It is rumored that Ryan Homes is interested in buying the project. No other subdivision is known to be under discussion or in the early planning stages, but there are perhaps ten in-fill lots scattered throughout the borough that could be developed within the next ten years.

The borough has its own sewage collection system and treatment plant, and officials state that it has sufficient capacity to meet the borough's modest needs. The plant is being re-rated, and there is also the possibility of an upgrade in the not-too-distant future. West Grove provides treatment service to limited portions of London Grove Township, but London Grove also has its own plant, so the borough is not the main source of sewage treatment for growth that occurs in the township.

Beyond the 64 townhouses known to be "in the pipeline" and the ten infill lots, very little opportunity exists for additional housing construction in West Grove given that most of the buildable land has been consumed. There is, however, a five-acre tract off Guernsey Road that

could produce perhaps five single-family units or maybe about a dozen townhouses. There is no indication that any movement on this parcel is imminent, and, in fact, the tract is viewed as "less than ideal" for several reasons. Officials believe that development of this parcel is unlikely.

During the 1990s (according to the U.S. Census), 1,597 new housing units were constructed in the Avon Grove School District compared with 1,675 in the 1980s and 1,524 during the 1970s. Through April of 2009, a total of 2,705 new units were permitted for construction during the current decade—a figure that exceeds the number of units built during the decade of the 1990s by 1,108 or 69.4 percent, the number of units built during the 1980s by 1,030 or 61.5 percent, and the number of units built during the 1970s by 1,181 or 77.5 percent.

As previously stated, the vast majority of new housing units constructed in the district in current decade (2,269 or 83.9 percent of the total—an average of 378 units per year) were built during the period 2000 to 2005; since then the annual figures have dropped to 231 in 2006, 140 in 2007, 49 in 2008, and 16 through April of this year. The experience of this most recent period contrasts notably with that of the earlier portion of the decade totaling just 436 units or 16.1 percent of the total for the entire decade. The number of units per year during this period averaged only 131.

Based on information gathered from interviews and conversations with municipal officials—and data provided by them (and recognizing the uncertainties of estimating the build-out in the district's various developments—especially given the weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; and projects in bankruptcy or dormant due to economic conditions or other reasons), there is a potential that 5,023 new housing units will be constructed in the Avon Grove School District during the next ten years. This figure includes 1,173 units that have been approved for construction, 3,631 units that have been formally proposed, 83 units that are known to be under discussion or in the early planning stages, and 136 that are expected to result from infill, minor subdivision activity, and/or miscellaneous housing construction. (An additional 148 units may be built in three of the approved subdivisions after 2018—the final year within the scope of this study—bringing the total of approved units to 1,321 and the total pipeline to 5,171 units.)

The number of new units that could be constructed in the next ten years (5,023) is 1,751 units or 53.5 percent greater than the number of units constructed during the decades of the 1990s and 1980s *combined*, and more than three times the number of units added in the 1970s.

The potential pace of growth (502 per year, on average) is also almost 75 percent faster than the average annual rate of housing development in the first nine years and four months of this decade and would result in the district's housing stock rising by 48.5 percent in the next ten years—compared with 53.4 percent in the 1970s, 38.3 percent in the 1980s, 26.4 percent in the 1990s, and 35.4 percent thus far in this decade.

But, while the number of units in the ten-year pipeline has the potential to result in a level of construction activity that would be up dramatically from the recent past, there is good reason to believe that some of the approved and proposed projects (and the one under discussion, as well) may not be built in a timely manner, may be reduced in scope, or perhaps not be built at all. This is due to weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; or bankruptcies and other factors. For example, more than 300 units cannot be built until sewage collection and treatment issues are addressed; more than 450 units are located on parcels "earmarked" for preservation; more than 150 units are in developments that are in bankruptcy or otherwise inactive; and about 180 units are in projects that are likely to be scaled back. Combined, there are more in than 950 units in the pipeline that are "at risk."

All parties should also be sensitive to the high number of age-restricted housing units (55 and over) and those similar in nature that are expected to be built in the years ahead. Specifically, 1,629 or almost one-third of the total number of anticipated new housing units (and a substantial portion of those constructed earlier in this decade) are of these types. These units should not directly impact the district's enrollments, but this type of housing has been known to draw older residents from nearby areas and, in turn, make the vacated parcels available for younger families. (See Table 2-4.)

While residential construction is often a very visible source of new public school enrollments in many districts, this is not always the case, and it is not the only source of new pupils. Turnover in older housing can drive growth in a district's enrollments, as well. Turnover has been experienced in parts of the Avon Grove School District, and this is expected to continue, albeit at a slower rate. While some of the turnover results from the normal process of family relocation, some is believed to involve older residents being replaced by younger ones with children (or who are about to have them). Clearly, this can affect the demographic mix. If

Table 2-4

AVON GROVE SCHOOL DISTRICT

Estimated Proposed Dwelling Unit Construction <sup>1/</sup>  
2009 to 2018  
(as of May 2009)

Development	Type <sup>2/</sup>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total 2009 to 2018
<b>APPROVED</b>												
<u>Avondale Borough</u>												
Carillon Ph. 1	TH	-	?	?	?	?	?	?	?	?	?	58
<u>Franklin Township</u>												
Franklin Chase	SF	?	?	?	?	?	?	?	?	?	?	11
High Pointe Meadow	SF	?	?	?	?	?	?	?	?	?	?	5
Insingna	SF	?	?	?	?	?	?	?	?	?	?	3
Lang	SF	?	?	?	?	?	?	?	?	?	?	6
Lexington Pointe	SF	?	?	?	?	?	?	?	?	?	?	37
White Clay Knoll	SF	-	5	-	-	-	-	-	-	-	-	5
Wyndermere/Crossan Creek	SF	?	?	?	?	?	?	?	?	?	?	40
Total	-	?	5	?	?	?	?	?	?	?	?	107
<u>London Britain Township</u>												
Flint Hill Crossing	SF	?	?	?	?	?	?	?	?	?	?	15
Glen Ridge	SF	?	?	?	?	?	?	?	?	?	?	5
Meadows II	SF	?	?	?	?	?	?	?	?	?	?	4
Nivin View	SF	?	?	?	?	?	?	?	?	?	?	7
Smith	SF	?	?	?	?	?	?	?	?	?	?	2
Windsor	SF	?	?	?	?	?	?	?	?	?	?	2
Total	-	?	?	?	?	?	?	?	?	?	?	35
<u>London Grove Township</u>												
Briarlea	SF	?	?	?	?	?	?	?	?	?	?	20
Dallas Green/DeLuca	SF	?	?	?	?	?	?	?	?	?	?	75
Fox Chase	SF	?	?	?	?	?	?	?	?	?	?	40
Hills of London Grove	SF	?	?	?	?	?	?	?	?	?	?	100
Inniscrone 3/	SF	16	16	16	16	16	16	16	16	16	16	160 5/
Lambourne Hunt	SF	?	?	?	?	?	?	?	?	?	?	40
Rose Hollow	SF	?	?	?	?	?	?	?	?	?	?	9
Village Green	SF/TH	?	?	?	?	?	?	?	?	?	?	47
Total	-	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16	491
<u>New London Township</u>												
Cornerstone/McDowell	SF	1	1	-	-	-	-	-	-	-	-	2
Downing	SF	1	1	-	-	-	-	-	-	-	-	2
Glidden	SF	?	?	?	?	?	?	?	?	?	?	10
Highland Crest	SF	?	?	?	?	?	?	?	?	?	?	4
Marshall	SF	?	?	?	?	?	?	?	?	?	?	1
Speakman	SF	?	?	?	?	?	?	?	?	?	?	2
Wheatland Farms	SF	8	8	8	8	8	8	8	8	8	8	80 5/
Wynstone	SF	6	3	-	-	-	-	-	-	-	-	9
Total	-	≥16	≥13	≥8	≥8	≥8	≥8	≥8	≥8	≥8	≥8	110
<u>Penn Township</u>												
Bartels Tract 3/	SF/TW	?	?	?	?	?	?	?	?	?	?	298
Ovations 3/ 4/	SF/TW	-	-	-	-	-	-	-	-	-	-	0
Village of Roseview 3/	SF	5	5	5	5	5	5	5	5	5	5	50 5/
Total	-	≥5	≥5	≥5	≥5	≥5	≥5	≥5	≥5	≥5	≥5	348
<u>West Grove Borough</u>												
Liberty Court	TH	12	12	-	-	-	-	-	-	-	-	24
<b>TOTAL APPROVED</b>	-	<b>≥49</b>	<b>≥51</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>1,173 6/</b>

Table 2-4

AVON GROVE SCHOOL DISTRICT

Estimated Proposed Dwelling Unit Construction<sup>1/</sup>  
2009 to 2018  
(as of May 2009)

Development	Type <sup>2/</sup>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total 2009 to 2018
<b><u>PROPOSED</u></b>												
<u>Avondale Borough</u>												
Carillon (additional phases)	TH	?	?	?	?	?	?	?	?	?	?	192
Thompson St.	TH	=	?	?	?	?	?	?	?	?	?	22
Total	-	?	?	?	?	?	?	?	?	?	?	214
<u>Franklin Township</u>												
Ashby Hills	SF	?	?	?	?	?	?	?	?	?	?	7
Davis	SF	?	?	?	?	?	?	?	?	?	?	4
Handler/Robino	TND	?	?	?	?	?	?	?	?	?	?	203
Fox Hunt Farms	SF	?	?	?	?	?	?	?	?	?	?	100
Logan	SF	?	?	?	?	?	?	?	?	?	?	4
Miller Farm	TH	?	?	?	?	?	?	?	?	?	?	239
Dolores Morris	SF	?	?	?	?	?	?	?	?	?	?	13
Woods Edge	SF	?	?	?	?	?	?	?	?	?	?	22
Total	-	?	?	?	?	?	?	?	?	?	?	592
<u>London Britain Township</u>												
London Britain Station	SF	-	?	?	?	?	?	?	?	?	?	101
<u>London Grove Township</u>												
Apple Grove	SF	?	?	?	?	?	?	?	?	?	?	42
Coventry Reserves	SF	?	?	?	?	?	?	?	?	?	?	20
Powers Property	SF	?	?	?	?	?	?	?	?	?	?	42
Valley Grove 3/	PRD	?	?	?	?	?	?	?	?	?	?	1,500
Westlyn	SF/TW	?	?	?	?	?	?	?	?	?	?	470
Yeatman Property	TH	?	?	?	?	?	?	?	?	?	?	374
Total	-	?	?	?	?	?	?	?	?	?	?	2,448
<u>New London Township</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<u>Penn Township</u>												
Big Elk Assoc. 3/	SF	?	?	?	?	?	?	?	?	?	?	236
<u>West Grove Borough</u>												
West Grove Partners	TH	-	20	20	-	-	-	-	-	-	-	40
<b>TOTAL PROPOSED</b>	-	?	≥20	≥20	?	?	?	?	?	?	?	<b>3,631</b>

Table 2-4

AVON GROVE SCHOOL DISTRICT

Estimated Proposed Dwelling Unit Construction <sup>1/</sup>  
2009 to 2018  
(as of May 2009)

Development	Type <sup>2/</sup>	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total 2009 to 2018
<b><u>UNDER DISCUSSION</u></b>												
<u>Avondale Borough</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<u>Franklin Township</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<u>London Britain Township</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<u>London Grove Township</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<u>New London Township</u>												
Stanwell	TH	?	?	?	?	?	?	?	?	?	?	83
<u>Penn Township</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<u>West Grove Borough</u>												
None	-	-	-	-	-	-	-	-	-	-	-	-
<b><u>TOTAL DISCUSSION</u></b>	-	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>83</b>
<b><u>MINOR ACTIVITY</u></b>												
Avondale Borough	SF	?	?	?	?	?	?	?	?	?	?	6
Franklin Township	SF	1	1	1	1	1	1	1	1	1	1	10
London Britain Township	-	-	-	-	-	-	-	-	-	-	-	-
London Grove Township	SF	5	5	5	5	5	5	5	5	5	5	50
New London Township	SF	1	1	1	1	1	1	1	1	1	1	10
Penn Township	SF	5	5	5	5	5	5	5	5	5	5	50
West Grove Borough	SF	2	2	2	2	2	2	2	2	2	2	10
<b><u>TOTAL MINOR ACTIVITY</u></b>	-	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>136</b>
<b><u>TOTAL APPROVED</u></b>	-	<b>≥49</b>	<b>≥51</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>≥29</b>	<b>1,173 <sup>6/</sup></b>
<b><u>TOTAL PROPOSED</u></b>	-	<b>?</b>	<b>≥20</b>	<b>≥20</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>3631</b>
<b><u>TOTAL DISCUSSION</u></b>	-	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>83</b>
<b><u>TOTAL MINOR ACTIVITY</u></b>	-	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>≥12</b>	<b>136</b>
<b><u>GRAND TOTAL</u></b>	-	<b>≥61</b>	<b>≥83</b>	<b>≥61</b>	<b>≥41</b>	<b>≥41</b>	<b>≥41</b>	<b>≥41</b>	<b>≥41</b>	<b>≥41</b>	<b>≥41</b>	<b>5,023 <sup>6/</sup></b>

1/ Estimating the starting date and build-out at the district's various developments is difficult given the uncertainties involved. It is reported by municipal officials that some approved and proposed projects (and the one under discussion, as well) may not move forward in a timely fashion, may be scaled back, or may not occur at all due to weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; or because some projects are in bankruptcy or are dormant due to economic conditions or other reasons. These figures reflect the judgments of the parties involved based on what was known at the end of April 2009. U = Underway; ? = Unknown

2/ Housing codes are as follows: SF = Single-Family Detached; TH = Townhouses; TW = Twins; PRD = Planned Residential Development (single-family detached units, townhouses, and apartments); TND = Traditional Neighborhood Development (single-family detached and townhouse units); ?? = Unknown

3/ Totally or partially age-restricted or similar in nature.

4/ Permits for all the 30 remaining units have been issued.

5/ Some of the units in these approved subdivisions are expected to be constructed after 2018.

6/ An additional 148 units are expected to be built in three of the approved subdivisions after 2018—the final year within the scope of this study—bringing the total approved to 1,363 units and the total pipeline to 5,251 units.

Note: All columns and rows may not add.

the pace of the turnover changes dramatically or is transformed from the historical mix to a higher (or lower) number of empty-nesters selling to young families, further changes in the demographic mix could occur, and this may have an impact on the pattern of enrollments. The district should be mindful of this potential.

PEL's projection methodology (described in Chapter 5) reflects the new housing that is expected to be constructed during the next ten years, factoring in—to the extent possible—the belief that some of the approved and proposed projects (and the one under discussion, as well) may not move forward in a timely fashion, may be scaled back, or may not occur at all due to the continuing turmoil in the housing and mortgage industries; weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; bankruptcies; or other reasons. It should also be noted that there has been speculation that the "growth philosophies" of some of the district's municipalities may be affected by the outcome of the November 2009 election, and this, in turn, may also have an effect on the future pace of development. The methodology is also sensitive to the expected number of age-restricted and similar housing units that will likely be built during the next ten years and the ongoing turnover of mature housing.

During the 1970s, the population of the Avon Grove School District increased by 2,971 or 29.9 percent, the number of housing units in the district rose by 1,524 or 53.5 percent, and public school enrollments fell by 168 or 6.3 percent. Between 1980 and 1990 the district's population was up by 4,524 or 35.0 percent, housing units grew by 1,675 or 38.3 percent, and public school enrollments increased by 572 or 22.7 percent. Between 1990 and 2000 the district's population rose by 5,635 or 32.3 percent, housing units were up by 1,597 or 26.4 percent, and public school enrollments grew by 1,648 or 53.3 percent. Between 2000 and 2008 the district's population is estimated to have risen by 6,762 or 29.3 percent, housing units increased by 2,689 or 35.2 percent, and public school enrollments were up by 662 or 14.0 percent. (See Table 2-5 and Graph 2-2.)

Table 2-5

AVON GROVE SCHOOL DISTRICT

Proportionate Change in Population, Housing Units, and Enrollments

1970 to 2008

	Change							
	1970 – 1980		1980 – 1990		1990 – 2000		2000 – 2008	
	#	%	#	%	#	%	#	%
Population	+2,971	+29.9	+4,524	+35.0	+5,635	+32.3	+6,752	+29.3
Housing Units	+1,524	+53.4	+1,675	+38.3	+1,597	+26.4	+2,689	+35.2
Total Enrollment	-168 <u>1/</u>	-6.3	+572	+22.7	+1,648	+53.3	+662	+14.0

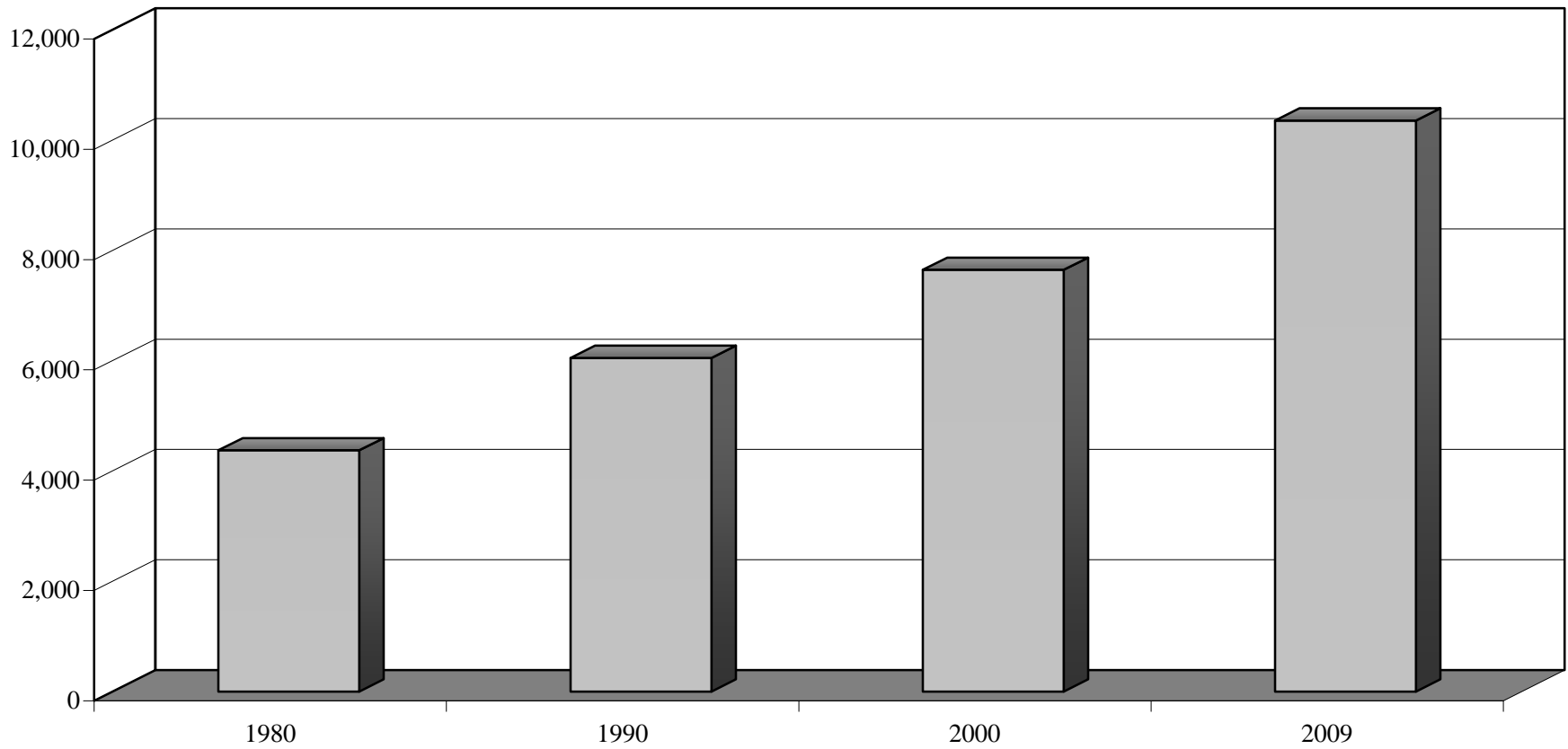
1/ 1971 enrollment figure used.



Public school enrollments in the Avon Grove School District have not had a direct correlation with trends in population and housing units. While population and housing units increased during the 1970s (at noticeably different rates), public school enrollments decreased. During the 1980s population, housing units, and enrollments all rose, but the rate of growth in enrollments was somewhat slower than that of population and housing. Again, in the 1990s, population, housing units, and enrollments all increased, but during this period the rate of growth in enrollments exceeded that of population and housing units by a wide margin. Between 2000 and 2008 the absolute growth in population accelerated and, at that point, exceeded the increase during the entire decade of the 1990s (after just eight years), and housing construction increased at almost double the average annual rate of the 1990s, although it slowed noticeably in 2006 and 2007 and even more so in 2008 (and also through April of 2009). Net growth in public school enrollments continued in the current decade, but at a much slower rate than either of the two preceding decades.

## APPENDIX 2

**Graph 2-1**  
Avon Grove School District  
Total Housing Units  
1980 to 2009



**Graph 2-2**  
Avon Grove School District  
Percentage Change in Population, Housing Units, and Enrollments  
1970 to 2008



## CHAPTER 3 BIRTH PATTERNS

The annual number of resident births in the Avon Grove School District, which is of vital importance in the planning process, was higher in the 1980s (on average) than it was in the 1970s, and higher in the 1990s than in the 1980s. The average for the first nine years of the current decade is higher still.

Births in the district increased in 22 of the 39 years reviewed, including six of the years of the 1990s and five of the nine years in the current decade for which figures are available; births fell, however, in both 2007 and 2008 (preliminary). The average number of annual births in the district this decade (312) is 80 births (34.5 percent) higher than the average for the 1990s (232), which was 42 births (22.1 percent) higher than the average for the period 1980 to 1989 (190). The average for the 1970s was 154. The average for the period 2000 to 2004 was 287, and for the period 2005 to 2008, it was 344.

The preliminary birth figure for 2008 (the most recent available—332) was the third highest ever recorded in the district; the 2006 figure (360) was the highest, and the 2007 figure (353) was the second-highest. Further, the district's ten highest birth figures were all experienced in the ten most recent years. The preliminary 2008 figure is 20 births or 6.4 percent higher than the average for this decade, 100 births (43.1 percent) higher than the average for the 1990s, 142 births (74.7 percent) higher than the average for the 1980s, and 178 births (115.6 percent) higher than the average for the 1970s. Births in the district were at their highest level in 2006 (360); their lowest level (122) was in 1972.

Preliminary figures for 2008 indicate that births in the Avon Grove School District represented 5.5 percent of total births in Chester County. Births in the district averaged 5.2 percent of the county figure during the nine years of this decade—up from 4.2 for the period 1990 to 1999, 3.9 percent for the period 1980 to 1989, and 3.8 percent for the period 1970-1979. Like in the Avon Grove School District, preliminary 2008 birth figures for Chester County as a whole were higher in 2008 than in 1970 (by 1,494 or 32.5 percent), higher than in 1980 (by 1,701 or 38.8 percent), higher than in 1990 (by 186 or 3.2 percent), and higher than in 2000 (by 274 or 4.7 percent). (See Table 3-1 and Graph 3-1.)

Table 3-1  
 AVON GROVE SCHOOL DISTRICT  
 Comparison of Birth Trends in the Avon Grove School District  
 and Chester County  
 1970 to 2008 <sup>1/</sup>

	Avon Grove SD		Chester County		AGSD as a % of the County
	Total # of Births	% Change From Previous Year	Total # of Births	% Change From Previous Year	
1970	167	-	4,594	-	3.6
1971	173	3.6	4,273	-7.0	4.0
1972	↓122	-29.5	3,908	-8.5	3.1
1973	128	4.9	3,809	-2.5	3.4
1974	158	23.4	3,902	2.4	4.0
1975	155	-1.9	3,781	-3.1	4.1
1976	144	-7.1	↓3,771	-0.3	3.8
1977	155	7.6	4,055	7.5	3.8
1978	156	0.6	4,022	-0.8	3.9
1979	185	18.6	4,150	3.2	4.5
1980	182	-1.6	4,387	5.7	4.1
1981	184	1.1	4,541	3.5	4.1
1982	203	10.3	4,626	1.9	4.4
1983	162	-20.2	4,559	-1.4	3.6
1984	191	17.9	4,809	5.5	4.0
1985	173	-9.4	4,861	1.1	3.6
1986	171	-1.2	5,118	5.3	3.3
1987	205	19.9	5,394	5.4	3.8
1988	220	7.3	5,541	2.7	4.0
1989	210	-4.5	5,616	1.4	3.7
1990	229	9.0	5,902	5.1	3.9
1991	227	-0.9	5,632	-4.6	4.0
1992	209	-7.9	5,496	-2.4	3.8
1993	225	7.7	5,482	-0.3	4.1
1994	193	-14.2	5,418	-1.2	3.6
1995	224	16.1	5,472	1.0	4.1
1996	241	7.6	5,356	-2.1	4.5
1997	230	-4.6	5,389	0.6	4.3
1998	255	10.9	5,506	2.2	4.6
1999	282	10.6	5,736	4.2	4.9
2000	269	-4.6	5,814	1.4	4.6
2001	301	11.9	5,733	-1.4	5.3
2002	304	1.0	5,918	3.2	5.1
2003	267	-12.2	6,072	2.6	4.4
2004	295	10.5	6,009	-1.0	4.9
2005	331	12.2	6,170	2.7	5.4
2006	↑360	8.8	↑6,300	2.1	5.7
2007	353	-1.9	6,052	-3.9	5.8
2008 <sup>1/</sup>	332	-5.9	6,088	0.6	5.5
<b>Change 1970</b>	<b>#</b>	<b>-</b>	<b>1,494</b>	<b>-</b>	<b>-</b>
<b>to 2008 <sup>1/</sup></b>	<b>%</b>	<b>-</b>	<b>32.5</b>	<b>-</b>	<b>-</b>
<b>Change 1980</b>	<b>#</b>	<b>-</b>	<b>1,701</b>	<b>-</b>	<b>-</b>
<b>to 2008 <sup>1/</sup></b>	<b>%</b>	<b>-</b>	<b>38.8</b>	<b>-</b>	<b>-</b>
<b>Change 1990</b>	<b>#</b>	<b>-</b>	<b>186</b>	<b>-</b>	<b>-</b>
<b>to 2008 <sup>1/</sup></b>	<b>%</b>	<b>-</b>	<b>3.2</b>	<b>-</b>	<b>-</b>
<b>Change 1980</b>	<b>#</b>	<b>-</b>	<b>274</b>	<b>-</b>	<b>-</b>
<b>to 2008 <sup>1/</sup></b>	<b>%</b>	<b>-</b>	<b>4.78</b>	<b>-</b>	<b>-</b>

<sup>1/</sup> Preliminary figures.

Note: Highest point marked by ↑; lowest point marked with ↓.

SOURCE: State Health Data Center, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

Statewide, births rose fairly consistently from the mid-1970s until 1990, but then declined in seven consecutive years (through 1997). While the figure for 1998 was up, births in Pennsylvania fell in three of the subsequent four years. However, statewide births rose by 0.6 percent in 2005, 2.5 percent in 2006, and 1.1 percent in 2007, before dropping by 0.9 percent based on preliminary data for 2008 (the most recent year for which Pennsylvania figures are available). Nationally, births decreased in each year from 1991 through 1997 (when they hit their lowest level since 1987), and then increased in all but two of the years since 1997—including a 3.1 percent jump in 2006 and a 1.2 percent rise based on provisional 2007 data. The 2007 figure is the highest ever recorded in the US; Pennsylvania's figure for 2007, however, was still more than 100,000 births (or about 41 percent) below its historical high point recorded in 1957. The preliminary 2008 figure for Pennsylvania is even further from the state's high point. The lowest Pennsylvania figure reported for the period starting in 1915 was in 2002. The preliminary 2008 figure is 6,547 births (4.6 percent) higher than in 2002.

Births in Avondale Borough averaged 24 yearly or 15.4 percent of all district births during the 1970s. In the 1980s the average was up to 39, and the borough's proportionate share grew to 20.7 percent. Avondale Borough's average was 49 or 21.0 percent of the district total during the 1990s. The average for the first nine years of this decade was up to 78 or 25.1 percent. Between 2000 and 2004 the average was 77 or 26.8 percent of the district total; for the period 2005 through 2008 the absolute average rose to 79, but the borough's proportionate share fell to 23.0 percent of the total. The preliminary figure for 2008 indicates that the borough accounted for 73 or 22.0 percent of all district births.

During the decade of the 1970s, annual births in Franklin Township averaged nine or 5.9 percent of all district births; during the 1980s the absolute average was up to 11, but the township's proportion of the total fell slightly to 5.8 percent. The average for the 1990s was up to 17 or 7.2 percent of total district births. The average for the current decade is 21 or 6.6 percent of the district's total. Between 2000 and 2004 the average was 19 or 6.7 percent of the total; for the period 2005 through 2008 the average was 23 or 6.6 percent of total births in the district. The preliminary birth figure for 2008 reveals that Franklin Township generated 21 births or 6.3 percent of all district births.

Annual births in London Britain Township during the 1970s averaged just three or 1.9 percent of all district births. During the 1980s the absolute average was up to four, but the

township's proportionate share was unchanged. London Britain averaged five or 2.2 percent of all district births during the 1990s, and in this decade the township's average rose to eight or 2.5 percent of all district births. Between 2000 and 2004 the average was six or 2.2 percent of the total; for the period 2005 through 2008 the average was ten or 2.9 percent of the total. London Britain accounted for nine births in 2008 (preliminary figure) or 2.7 percent of all district births.

Births in London Grove Township averaged 42 yearly or 27.6 percent of all district births during the 1970s. In the 1980s London Grove's average fell to 28 or 14.8 percent of the district total, but its average was up to 34 or 14.9 percent of all district births during the 1990s. Births in this decade averaged 57 or 18.1 percent of total district births. Between 2000 and 2004 the average was 51 or 17.7 percent of the total; for the period 2005 through 2008 the average was 64 or 18.7 percent. The preliminary 2008 figure indicates that the township accounted for 73 births or 22.0 percent of all births in the district total.

During the decade of the 1970s, annual births in New London Township averaged 14 or 8.9 percent of all district births; during the 1980s the average rose to 19 or 9.9 percent of the total. The average for the 1990s was up again to 31 births per year or 13.6 percent of the district total. For the first nine years of this decade births averaged 30 or 9.7 percent of the district total. Between 2000 and 2004 the average was 31 or 10.6 percent of the total; for the period 2005 through 2008 the average was 29 or 8.5 percent of the total. Preliminary figures for 2008 indicate that New London Township generated 30 births or 9.0 percent of all district births.

Births in Penn Township during the 1970s averaged 17 yearly or 10.8 percent of all district births. During the 1980s the absolute average rose to 19, but the township's proportionate share decreased to 10.1 percent of the total. Penn Township's average during the 1990s was 19 or 8.4 percent of all district births. Births during this decade averaged 33 or 10.3 percent of all district births. Between 2000 and 2004 the average was 26 or 9.2 percent of the total; for the period 2005 through 2008 the average was up to 40 or 11.7 percent. Birth figures for 2008 show that Penn Township accounted for 32 or 9.0 percent of total births in the district.

Annual births in West Grove Borough during the 1970s averaged 46 or 29.6 percent of all district births. During the 1980s the average rose to 70 or 36.7 percent. West Grove Borough's average during the 1990s was 76 or 32.7 percent of all district births. Births during this decade averaged 87 or 27.7 percent of all district births. Between 2000 and 2004 the average was 77 or 26.9 percent of the total; for the period 2005 through 2008 the average was 99 or 28.6 percent of

the total. The preliminary figure for 2008 reveals that West Grove Borough generated 94 births or 28.3 percent of the district total. (See Table 3-2.)

A comparison of average births and proportionate shares of total district births in the district's municipalities reveals that in Avondale Borough, Franklin Township, London Britain Township, London Grove Township, and New London Township, the average numbers of births per year and shares of total district births were higher in the 1990s than the 1980s. The average number of births per year in West Grove Borough was higher in the 1990s than the 1980s, but the borough's proportionate share of total district births was down slightly. In Penn Township the average absolute number of births per year was unchanged from the 1980s to the 1990s, but the township's proportionate share fell.

The average numbers of births per year and proportionate shares were higher in the current decade than the 1990s in Avondale Borough, London Britain Township, London Grove Township, and Penn Township. In Franklin Township and West Grove Borough the absolute numbers of births increased, but their proportionate shares declined. In New London Township both the average number of births and proportionate share were lower.

Births per 1,000 population in the Avon Grove School District averaged 13.7 per year during the 1970s. In the 1980s the average annual number of births per 1,000 population fell to 12.8, and in the 1990s it fell again to 11.6. Based on the 2000 Census figure, annual Census estimates, actual birth figures for 2000 through 2007, and preliminary figures for 2008, the average yearly number of births per 1,000 population for the first nine years of the current decade is up slightly to 11.8. The highest number of births per 1,000 population (16.9) was recorded in 1971; the lowest number of births per 1,000 population (9.8) occurred in 1994. The figure for 2008 was 11.1. (See Table 3-3 and Graph 3-2.)

The annual number of births per 1,000 housing units in the district averaged 44.2 during the 1970s. In the 1980s the average annual number of births per 1,000 housing units dropped to 37.2, and in the 1990s it fell further to 34.2. Based on the yearly number of housing units authorized by permit starting in 2000, actual birth figures for 2000 through 2007, and the preliminary figures for 2008, the average annual number of births per 1,000 housing units in this decade has fallen again to 33.7. The highest number of births per 1,000 housing units (58.6) was recorded in 1970; the lowest figure (28.8) was in 1994. In 2008 there were 32.1 births per 1,000 housing units. (See Table 3-3 and Graph 3-3.)

Table 3-2

AVON GROVE SCHOOL DSITRICT

Birth Trends in the Avon Grove School District, by Municipality  
1970 to 2008<sup>1/</sup>

Year	Avondale Borough		Franklin Township		London Britain Township		London Grove Township	
	#	% of Total	#	% of Total	#	% of Total	#	% of Total
1970	26	15.6	9	5.4	10	6.0	48	28.7
1971	25	14.5	9	5.2	4	2.3	58	33.5
1972	↓11	9.0	10	8.2	1	0.8	35	28.7
1973	19	14.8	↓5	3.9	2	1.6	39	30.5
1974	29	18.4	7	4.4	↓0	0.0	37	23.4
1975	22	14.2	9	5.8	4	2.6	45	29.0
1976	22	15.3	7	4.9	1	0.7	49	34.0
1977	27	17.4	12	7.7	2	1.3	43	27.7
1978	24	15.4	11	7.1	4	2.6	38	24.4
1979	36	19.5	11	5.9	3	1.6	29	15.7
1980	40	22.0	12	6.6	2	1.1	30	16.5
1981	39	21.2	9	4.9	5	2.7	26	14.1
1982	33	16.3	15	7.4	3	1.5	37	18.2
1983	34	21.0	9	5.6	3	1.9	21	13.0
1984	39	20.4	9	4.7	4	2.1	30	15.7
1985	38	22.0	16	9.2	1	0.6	↓16	9.2
1986	44	25.7	9	5.3	4	2.3	25	14.6
1987	38	18.5	9	4.4	3	1.5	32	15.6
1988	45	20.5	11	5.0	6	2.7	26	11.8
1989	41	19.5	11	5.2	5	2.4	41	19.5
1990	40	17.5	12	5.2	4	1.7	37	16.2
1991	44	19.4	14	6.2	8	3.5	32	14.1
1992	33	15.8	16	7.7	5	2.4	32	15.3
1993	43	19.1	21	9.3	6	2.7	35	15.6
1994	35	18.1	10	5.2	4	2.1	37	19.2
1995	49	21.9	19	8.5	5	2.2	26	11.6
1996	55	22.8	22	9.1	4	1.7	31	12.9
1997	58	25.2	18	7.8	6	2.6	24	10.4
1998	72	28.2	16	6.3	2	0.8	41	16.1
1999	62	22.0	20	7.1	6	2.1	49	17.4
2000	72	26.8	21	7.8	3	1.1	38	14.1
2001	66	21.9	16	5.3	7	2.3	60	19.9
2002	90	29.6	24	7.9	7	2.3	49	16.1
2003	73	27.3	14	5.2	9	3.4	53	19.9
2004	83	28.1	21	7.1	5	1.7	54	18.3
2005	↑92	27.8	15	4.5	9	2.7	49	14.8
2006	77	21.4	↑28	7.8	3	0.8	70	19.4
2007	74	21.0	27	7.6	↑19	5.4	65	18.4
2008 <sup>1/</sup>	73	22.0	21	6.3	9	2.7	↑73	22.0
<b>Change 1970</b>	<b># 47</b>	<b>-</b>	<b>12</b>	<b>-</b>	<b>-1</b>	<b>-</b>	<b>25</b>	<b>-</b>
<b>to 2008<sup>1/</sup></b>	<b>% 180.8</b>	<b>-</b>	<b>133.3</b>	<b>-</b>	<b>-10.0</b>	<b>-</b>	<b>52.1</b>	<b>-</b>

<sup>1/</sup> Preliminary figures.

NOTE: Highest point marked by ↑; lowest point marked with ↓.

SOURCE: State Health Data Center, Pennsylvania Department of Health, Harrisburg, Pennsylvania.  
The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

Table 3-2

AVON GROVE SCHOOL DSITRICT

Birth Trends in the Avon Grove School District, by Municipality  
1970 to 2008<sup>1/</sup>

Year	New London Township		Penn Township		West Grove Borough		District Total	
	#	% of Total	#	% of Total	#	% of Total	#	% of Total
1970	15	9.0	15	9.0	44	26.3	167	100.0
1971	13	7.5	19	11.0	45	26.0	173	100.0
1972	13	10.7	↓11	9.0	41	33.6	↓122	100.0
1973	13	10.2	15	11.7	35	27.3	128	100.0
1974	11	7.0	16	10.1	58	36.7	158	100.0
1975	13	8.4	20	12.9	42	27.1	155	100.0
1976	15	10.4	19	13.2	↓31	21.5	144	100.0
1977	↓11	7.1	15	9.7	45	29.0	155	100.0
1978	14	9.0	14	9.0	51	32.7	156	100.0
1979	18	9.7	23	12.4	65	35.1	185	100.0
1980	17	9.3	13	7.1	68	37.4	182	100.0
1981	19	10.3	22	12.0	64	34.8	184	100.0
1982	21	10.3	25	12.3	69	34.0	203	100.0
1983	17	10.5	14	8.6	64	39.5	162	100.0
1984	12	6.3	19	9.9	78	40.8	191	100.0
1985	23	13.3	15	8.7	64	37.0	173	100.0
1986	12	7.0	18	10.5	59	34.5	171	100.0
1987	22	10.7	21	10.2	80	39.0	205	100.0
1988	26	11.8	31	14.1	75	34.1	220	100.0
1989	20	9.5	16	7.6	76	36.2	210	100.0
1990	33	14.4	22	9.6	81	35.4	229	100.0
1991	37	16.3	21	9.3	71	31.3	227	100.0
1992	31	14.8	19	9.1	73	34.9	209	100.0
1993	30	13.3	12	5.3	78	34.7	225	100.0
1994	28	14.5	21	10.9	58	30.1	193	100.0
1995	38	17.0	19	8.5	68	30.4	224	100.0
1996	26	10.8	14	5.8	89	36.9	241	100.0
1997	28	12.2	20	8.7	76	33.0	230	100.0
1998	26	10.2	23	9.0	75	29.4	255	100.0
1999	35	12.4	22	7.8	88	31.2	282	100.0
2000	35	13.0	22	8.2	78	29.0	269	100.0
2001	↑39	13.0	23	7.6	90	29.9	301	100.0
2002	33	10.9	21	6.9	80	26.3	304	100.0
2003	22	8.2	30	11.2	66	24.7	267	100.0
2004	24	8.1	36	12.2	72	24.4	295	100.0
2005	26	7.9	↑44	13.3	96	29.0	331	100.0
2006	34	9.4	↑44	12.2	↑104	28.9	↑360	100.0
2007	27	7.6	41	11.6	100	28.3	353	100.0
2008 <sup>1/</sup>	30	9.0	32	9.6	94	28.3	332	100.0
<b>Change 1970 to 2008<sup>1/</sup></b>	<b># 15</b>	<b>-</b>	<b>17</b>	<b>-</b>	<b>50</b>	<b>-</b>	<b>165</b>	<b>-</b>
	<b>% 100.0</b>	<b>-</b>	<b>113.3</b>	<b>-</b>	<b>113.6</b>	<b>-</b>	<b>98.8</b>	<b>-</b>

<sup>1/</sup> Preliminary figures.

NOTE: Highest point marked by ↑; lowest point marked with ↓.

SOURCE: State Health Data Center, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

Table 3-3

AVON GROVE SCHOOL DISTRICT

Births Per 1,000 Population and Per 1,000 Housing Units  
1970 to 2008

<u>Year</u>	<u>Births Per 1,000</u>	
	<u>Population</u>	<u>Housing Units</u>
1970	16.8	↑58.6
1971	↑16.9	57.6
1972	11.6	38.7
1973	11.8	38.7
1974	14.2	45.7
1975	13.6	42.9
1976	12.3	38.3
1977	12.9	39.6
1978	12.7	38.4
1979	14.7	43.8
1980	14.1	41.6
1981	13.8	40.5
1982	14.7	43.1
1983	11.4	33.2
1984	13.0	37.8
1985	11.4	33.2
1986	10.9	31.8
1987	12.8	36.9
1988	13.3	38.5
1989	12.4	35.7
1990	13.1	37.9
1991	12.6	36.6
1992	11.3	32.8
1993	11.8	34.5
1994	↓9.8	↓28.8
1995	11.1	32.7
1996	11.6	34.4
1997	10.8	32.1
1998	11.6	34.8
1999	12.5	37.7
2000	11.7	35.2
2001	12.6 <sup>1/</sup>	36.4 <sup>2/</sup>
2002	12.4 <sup>1/</sup>	35.4 <sup>2/</sup>
2003	10.6 <sup>1/</sup>	29.8 <sup>2/</sup>
2004	11.3 <sup>1/</sup>	31.2 <sup>2/</sup>
2005	12.2 <sup>1/</sup>	33.4 <sup>2/</sup>
2006	12.6 <sup>1/</sup>	35.5 <sup>2/</sup>
2007	12.0 <sup>1/</sup>	34.3 <sup>2/</sup>
2008	11.1 <sup>1/ 3/</sup>	32.1 <sup>2/ 3/</sup>

<sup>1/</sup> Based on U.S. Census estimates.

<sup>2/</sup> Based on the number of new housing units authorized by permit since 2000.

<sup>3/</sup> Based on preliminary birth figures.

Note: Highest point marked by ↑; lowest point marked with ↓.

Analyzing the total number of public school children in relation to the total number of housing units in the district produces a more complete picture of the district's demographics. In 1970, the number of public school children per housing unit in the Avon Grove School District was 0.943. Between 1970 and 1980, the number of housing units increased by 53.4 percent, while the number of public school children decreased by 6.3 percent, causing the ratio of public school children to housing units to fall to 0.575. By 1990-91, given a 38.3 percent rise in the number of housing units and a growth in enrollments of 27.7 percent, the number of public school children per housing unit had dropped further to 0.511—barely more than one-half of the 1970s figure. During the decade of the 1990s, the number of housing units increased by 26.4 percent, and public school enrollments grew by 53.3 percent; as a result, the number of public school children per housing unit was up to 0.621 in the 2000-01 school year.

Using a housing figure based on the 2000 Census figures and the number of units authorized by permit through April 2009, the number of public school children per housing unit in 2009-10 is down to 0.526. Decreases were experienced in three of the four grade groupings. Grades K-2 recorded a decline from 0.136 in 2000-01 to 0.102 in 2009-10. (Figures for this group had decreased from 0.242 in 1970 to 0.128 in 1980, but rose to 0.134 in 1990 and to 0.136 in 2000-01.) In grades 3 to 6 the figure fell from 0.211 in 2000-01 to 0.159 in 2009-10. (Figures for this group had dropped from 0.279 in 1970-71, to 0.185 in 1980-81, and to 0.178 in 1990-91, before rising to 0.211 in 2000-01.) The ratio of public school children to housing units in grades 7 and 8 declined from 0.099 in 2000-01 to 0.089 in 2009-10. (Figures for this group had fallen from 0.160 in 1970, to 0.087 in 1980, and to 0.076 in 1990, before increasing to 0.099 in 2000-01.) The ratio of public school children to housing units in grades 9 to 12 rose slightly from 0.175 in 2000-01 to 0.176 in 2009-10. (Figures for this group had decreased from 0.262 in 1970-71, to 0.175 in 1980-81, and to 0.123 in 1990-91, before increasing to 0.175 in 2000-01.) (See Table 3-4 and Graph 3-4.)

The drop in the number of public school children per housing unit between the 2000-01 and 2009-10 school years appears to have been strongly influenced by the Avon Grove Charter School which in the 2009-10 school year enrolled 534 pupils who reside in the Avon Grove School District. If these children continued to be educated by the district, the number of public school children per housing unit would have been 0.578 this year.

Table 3-4

AVON GROVE SCHOOL DISTRICT

Relationship of Public School Children to Housing Units

1970-71 to 2009-10

	<u>1970-71</u>	<u>1980-81</u>	<u>1990-91</u>	<u>2000-01</u>	<u>2009-10</u>
No. of Housing Units	2,851	4,375	6,050	7,647	10,352 <sup>2/</sup>
<u>No. of Public School Children</u>					
Grades K-2	689	561	811	1,037	1,055
Grades 3-6	795	808	1,074	1,610	1,648
Grades 7-8	455	382	458	756	917
Grades 9-12	<u>747</u>	<u>767</u>	<u>747</u>	<u>1,335</u>	<u>1,825</u>
Total Grades K-12	2,686 <sup>1/</sup>	2,518	3,090	4,738	5,445
<u>Children Per Unit</u>					
Grades K-2	0.242	0.128	0.134	0.136	0.102
Grades 3-6	0.279	0.185	0.178	0.211	0.159
Grades 7-8	0.160	0.087	0.076	0.099	0.089
Grades 9-12	<u>0.262</u>	<u>0.175</u>	<u>0.123</u>	<u>0.175</u>	<u>0.176</u>
<b>Total Grades K-12</b>	<b><u>0.943</u></b>	<b><u>0.575</u></b>	<b><u>0.511</u></b>	<b><u>0.621</u></b>	<b><u>0.526</u></b>

<sup>1/</sup> 1971-72 figure used due to unavailability of 1970-71 data.

<sup>2/</sup> Housing units are as of the end of April 2009.

Note: Not all figures may add due to rounding.

SOURCE: U.S. Bureau of the Census, Avon Grove School District, and the district's member municipalities.

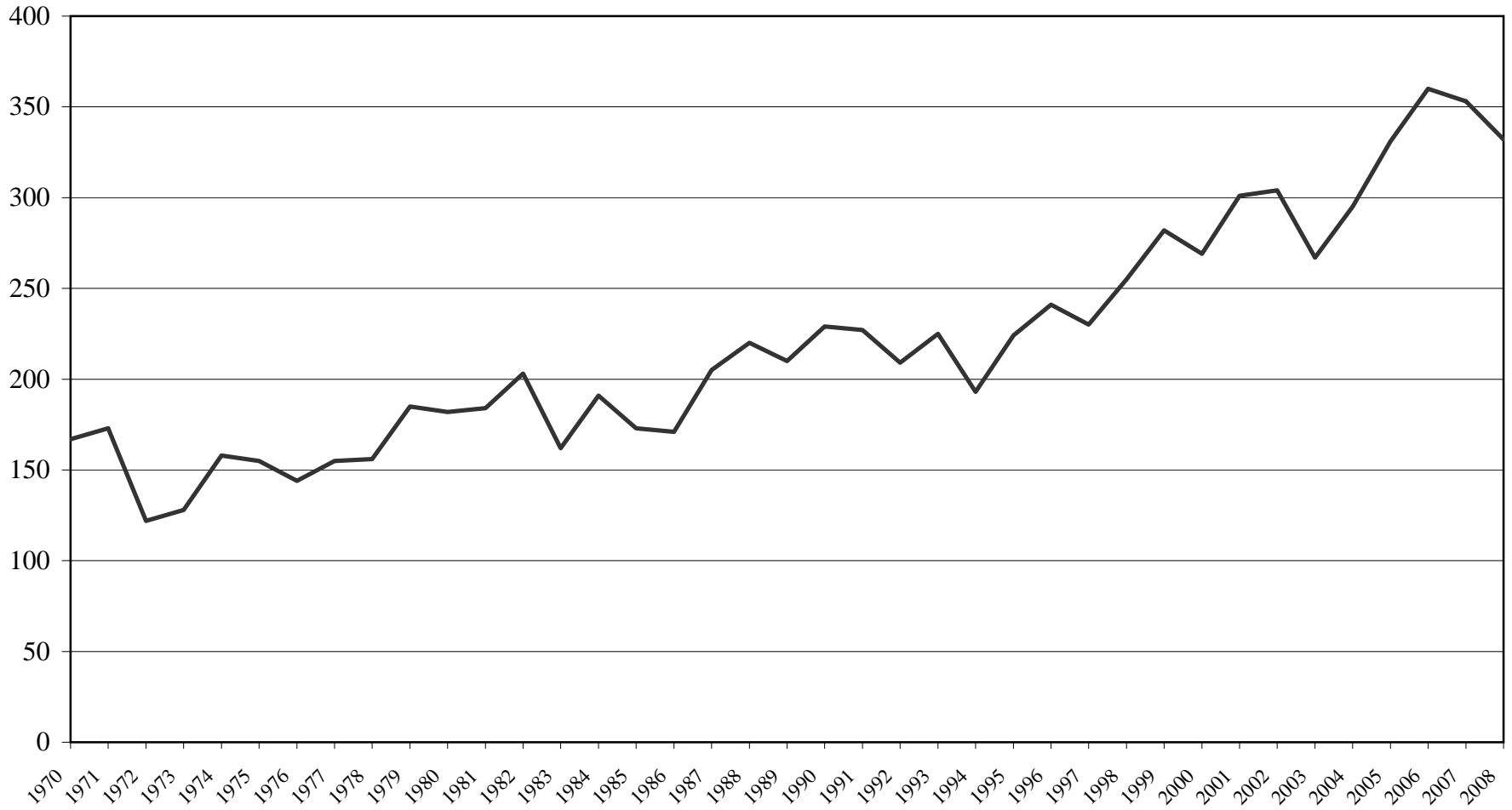


PEL's analysis of birth trends reveals a clear and significant pattern of increase from the early 1970s through the 1980s and 1990s, and into the current decade. In fact, births in the district increased in most of the years reviewed, including six of the years of the 1990s and five of the nine years in the current decade for which figures are available; births fell, however, in both 2007 and 2008 (preliminary). The preliminary figure for 2008 (the most recent available) was still the third highest ever recorded in the district; the 2006 figure was the highest, and the 2007 figure was the second-highest. Further, the district's ten highest birth figures were experienced in the ten most recent years. In spite of the rise in the absolute number of births, given the rapid growth in population, there was a clear drop

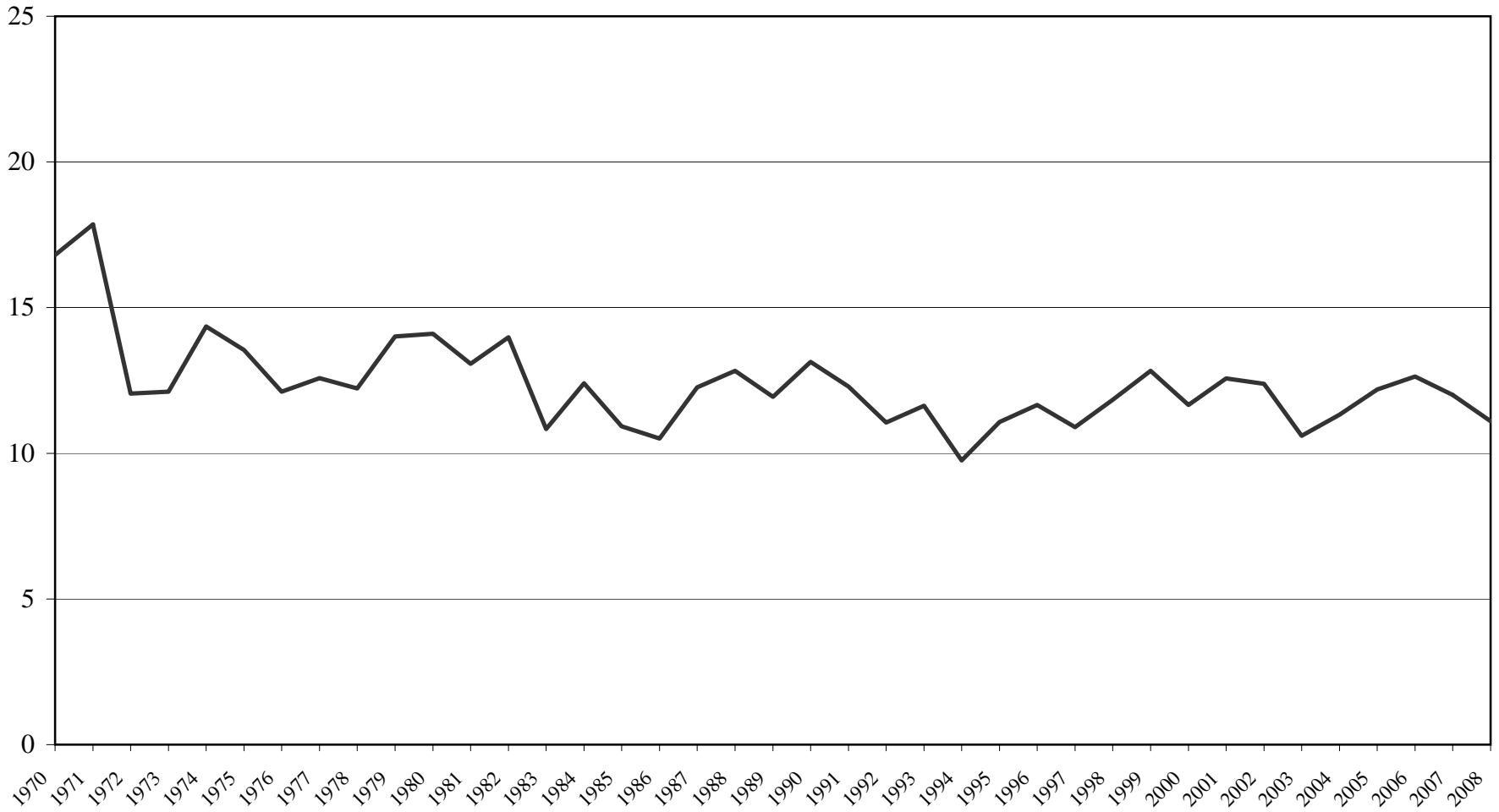
in the number of births per 1,000 population—on average—from the 1970s through the 1980s and into the 1990s. However, the experience of the first eight years of this decade was up slightly. In view of the dramatic rise in the number of housing units in the district and the pattern of births, the district's average number of births per 1,000 housing units fell in each of the decades reviewed. The ultimate impact of birth patterns (combined with migration patterns, new housing construction, and the impact of nonpublic education) is that the overall number of public school pupils generated by each housing unit in the district fell between 1970-71 and 1980-81 and again between 1980-81 and 1990-91. In 2000-01 the figure rose noticeably, but in 2009-10 it is down—in large part due to the opening of the Avon Grove Charter School earlier in this decade. In the current school year each housing unit produced just slightly more than one-half the number of pupils as in 1970-71. The differences between the 2009-10 figure and the other figures presented are far less dramatic. The current figure is about 8.5 percent lower than in the 1980-81 school year, about 3.0 percent higher than in 1990-91, and about 15 percent lower than in 2000-01.

## APPENDIX 3

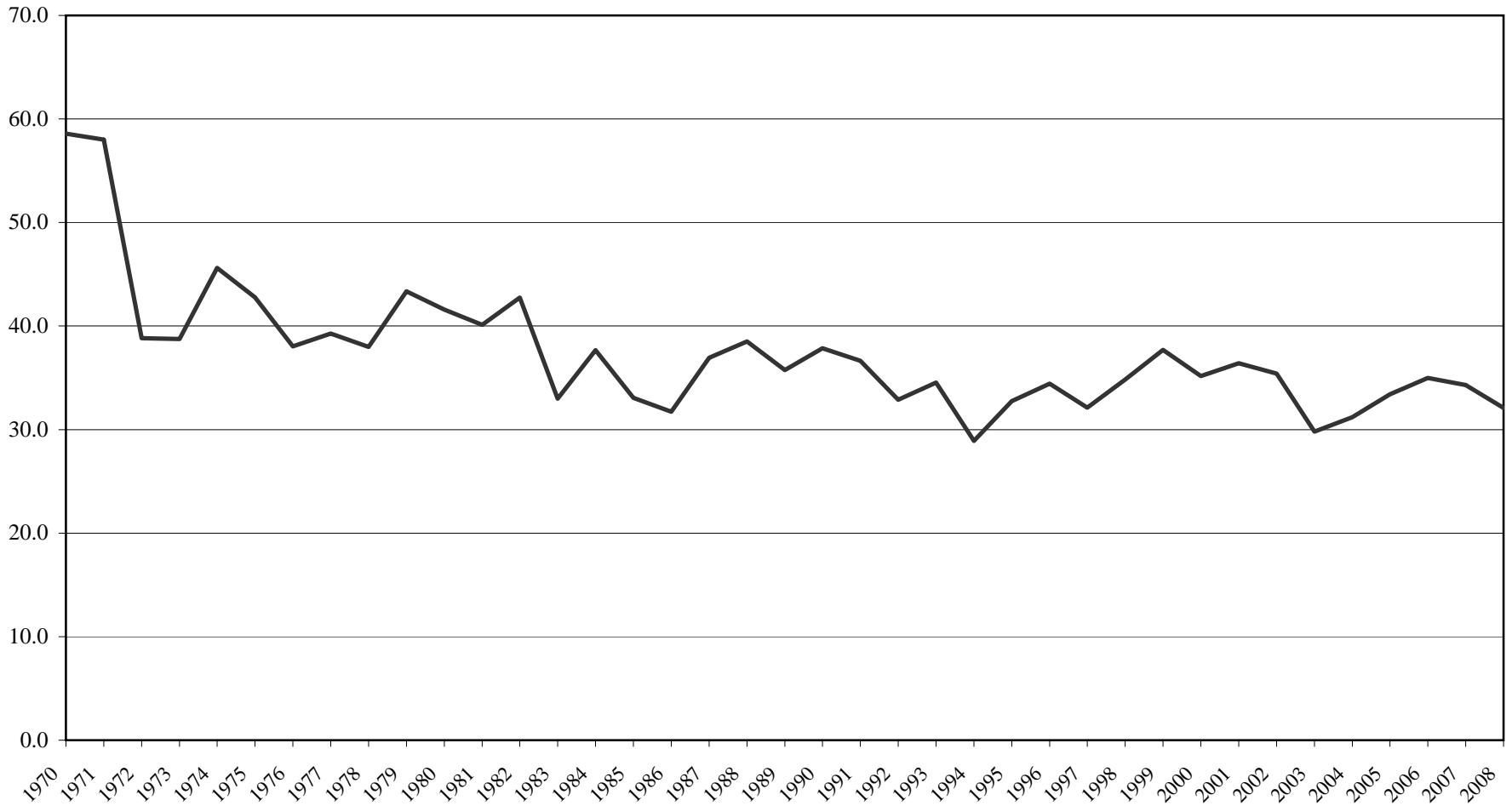
**Graph 3-1**  
Avon Grove School District  
Births  
1970 to 2008



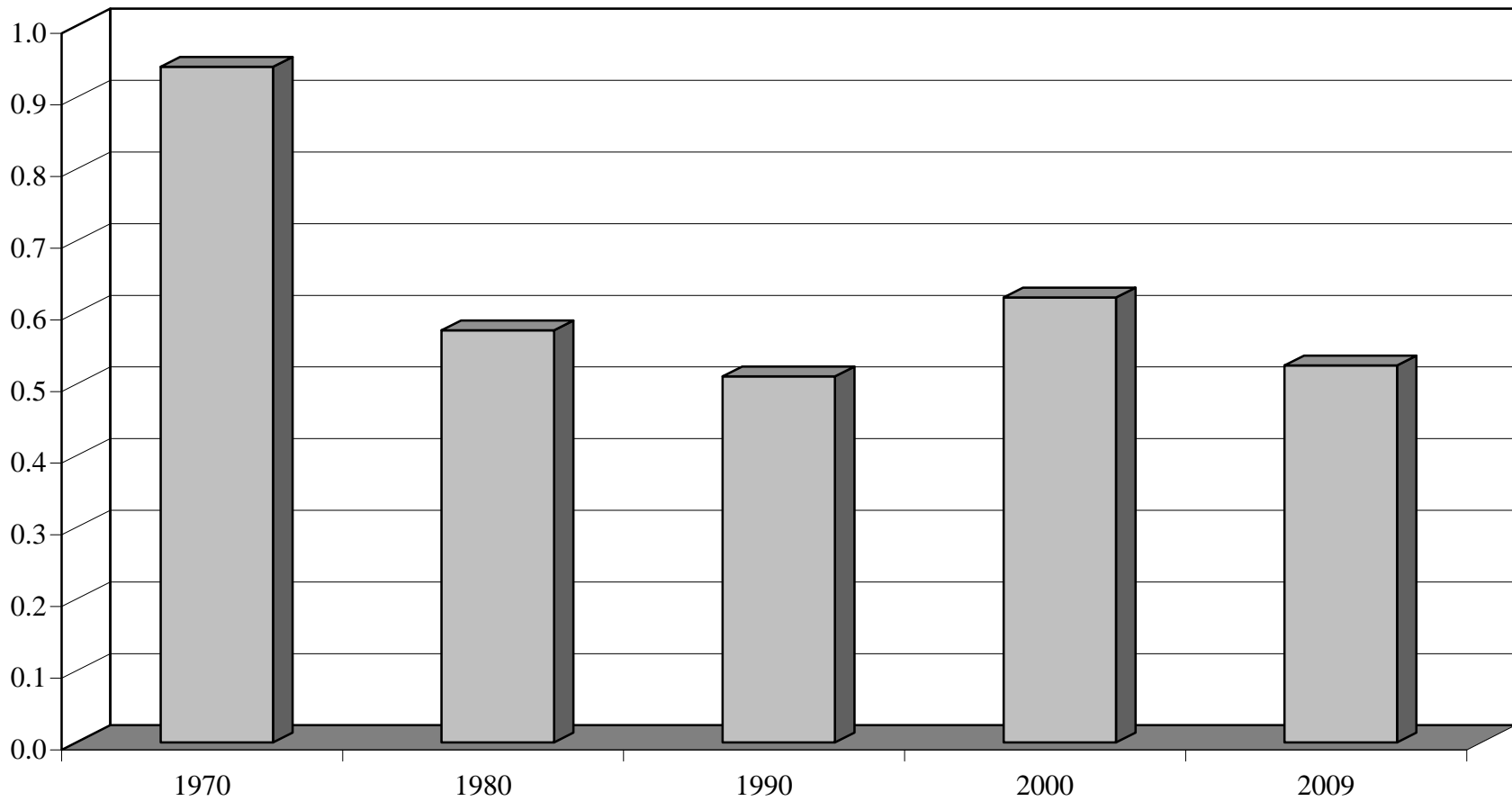
**Graph 3-2**  
Avon Grove School District  
Births Per 1,000 Population  
1970 to 2008



**Graph 3-3**  
Avon Grove School District  
Births Per 1,000 Housing Units  
1970 to 2008



**Graph 3-4**  
Avon Grove School District  
Ratio of Public School Children Per Housing Unit  
1970 to 2009



CHAPTER 4  
MIGRATION PATTERNS

During the 1970s resident births in the Avon Grove School District totaled 1,543; deaths during this period totaled 908. This produced a “natural” increase in population of 635. The actual change in population between 1970 and 1980, however, was an increase of 2,971, suggesting that a net in-migration of 2,336 people had occurred during this period. Between 1980 and 1990, births totaled 1,901 and deaths totaled 906. This produced another natural increase of 995. The district’s actual population count increased by 4,524 during the 1980s, indicating that a net in-migration of 3,529 people had occurred. During the period 1990 to 2000, births totaled 2,315, and deaths totaled 923 producing still another natural increase of 1,392. The district’s population grew by 5,635 between 1990 and 2000 suggesting that a net in-migration of 4,243 occurred in the 1990s. During the period 2000 to 2007 births totaled 2,475 and deaths totaled 1,167, producing a natural increase in population of 1,308. Avon Grove’s population is estimated to have grown by 6,409 between 2000 and 2007 suggesting that a net in-migration of 5,101 residents had occurred thus far in this decade. (See Table 4-1.)

Table 4-1

AVON GROVE SCHOOL DISTRICT

Resident Births, Deaths, and Population Change  
1970 to 2007

	1970 to 1979	1980 to 1989	1990 to 1999	2000 to 2007	1970 to 2007
Births	1,543	1,901	2,315	2,475	8,234
Deaths	<u>908</u>	<u>906</u>	<u>923</u>	<u>1,167</u>	<u>3,904</u>
<b>Natural Pop. Change</b>	<b>+635</b>	<b>+995</b>	<b>+1,392</b>	<b>+1,308</b>	<b>+4,330</b>
Total Population (start)	9,937	12,908	17,432	23,067	9,937
Total Population (end)	<u>12,908</u>	<u>17,432</u>	<u>23,067</u>	<u>29,476</u>	<u>29,476</u>
<b>Total Population Change</b>	<b>+2,971</b>	<b>+4,524</b>	<b>+5,635</b>	<b>+6,409</b>	<b>+19,539</b>
Less Natural Change	+635	+995	+1,392	+1,308	+4,330
<b>Net Migration</b>	<b><u>+2,336</u></b>	<b><u>+3,529</u></b>	<b><u>+4,243</u></b>	<b><u>+5,101</u></b>	<b><u>+15,209</u></b>

SOURCE: U.S. Bureau of the Census and State Health Data Center, Pennsylvania Department of Health, Harrisburg Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions.

Overall, for the period 1970 to 2007 resident births in the Avon Grove School District totaled 8,234; deaths during this period totaled 3,904. This produced a “natural” increase in population of 4,330. The actual and estimated population change during this period, however, was an increase of 19,539, indicating an overall net in-migration of 15,209. Net in-migration was more pronounced in the current decade than in any of the three preceding decades and, in fact, it accounted for slightly more than one-third of the overall net in-migration during the four decades reviewed—and these figures reflect only the first eight years of the current decade.

The significance of migration for purposes of this examination lies in its effect on school-age children and public school enrollments. Migration can be highlighted by using birth data and actual enrollments.

A review of the relationship between enrollments in the district and births in the years corresponding to the ages of children in school provides a perspective on the effect of migration. A figure of greater than 100 percent indicates an enrollment that is higher than that resulting solely from the cumulative total of births in the district during the corresponding time period (due to net in-migration in this age grouping); conversely, a figure of less than 100 percent indicates a public school enrollment lower than the cumulative number of births (due primarily to net out-migration and/or parents and children opting for nonpublic schools or participation in special programs).

The cumulative number of births recorded in the Avon Grove School District during calendar years 1992 through 2004 (which roughly corresponds to children in grades K-12 for the 2009-10 school year) was 3,269; the number of children enrolled in the district in this school year is 5,445, or 166.6 percent of the corresponding births, well above the “neutral” figure of 100 percent. The relationship of children in public school to the sum of the births in the appropriate years averaged 172.3 percent throughout the review period—173.4 percent for the period 1999-2000 to 2004-05 and 170.9 percent for the period 2005-06 through 2009-10. The relationship of Avon Grove enrollments to the sum of births was at its highest point (179.5 percent) in 2000-01; its lowest point (166.6 percent) is in the current school year. In 2001-02 the relationship of public school pupils to the sum of the births fell modestly, but in 2002-03 it dropped more noticeably due to the opening of the Avon Grove Charter School. In two of the three subsequent years the relationship was slightly higher; however, it rose noticeably in 2006-07 only to fall in each of the three most recent years hitting its lowest level of the review period in the current

school year. The average for the eight years since the charter school opened is 170.7 percent compared with 176.6 percent for the three years prior to its opening.

The number of children who reside in the Avon Grove School District who are known to be attending nonpublic schools on a full-time basis (private/parochial schools, the Avon Grove Charter School, and home and cyber schools—but not children in full-time IU programs, the limited full-time voc-tech program, or out-of-district placements) in the 2009-10 school year is 1,031, or 31.5 percent of the corresponding births; in 1999-2000, the figures were 567 or 21.7 percent. The relationship of children in nonpublic schools to the sum of the births in the appropriate years averaged 32.0 percent throughout the period 1999-2000 through 2009-10—29.8 percent for the period 1999-2000 to 2004-05 and 34.7 percent for the period 2005-06 through 2009-10. The relationship of these children to the sum of births was at its highest point (40.0 percent) in 2004-05; its lowest point (21.4 percent) was in 2000-01. Again, the impact of the Avon Grove Charter School is clear. In 2002-03 (the initial year for the charter school) the relationship between nonpublic enrollments and the sum of the births in the corresponding 13 years jumped by 9.3 points (or by more than one-third) to 34.4 percent, and in the years since the charter school opened the average is 35.6 percent—compared with 22.7 percent for the three years prior to its opening. Like the experience of the Avon Grove School District, the relationship between nonpublic enrollments and cumulative births has fallen in each of the three most recent years, and nonpublic enrollment as a percentage of the sum of the births is now at its lowest point since 2001-02—the year prior to the opening of the charter school.

Further insight with respect to migration patterns can be gained by analyzing the relationship between cumulative births and total district children reported to be enrolled in schools. In 2009-10, there are 6,476 district children reported to be attending public and nonpublic schools (private/parochial schools, the Avon Grove Charter School, and home and cyber schools—but not children in full time IU programs, the limited full-time voc-tech program, or out-of-district placements). Based on these figures, the total number of school-age children in the district is 198.1 percent of the number of births that occurred in the district during the corresponding years. When all nonpublic pupils are included, total enrollment during the period 1999-2000 through 2009-10 averaged 204.3 percent of cumulative births—more than double the neutral figure of 100. The average for the most recent five years (205.7 percent) is higher than for the prior six years (203.2 percent). The relationship of the total school-age population to

births rose in all but one the year between 1999-2000 and 2006-07; in each of the three most recent years it has fallen. The relationship was at its highest point in the 2006-07 school year (213.8 percent); its lowest point during the review period (196.4 percent) was in the 1999-2000 school year.

The overall relationship between cumulative births and total reported public and nonpublic enrollments appears to be strongly influenced by migration patterns, but it may also be affected by any changes over time in the way the number of nonpublic pupils is recorded. However, the figures presented are likely to represent a valid measure of the relationship between cumulative births and public and reported nonpublic pupils during the period for which consistent and compatible data were available—recognizing that the private/parochial figures are limited to those enrolled in private/parochial schools, the Avon Grove Charter School, and home and cyber schools, and exclude children in full time IU programs, the limited full-time voc-tech program, and out-of-district placement. If figures for all nonpublic enrollments were factored in, the demonstrated relationship between total enrollments and cumulative births would be slightly higher. (See Table 4-2.)

Changes in enrollments by grade within the public school system can reflect many factors in addition to migration; e.g., promotion policies, shifts to and from special classes, shifts to and from nonpublic schools and/or a full-time vocational-technical program, and withdrawals—particularly in the high school grades. However, any large migration would be reflected in a comparison of the number of pupils in corresponding grades over a period of years. In 2003-04 there were 1,036 pupils in grades 1-3 in the district. Three years later (2006-07) when the bulk of this group was in grades 4-6, the number was 1,215 (179 pupils or 17.3 percent higher than in 2003-04). In 2009-10 (three years later), when these pupils were in grades 7-9, the number was 1,375—160 (13.2 percent) higher than in 2006-07, and 339 (32.7 percent) above the 2003-04 level. In 2009-10 the number of pupils in grades 4-6 totaled 1,252—71 (6.0 percent) more than in grades 1-3 three years earlier.

In 2003-04 the number of pupils in grades 4-6 totaled 1,148; three years later when these children were in grades 7-9, the total was 1,396—up by 248 or 21.6 percent. When these children reached grades 10-12 in 2009-10, the number had fallen slightly to 1,367—or by 29 or 2.1 percent from three years prior. This figure was still 219 or 19.1 percent higher than in 2003-04, when these pupils were in grades 4-6. A decrease (37 or 2.9 percent) was also recorded in

Table 4-2

AVON GROVE SCHOOL DISTRICT

Relationship of Cumulative Births to Public and Nonpublic  
Enrollments in the Corresponding Years  
 1999-2000 to 2009-10

	Cumulative Births <sup>1/</sup>	AGSD Enrollments		Nonpublic Enrollments <sup>2/</sup>		Total Enrollments <sup>3/</sup>	
		#	as a % of Cumulative Births	#	as a % of Cumulative Births	#	as a % of Cumulative Births
1999-2000	2,618	4,576	174.8	567	21.7	5,143	↓196.4
2000-01	2,639	4,738	↑179.5	564	↓21.4	5,302	200.9
2001-02	2,718	4,773	175.6	682	25.1	5,455	200.7
2002-03	2,757	4,700	170.5	948	34.4	5,648	204.9
2003-04	2,839	4,854	171.0	1,037	36.5	5,891	207.5
2004-05	2,950	4,988	169.1	1,179	↑40.0	6,167	209.1
2005-06	3,014	5,205	172.7	1,135	37.7	6,340	210.4
2006-07	3,063	5,382	175.7	1,167	38.1	6,549	↑213.8
2007-08	3,154	5,442	172.5	1,070	33.9	6,512	206.5
2008-09	3,229	5,400	167.2	1,043	32.3	6,443	199.5
2009-10	3,269	5,445	↓166.6	1,031	31.5	6,476	198.1

1/ Cumulative births represents the sum of births for the 13-year period corresponding to the school year. For example, pupils in school year 2009-10 reflect births during the period 1992 through 2004.

2/ Includes district children in private/parochial schools, the Avon Grove Charter School, and home and cyber schools—but not children in full time IU programs, the limited full-time voc-tech program, or out-of-district placements.

3/ Includes district children in public and private/parochial schools, the Avon Grove Charter School, and home and cyber schools—but not children in full time IU programs, the limited full-time voc-tech program, or out-of-district placements. It should be noted that the overall relationship between cumulative births and enrollments may be influenced not only by migration patterns but also by any changes over time in the way the number of children in nonpublic schools is recorded.

Note: Highest point marked by ↑; lowest point marked with ↓.

the number of pupils in grades 10-12 in 2006-07 from the levels in the three lower grades three years earlier. (See Table 4-3.)

Another factor that can be an indicator of the pattern of future total enrollments in a school district is the relationship between senior classes and the first grade classes that replace them in the following school year. In Avon Grove, first grade classes were larger than the senior classes they replaced in each of the first six years of the review period; however, in the four most recent years, first grade classes were smaller than the senior classes they replaced. During the past five years there was an overall loss of 98 pupils (5.1 percent) in the number of first graders versus twelfth graders in the prior year—or a loss of 20 per year on average. During the first five

Table 4-3

## AVON GROVE SCHOOL DISTRICT

Migration Reflected in Public School Enrollments, By Grade  
2003-04, 2006-07, and 2009-10

<u>2003-04</u>		<u>2006-07</u>		<u>Change 2003-04 to 2006-07</u>		<u>2009-10</u>		<u>Change 2006-07 to 2009-10</u>		<u>Change 2003-04 to 2009-10</u>	
<u>Grade</u>	<u>Number</u>	<u>Grade</u>	<u>Number</u>	<u>#</u>	<u>%</u>	<u>Grade</u>	<u>Number</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>
-	-	1	355	-	-	4	387	32	9.0	-	-
-	-	2	425	-	-	5	447	22	10.4	-	-
-	-	3	<u>401</u>	-	-	6	<u>418</u>	<u>17</u>	4.2	-	-
-	-	<b>Total</b>				<b>Total</b>					
-	-	<b>1-3</b>	<b>1,181</b>	-	-	<b>4-6</b>	<b>1,252</b>	<b>71</b>	<b>6.0</b>	-	-
1	317	4	386	69	21.8	7	452	66	17.1	135	42.6
2	378	5	419	41	10.8	8	465	46	11.0	87	23.0
3	<u>341</u>	6	<u>410</u>	<u>69</u>	20.2	9	<u>458</u>	<u>48</u>	11.7	<u>117</u>	34.3
<b>Total</b>		<b>Total</b>				<b>Total</b>					
<b>1-3</b>	<b>1,036</b>	<b>4-6</b>	<b>1,215</b>	<b>179</b>	<b>17.3</b>	<b>7-9</b>	<b>1,375</b>	<b>160</b>	<b>13.2</b>	<b>339</b>	<b>32.7</b>
4	366	7	429	63	17.2	10	443	14	3.3	77	21.0
5	397	8	471	74	18.6	11	491	20	4.2	94	23.7
6	<u>385</u>	9	<u>496</u>	<u>111</u>	28.8	12	<u>433</u>	<u>-63</u>	-12.7	<u>48</u>	12.5
<b>Total</b>		<b>Total</b>				<b>Total</b>					
<b>4-6</b>	<b>1,148</b>	<b>7-9</b>	<b>1,396</b>	<b>248</b>	<b>21.6</b>	<b>10-12</b>	<b>1,367</b>	<b>-29</b>	<b>-2.1</b>	<b>219</b>	<b>19.1</b>
7	411	10	418	7	1.7	-	-	-	-	-	-
8	441	11	445	4	0.9	-	-	-	-	-	-
9	<u>444</u>	12	<u>396</u>	<u>-48</u>	-10.8	-	-	-	-	-	-
<b>Total</b>		<b>Total</b>									
<b>7-9</b>	<b>1,296</b>	<b>10-12</b>	<b>1,259</b>	<b>-37</b>	<b>-2.9</b>						

years of the review period there was an overall net increase of 252 first grade entries (17.2 percent) compared with the preceding years’ senior classes—an annual average gain of 50 pupils. During the entire period the gains ranged from a low of 11 pupils (3.6 percent) in 2003-04 to a high of 106 pupils (41.6 percent) in the 2000-01 school year. The losses ranged from a low of ten pupils (2.5 percent) in 2007-08 to a high of 59 (13.8 percent) in 2008-09. In the current school year 343 first graders replaced 399 seniors from the prior school year indicating a loss of 56 pupils or 14.0 percent. (See Table 4-4 and Graph 4-1.)

Table 4-4

AVON GROVE SCHOOL DISTRICT

Relationship Between Senior Classes and  
Entering First Grade Classes in the Following Year  
 1999-2000 to 2009-10

Senior Class		First Grade Class		Change	
Year	No. of Pupils	Year	No. of Pupils	Pupils	%
1999-2000	255	2000-01	361	106	41.6
2000-01	315	2001-02	333	18	5.7
2001-02	269	2002-03	359	90	33.5
2002-03	306	2003-04	317	11	3.6
2003-04	323	2004-05	350	27	8.4
2004-05	326	2005-06	383	57	17.5
2005-06	385	2006-07	355	-30	-7.8
2006-07	396	2007-08	386	-10	-2.5
2007-08	428	2008-09	369	-59	-13.8
2008-09	399	2009-10	343	-56	-14.0

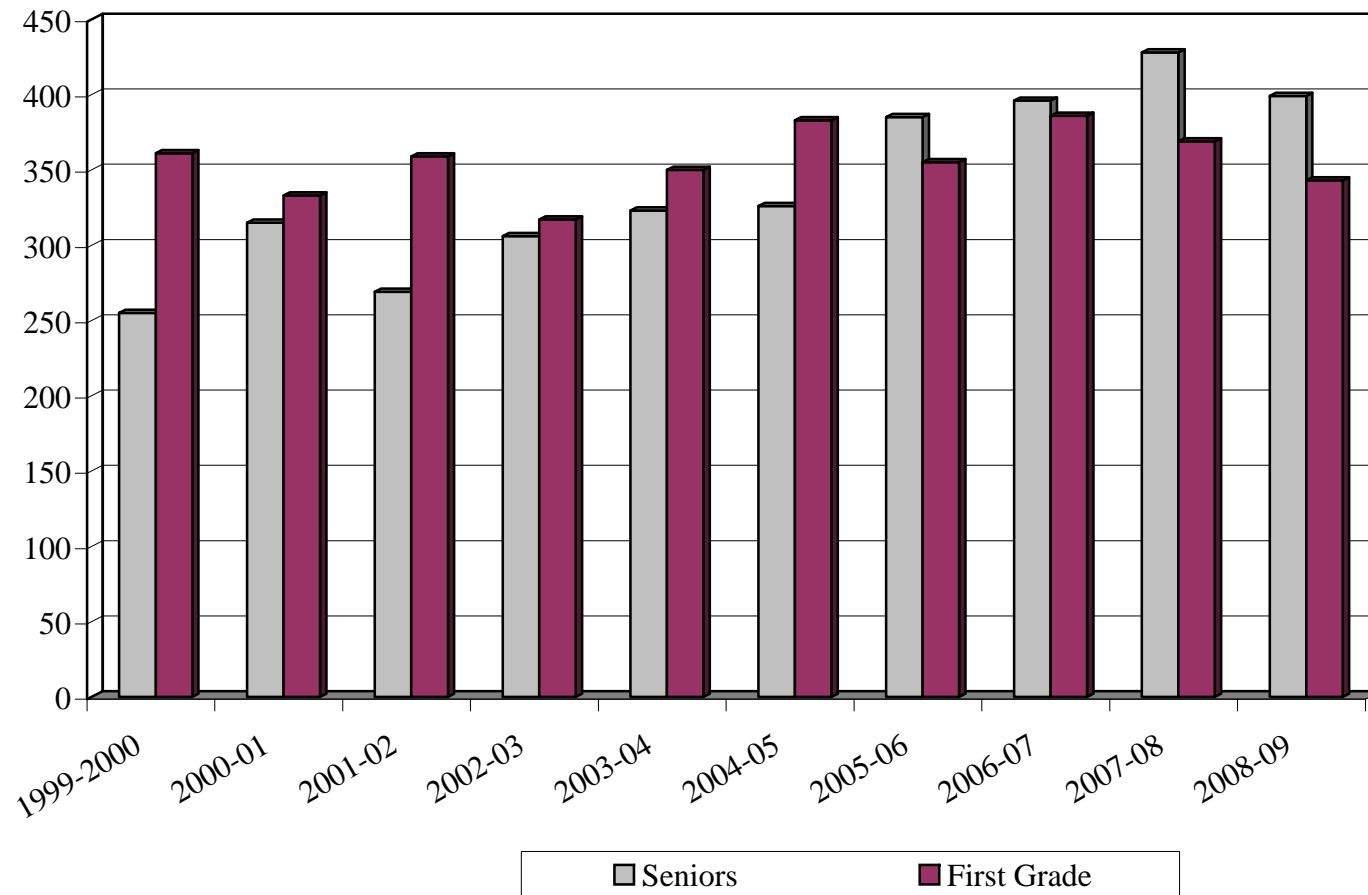


**Dramatic net in-migration of total population in the Avon Grove School District is evident during the entire review period, and it was most pronounced in the current decade; in fact, it accounted for slightly more than one-third of the overall net in-migration during the four decades reviewed—and these figures reflect only the first eight years of this decade. During the period 1999-2000 to 2009-10, enrollments in Avon Grove also reflect a clear and**

very strong pattern of net in-migration to the public school system based on the relationship between cumulative births and pupil counts; however, the overall pattern of net in-migration has slowed somewhat in the three most recent years. When reported nonpublic figures are factored in, the impact of in-migration on the total known enrollment of district children in public and nonpublic schools is even more pronounced, but it, too, shows a declining impact in the three most recent years. Analysis of the movement of children through the public school system during the recent past reveals net in-migration in all grades in all years, except the high school grades. In keeping with the pattern of net in-migration—and aided by growing births during the 1980s, 1990s, and the current decade—public school enrollments in the district increased in all but two of the years reviewed. (The exceptions were 2002-03—the first year of the charter school—and the 2008-09 school year.) As a result of migration, birth patterns, and other factors, first grade classes were larger than the senior classes they replaced in the first six years of the ten-year period reviewed. The largest "gain" was recorded in 1999-2000 when the first grade class was 106 pupils (41.6 percent) higher than the prior year's senior class. Figures in the five subsequent years were noticeably lower, and in each of the four most recent years first grade classes were smaller than the senior classes they replaced—and the losses have grown. These relationships and indicators as well as a variety of others will be further explored in Chapter 5.

## APPENDIX 4

**Graph 4-1**  
Avon Grove School District  
Relationship Between Graduating Class  
and Entering First Grade Class in the Following Year



CHAPTER 5  
ENROLLMENT TRENDS AND PROJECTIONS

Past Enrollment Trends

Enrollments in the Avon Grove School District total 5,445 in 2009-10 and are 869 pupils (19.0 percent) higher than in 1999-2000. Increases in pupil population were recorded in all years during this period except 2002-03 (the year the Avon Grove Charter School opened), when a loss of 73 (1.5 percent) was experienced, and in 2008-09, when a pupil count fell by 42 (0.8 percent). The largest growth (217 or 4.4 percent) occurred in 2005-06; the smallest rise (35 or 0.7 percent) was in 2001-02. In the current school year, the number of pupils grew by 45 or 0.8 percent—the smallest gain since 2000-01. Enrollments in the district rose by a net of 412 or 9.0 percent (a net of 82 pupils or 1.8 percent yearly, on average) during the period 1999-2000 to 2004-05; in the five most recent years enrollments grew by a net of 457 or 9.2 percent (an average annual net increase of 91 pupils or 1.8 percent), but in the three most recent years the net annual gain average just 21 pupils or 0.4 percent. (See Tables 5-1 and 5-2 and Graph 5-1.)

Table 5-1

AVON GROVE SCHOOL DISTRICT

Total Enrollment (Grades K-12)<sup>1/</sup>  
1999-2000 to 2009-10

<u>School Year</u>	<u>Enrollment K-12</u>	<u>Change From Previous Year</u>	
		<u>#</u>	<u>%</u>
1999-2000	4,576	—	—
2000-01	4,738	162	3.5
2001-02	4,773	35	0.7
2002-03	4,700	-73	-1.5
2003-04	4,854	154	3.3
2004-05	4,988	134	2.8
2005-06	5,205	217	4.4
2006-07	5,382	177	3.4
2007-08	5,442	60	1.1
2008-09	5,400	-42	-0.8
2009-10	5,445	45	0.8
Change 1999-2000 to 2009-10		869	19.0

<sup>1/</sup> Based on October 1 figures.

Table 5-2

## AVON GROVE SCHOOL DISTRICT

Total Enrollments by Grade<sup>1/</sup>  
1999-2000 to 2009-10

<u>Year</u>	<u>K</u>	<u>1</u>	<u>2</u>	<b>Total <u>K-2</u></b>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<b>Total <u>3-6</u></b>	<u>7</u>	<u>8</u>	<b>Total <u>7-8</u></b>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<b>Total <u>9-12</u></b>	<b>Total <u>K-12</u></b>
1999-2000	308	350	349	<b>1,007</b>	381	416	382	366	<b>1,545</b>	375	378	<b>753</b>	387	303	326	255	<b>1,271</b>	<b>4,576</b>
2000-01	305	361	371	<b>1,037</b>	384	392	432	402	<b>1,610</b>	373	383	<b>756</b>	376	351	293	315	<b>1,335</b>	<b>4,738</b>
2001-02	325	333	373	<b>1,031</b>	392	391	401	435	<b>1,619</b>	405	384	<b>789</b>	373	361	331	269	<b>1,334</b>	<b>4,773</b>
2002-03	275	359	323	<b>957</b>	346	364	372	378	<b>1,460</b>	431	419	<b>850</b>	429	350	348	306	<b>1,433</b>	<b>4,700</b>
2003-04	297	317	378	<b>992</b>	341	366	397	385	<b>1,489</b>	411	441	<b>852</b>	444	413	341	323	<b>1,521</b>	<b>4,854</b>
2004-05	302	350	338	<b>990</b>	390	368	381	424	<b>1,563</b>	406	409	<b>815</b>	472	416	406	326	<b>1,620</b>	<b>4,988</b>
2005-06	309	383	371	<b>1,063</b>	370	397	388	402	<b>1,557</b>	457	431	<b>888</b>	455	449	408	385	<b>1,697</b>	<b>5,205</b>
2006-07	331	355	425	<b>1,111</b>	401	386	419	410	<b>1,616</b>	429	471	<b>900</b>	496	418	445	396	<b>1,755</b>	<b>5,382</b>
2007-08	309	386	374	<b>1,069</b>	438	412	400	425	<b>1,675</b>	429	442	<b>871</b>	505	478	416	428	<b>1,827</b>	<b>5,442</b>
2008-09	302	369	378	<b>1,049</b>	378	446	420	408	<b>1,652</b>	459	427	<b>886</b>	479	488	447	399	<b>1,813</b>	<b>5,400</b>
2009-10	322	343	390	<b>1,055</b>	396	387	447	418	<b>1,648</b>	452	465	<b>917</b>	458	443	491	433	<b>1,825</b>	<b>5,445</b>
<u>Pupil Change</u>																		
1999-2000 to																		
2009-10	14	-7	41	<b>48</b>	15	-29	65	52	<b>103</b>	77	87	<b>164</b>	71	140	165	178	<b>554</b>	<b>869</b>
<u>Percent Change</u>																		
1999-2000 to																		
2009-10	4.5	-2.0	11.7	<b>4.8</b>	3.9	-7.0	17.0	14.2	<b>6.7</b>	20.5	23.0	<b>21.8</b>	18.3	46.2	50.6	69.8	<b>43.6</b>	<b>19.0</b>

<sup>1/</sup> Based on October 1 figures.

In its initial year (2002-03) the Avon Grove Charter School provided only for grades K-6, but in 2003-04 grade 7 was added, and so were additional sections of several other grades (most notably kindergarten). As a result, enrollments of Avon Grove residents at the charter school rose from 264 in 2002-03 to 366 in 2003-04, or by 102 pupils were 38.6 percent—almost one-third of which reflected kindergarten pupils. In the fall of 2004 the charter school expanded again to include grade 8, the high school grades, and additional sections of kindergarten and most of the other grades were also added; enrollment of district residents jumped to 504. In 2005-06 a very modest rise to 507 was recorded, but then enrollments fell to 486 in the following year and remained fairly stable through 2008-09. In the current school year the number of Avon Grove residents enrolled in a charter school rose by 46 or 9.4 percent to 534—its historical high point. In view of this, the current figure is up by 270 or 102.3 percent from the initial year for the charter school. The impact that the Avon Grove Charter School will likely have on the district's future enrollments is addressed later in this Chapter.

The Avon Grove School District's enrollments in grades K-2 were 48 pupils or 4.8 percent higher in 2009-10 than in 1999-2000. During this period five annual increases and five annual decreases occurred. The largest rise in pupils (73 or 7.4 percent) was experienced in 2005-06; the smallest growth (six or 0.6 percent) was recorded in the current school year. The decreases ranged from a high of 74 (7.2 percent) in 2002-03 (the first year for the charter school) to a low of just two pupils (0.2 percent) in 2004-05. Elementary enrollments were down by a net of 17 or 1.7 percent during the period 1999-2000 to 2004-05 (a net loss of three pupils or 0.3 percent yearly, on average); in the five most recent years enrollments in these grades rose by a net of 65 or 6.6 percent (or an average annual net gain of 13 pupils or 1.3 percent). (See Tables 5-2 and 5-3 and Graph 5-2.)

Table 5-3

AVON GROVE SCHOOL DISTRICT

Elementary Enrollment (Grades K-2)<sup>1/</sup>  
1999-2000 to 2009-10

<u>School Year</u>	<u>Enrollment K-2</u>	<u>Change From Previous Year</u>	
		<u>#</u>	<u>%</u>
1999-2000	1,007	-	-
2000-01	1,037	30	3.0
2001-02	1,031	-6	-0.6
2002-03	957	-74	-7.2
2003-04	992	35	3.7
2004-05	990	-2	-0.2
2005-06	1,063	73	7.4
2006-07	1,111	48	4.5
2007-08	1,069	-42	-3.8
2008-09	1,049	-20	-1.9
2009-10	1,055	6	0.6
Change 1999-2000 to 2009-10		48	4.8

<sup>1/</sup> Based on October 1 figures.

Enrollments in the district’s intermediate grades (3-6) were 103 pupils 6.7 percent higher in 2009-10 than in 1999-2000. Enrollments increased in six years during this period and decreased in four years. The largest annual growth was experienced in 2004-05 (74 or 5.0 percent); the smallest rise (nine or 0.6 percent) was recorded in 2001-02. The largest decrease occurred in 2002-03 (the first year for the Avon Grove Charter School—159 or 9.8 percent); the smallest decline (four pupils or 0.2 percent) was in the current school year. Between 1999-2000 and 2004-05, enrollments in grades 3-6 rose by a net of 18 or 1.2 percent (a net annual gain of four pupils or 0.2 percent, on average); in the five most recent years enrollments in these grades were up by a net of 85 or 5.4 percent (an annual average net increase of 17 pupils or 1.1 percent)—in spite of losses in 2008-09 and the current school year. (See Tables 5-2 and 5-4 and Graph 5-3.)

Table 5-4

AVON GROVE SCHOOL DISTRICT

Intermediate Enrollment (Grades 3-6)<sup>1/</sup>  
1999-2000 to 2009-10

School Year	Enrollment 3-6	Change From Previous Year	
		#	%
1999-2000	1,545	—	—
2000-01	1,610	65	4.2
2001-02	1,619	9	0.6
2002-03	1,460	-159	-9.8
2003-04	1,489	29	2.0
2004-05	1,563	74	5.0
2005-06	1,557	-6	-0.4
2006-07	1,616	59	3.8
2007-08	1,675	59	3.7
2008-09	1,652	-23	-1.4
2009-10	1,648	-4	-0.2
Change 1999-2000 to 2009-10		103	6.7

<sup>1/</sup> Based on October 1 figures.

Middle school enrollments (grades 7 and 8) in the Avon Grove School District were 164 pupils 21.8 percent higher in 2009-10 than in 1999-2000. Increases occurred in all years during this period except 2004-05 (when a decrease of 37 pupils or 4.3 percent was recorded—due to additional pupils transferring to the Avon Grove Charter School) and in 2007-08 (when enrollments fell by 29 or 3.2 percent). The largest gain (73 or 9.0 percent) occurred in 2005-06; the smallest increase (two or 0.2 percent) was in 2003-04. In the current school year enrollments at the middle school level grew by 31 (3.5 percent). Between 1999-2000 and 2004-05, enrollments in grades 7-8 rose by a net of 62 or 8.2 percent (a net gain of 12 pupils or 1.6 percent yearly, on average); in the five most recent years enrollments in these grades grew by a net of 102 or 12.5 percent (an annual average net increase of 20 pupils or 2.5 percent). (See Tables 5-2 and 5-5 and Graph 5-4.)

Table 5-5

AVON GROVE SCHOOL DISTRICT

Middle School Enrollment (Grades 7-8)<sup>1/</sup>  
1999-2000 to 2009-10

<u>School Year</u>	<u>Enrollment</u> 7-8	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
1999-2000	753	—	—
2000-01	756	3	0.4
2001-02	789	33	4.4
2002-03	850	61	7.7
2003-04	852	2	0.2
2004-05	815	-37	-4.3
2005-06	888	73	9.0
2006-07	900	12	1.4
2007-08	871	-29	-3.2
2008-09	886	15	1.7
2009-10	917	31	3.5
Change 1999-2000 to 2009-10		164	21.8

<sup>1/</sup> Based on October 1 figures.

High school enrollments (grades 9-12) were 554 pupils or 43.6 percent higher in 2009-10 than in 1999-2000. Increases occurred in all years during this period except 2001-02, when a loss of one pupil (0.1 percent) was experienced, and 2008-09, when enrollments fell by 14 (0.8 percent). The largest absolute gain at the high school (99) was recorded in both 2002-03 and 2004-05; the largest proportionate increase (7.4 percent) was in 2002-03. The smallest growth (12 or 0.7 percent) was in the current school year. High school enrollments in 2004-05 were up by a net of 349 or 27.5 percent from 1999-2000 (an average net growth of 70 pupils or 5.5 percent annually); in 2009-10 enrollments in grades 9-12 were 205 pupils or 12.5 percent higher than five years prior (an average net increase of 41 pupils or 2.5 percent yearly). The charter school’s impact on enrollments in the district’s high school grades has been much less dramatic than in the elementary, intermediate, and middle school grades. (See Tables 5-2 and 5-6 and Graph 5-5.)

Table 5-6

AVON GROVE SCHOOL DISTRICT

High School Enrollment (Grades 9-12)<sup>1/</sup>  
1999-2000 to 2009-10

<u>School Year</u>	<u>Enrollment</u> <u>9-12</u>	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
1999-2000	1,271	–	–
2000-01	1,335	64	5.0
2001-02	1,334	-1	-0.1
2002-03	1,433	99	7.4
2003-04	1,521	88	6.1
2004-05	1,620	99	6.5
2005-06	1,697	77	4.8
2006-07	1,755	58	3.4
2007-08	1,827	72	4.1
2008-09	1,813	-14	-0.8
2009-10	1,825	12	0.7
Change 1999-2000 to 2009-10		554	43.6

<sup>1/</sup> Based on October 1 figures.

Based on figures provided by the Avon Grove School District, the total reported number of district children attending nonpublic schools (that is, those in private/parochial schools, the Avon Grove Charter School, and home and cyber schools—but not any children in full-time IU programs, the limited full-time voc-tech program, or any out-of-district placements) rose from 567 in 1999-2000 to 1,031 in 2009-10, or by 464 or 81.8 percent. Clearly, the major portion of this growth is tied to the Avon Grove Charter School, where the current pupil population includes 534 Avon Grove residents. Public school enrollments grew by 869 or 19.0 percent during the ten-three year review period.

The reported number of district residents enrolled in private/parochial schools totaled 390 in 2009-10—93 or 19.3 percent lower than in 1999-2000. Growth was fairly steady early in the current decade, and enrollments reached a high of 618 in 2002-03. But, the pupil count fell in most of the subsequent years, the largest of which was a drop of 105 in 2007-08.

The number of district children enrolled in the Avon Grove Charter School increased from zero in 1999-2000 to 534 in the current school year—up by 270 or 102.3 percent from the charter school's initial year when enrollments totaled 264.

The number of district children engaged in home schooling or enrolled in cyber schools rose from 84 in 1999-2000 to 107 in 2009-10—up by 23 or 27.4 percent. Enrollments in home and cyber schools reached their highest point of 126 in 2008-09.

On a proportionate basis, in 1999-2000 total nonpublic pupils (as defined above) represented 11.0 percent of all district children reported to be in public and nonpublic schools; in 2009-10 the figure is up to 15.9 percent. The relationship of nonpublic children to total children in public and nonpublic schools averaged 15.6 percent during the entire review period; for the most recent five years the average is 16.9 percent, compared with 14.6 percent for the period 1999-2000 to 2004-05. The proportion of district children attending nonpublic schools rose modestly in the early years of this decade, but the opening of the Avon Grove Charter School in 2002-03 caused the figure to jump by almost one-third to 16.8 percent, and it subsequently rose to a high of 19.1 percent in 2004-05 before gradually declining to 15.9 percent in the 2009-10 school year. Its lowest point during the review period (10.6 percent) was in 2000-01.

Conversely, the proportion of children attending public school fell from 89.0 percent in 1999-2000 to a low of 80.9 percent in 2004-05 before rising steadily to 84.1 percent in the current school year. Its highest point during the review period (89.4 percent) was in 2000-01.

The relationship of public school children to the total number of children reported to be in public and nonpublic schools averaged 84.4 percent during the review period—83.1 percent for the most recent five year period and 85.4 percent for the prior six years.

The overall relationship between total public and reported nonpublic enrollments appears to be very strongly influenced by the role of the Avon Grove Charter School, and it may also be affected by any changes over time in the way the number of nonpublic pupils is recorded. However, the figures presented are likely to represent a valid measure of the relationship during the period 1999-2000 to 2009-10—recognizing that some nonpublic figures may be excluded from the counts. If all nonpublic enrollments were factored in, the “market share” of the public school system would likely be slightly lower.

The methodology employed to generate the projections of the district’s enrollments recognizes the impact of Avon Grove residents attending nonpublic schools and factors in the patterns of the past several years and expectations for the next several years. (See Table 5-7.)

Table 5-7

AVON GROVE SCHOOL DISTRICT

Proportion of District Children Attending Public and Nonpublic Schools  
1999-2000 to 2009-10

	AGSD Enroll- ments	Nonpublic Enrollments				Grand Total Enroll- Ments <sup>3/</sup>	AGSD as a % of Grand Total <sup>4/</sup>	Nonpublic Enrollments as a % of Grand Total <sup>4/</sup>
		Private/ Parochial	AG Charter School	Home Schools <sup>1/</sup>	Total <sup>2/</sup>			
1999-2000	4,576	483	-	84	567	5,143	89.0	11.0
2000-01	4,738	505	-	59	564	5,302	↑89.4	↓10.6
2001-02	4,773	604	-	78	682	5,455	87.5	12.5
2002-03	4,700	618	264	66	948	5,648	83.2	16.8
2003-04	4,854	596	366	75	1,037	5,891	82.4	17.6
2004-05	4,991	597	504	78	1,179	6,167	↓80.9	↑19.1
2005-06	5,205	529	507	99	1,135	6,340	82.1	17.9
2006-07	5,382	578	486	103	1,167	6,549	82.2	17.8
2007-08	5,442	473	487	110	1,070	6,512	83.6	16.4
2008-09	5,400	429	488	126	1,043	6,443	83.8	16.2
2009-10	5,445	390	534	107	1,031	6,476	84.1	15.9
<b>Change 1999-00 to 2009-10</b>	<b># 869 % 19.0</b>	<b>-93 -19.3</b>	<b>534 --</b>	<b>23 27.4</b>	<b>464 81.8</b>	<b>1,333 25.9</b>	<b>-- --</b>	<b>-- --</b>

1/ Includes children enrolled in cyber schools.

2/ Excludes any children in full-time IU programs, the limited full-time voc-tech program, and any out-of-district placements.

3/ Includes public and nonpublic pupils, but excludes any children in full-time IU programs, the limited full-time voc-tech program, and any out-of-district placements.

4/ It should be noted that the overall relationship between total public and reported nonpublic enrollments appears to be very strongly influenced by the role of the Avon Grove Charter School, but it may also be affected by any changes over time in the way the number of nonpublic pupils is recorded.

Note: Highest point marked by ↑; lowest point marked by ↓.

SOURCE: Avon Grove School District.

### Mechanics of Enrollment Projections

Enrollment projections for the Avon Grove 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 tempering that with the various community growth data that were analyzed and the expected impact of nonpublic schools in the area. This approach is designed to detect such factors as in- or out-migration of pupils; transfer of pupils between public and nonpublic schools, and into and out of special programs; withdrawals; promotional policies; and participation in any full-time vocational-technical program.

By way of example, if the grade 2 enrollments were 98 in the 2009-10 school year and grade 1 had 100 pupils in the prior school year (2008-09), 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 programs (e.g., a full-time vocational technical school), 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 public school system from nonpublic schools or special programs, and/or the failure to promote pupils to the next grade.

In the Avon Grove School District during the 2009-10 school year the progression ratios for all grades except 6, 10, and 12 were 1.00 or higher suggesting net in-migration of pupils. In the grades with a ratio below 1.00 there was not necessarily an absence of in-migration, but any in-migration may not have been as strong as in the other grades, or may have been more than offset by out-migration, transfers to nonpublic schools, entry into special classes, failure to promote pupils from the previous grade, and/or by the dropout of pupils in the high school grades.

Analysis of the progression ratios for the most recent five years reveals that the sum of the individual grade ratios fell in three years, increased in one year, and exceeded the “neutral” migration figure of 12.0 in all years. In 2005-06 the sum of the progression ratios totaled 12.6825 (its highest point during the review period). It decreased to 12.6238 in 2006-07, to 12.3978 in 2007-08, and to 12.2614 (its lowest point during the review period) in 2008-09. In 2009-10 the sum of the ratios rose to 12.3546.

A further reinforcement of in- and out-migration patterns is found in the number of individual grade progression ratios that equaled or exceeded 1.0. In 2005-06, 2006-07, 2007-08, and 2009-10, nine of the 12 figures equaled or exceeded 1.0; in 2008-09 just seven of the figures equaled or exceeded 1.0.

The sum of the progression ratios in grades 1 and 2 exceeded the “neutral” migration figure of 2.0 in all years; there were three annual decreases and one increase during this period. The sum fell from 2.3282 (its highest point during the review period) in 2005-06, to 2.2586 in 2006-07, to 2.2197 in 2007-08, and to 2.1735 (its lowest point during the review period) in 2008-09. It increased to 2.1927 in 2009-10. The progression ratios equaled or exceeded 1.0 in both of these grades in all years except 2008-09 when only one ratio equaled or exceeded 1.0.

The sum of the progression ratios for grades 3 to 6 exceeded the “neutral” point of 4.0 in each of the five years reviewed; two annual increases and two decreases were recorded during this period. In 2005-06 the sum of the ratios was 4.2220. It rose slightly to 4.2362 (its highest point during the review period) in 2006-07, but it then fell to 4.1086 in 2007-08 and to 4.0684 (its lowest point during the review period) in 2008-09. In 2009-10 the sum of the ratios grew very slightly to 4.0688. In all but one of the years reviewed each of the four grades in this grouping had progression ratios that equaled or exceeded 1.0; in 2009-10 only three of the grades had a ratio that equaled or exceeded 1.0.

The sum of the progression ratios in grades 7 and 8 exceeded the “neutral” migration figure of 2.0 in each of the past five years; three annual decreases and one annual increase were recorded during this period. The sum of the ratios dropped from 2.1394 (its highest point during the review period) in 2005-06, to 2.0978 in 2006-07, to 2.0766 in 2007-08, and to 2.0753 (its lowest point during the review period) in 2008-09. It then increased to 2.1209 in 2009-10. In 2008-09 just one of these two grades had a ratio that equaled or exceeded 1.0; in all other years both of the grades had progression ratios that equaled or exceeded 1.0.

The sum of the progression ratios for grades 9 to 12 exceeded the “neutral” point of 4.0 in just one of the past five years; there were two annual increases and two decreases during this period. In 2005-06 the sum of the ratios was 3.9929. It grew to 4.0312 (its highest point during the review period) in 2006-07, and then fell to 3.9929 in 2007-08 and to 3.9442 (its lowest point during the review period) in 2008-09. The sum of the ratios increased to 3.9722 in 2009-10. In three of the years reviewed only grade 9 had a progression ratio that equaled or exceeded 1.0; in

2009-10 both grades 9 and 11 had ratios that equaled or exceeded 1.0. The individual grade ratios and the overall ratios for most of the high school grades are normally more strongly influenced by dropouts than by general migration patterns. (See Table 5-8.)

Table 5-8

AVON GROVE SCHOOL DISTRICT

Grade Progression Ratios by Grade Configuration

<u>Grades</u>	<u>2009-10 Progression Ratios</u>	<u>2008-09 Progression Ratios</u>	<u>2007-08 Progression Ratios</u>	<u>2006-07 Progression Ratios</u>	<u>2005-06 Progression Ratios</u>
1/K	↓1.1358	1.1942	1.1662	1.1489	↑1.2682
2/1	<u>1.0569</u>	↓ <u>0.9793</u>	<u>1.0535</u>	↑ <u>1.1097</u>	<u>1.0600</u>
<b>Total 1-2</b>	<b>2.1927</b>	↓ <b>2.1735</b>	<b>2.2197</b>	<b>2.2586</b>	↑ <b>2.3282</b>
3/2	1.0476	↓1.0107	1.0306	1.0809	↑1.0947
4/3	1.0238	1.0183	1.0274	↑1.0432	↓1.0179
5/4	↓1.0022	1.0194	1.0363	↑1.0554	1.0543
6/5	↓ <u>0.9952</u>	<u>1.0200</u>	<u>1.0143</u>	↑ <u>1.0567</u>	<u>1.0551</u>
<b>Total 3-6</b>	<b>4.0688</b>	↓ <b>4.0684</b>	<b>4.1086</b>	↑ <b>4.2362</b>	<b>4.2220</b>
7/6	↑1.1078	1.0800	↓1.0463	1.0672	1.0778
8/7	<u>1.0131</u>	↓ <u>0.9953</u>	<u>1.0303</u>	<u>1.0306</u>	↑ <u>1.0616</u>
<b>Total 7-8</b>	<b>2.1209</b>	↓ <b>2.0753</b>	<b>2.0766</b>	<b>2.0978</b>	↑ <b>2.1394</b>
9/8	1.0726	1.0837	↓1.0722	↑1.1508	1.1125
10/9	0.9248	↑0.9663	0.9637	↓0.9187	0.9513
11/10	↑1.0061	↓0.9351	0.9952	0.9911	0.9808
12/11	<u>0.9687</u>	<u>0.9591</u>	<u>0.9618</u>	↑ <u>0.9706</u>	↓ <u>0.9483</u>
<b>Total 9-12</b>	<b>3.9722</b>	↓ <b>3.9442</b>	<b>3.9929</b>	↑ <b>4.0312</b>	<b>3.9929</b>
<b>Total 1-12</b>	<b><u>12.3546</u></b>	↓ <b><u>12.2614</u></b>	<b><u>12.3978</u></b>	<b><u>12.6238</u></b>	↑ <b><u>12.6825</u></b>

Note: Highest point for each grade marked by ↑; lowest point marked with ↓. Not all figures may add due to rounding.

The impact of the district’s progression ratios is clearly demonstrated by measuring their effect on children entering kindergarten and then moving through each of the grades. Using the grade-by-grade progression ratios for 2009-10, 100 children entering kindergarten this year would in theory increase to 120 second grade pupils, grow to 129 fifth graders, fall slightly to 128 sixth graders, increase to 144 in the eighth grade, and then peak at 154 ninth grade pupils before decreasing to 139 pupils in the twelfth grade. These figures contrast with those that would result from using the ratios for the 2005-06 school year—the highest aggregate figure of the past

five years (the aggregate figure for the current school year is in the second lowest of the five most recent years). Based on the 2005-06 figures, 100 kindergarten entries in that school year last year would rise to 135 second grade pupils, 168 sixth graders, 192 eighth graders, and peak at 214 pupils in the ninth grade. They would then drop steadily to 190 pupils in the twelfth grade.

In practice, neither of these patterns would 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 into and out of the public school system and special programs, promotion policies, dropouts, and so forth.

The only new input needed in projecting enrollments in this manner is kindergarten entries. In order to determine future kindergarten entries, ratios must be developed between historic kindergarten enrollments in specific school years and resident births in the district five years earlier. These ratios (or “cohort survival rates”) are then 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 nonpublic schools and special 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 and/or families opting to enroll their children in nonpublic kindergarten programs. Conversely, a figure of greater than 1.0 suggests more kindergarten entries than births in the district five years earlier indicating strong in-migration that outweighs any impact nonpublic education may play.

The ratio of kindergarten entries to births in the Avon Grove School District five years prior was noticeably lower in the current school year (1.0733) than in 2005-06 (1.1115). In the interim years, the ratio of kindergarten entries to births in the district five years prior increased to 1.1993 in 2006-07, fell to a low of 1.0334 in 2007-08, grew to 1.0982 in 2008-09, and then dropped to 1.0733 in the current school year. (See Table 5-9.)

The best available source of data on resident births in the district is the annual compilations by the PA Department of Health. However, it should be noted that birth figures for purposes of the projection methodology are based on the school year and age requirements for entry into the school system rather than the calendar year as reported elsewhere in this study. While the district requires that children be five years old by September 8 to be eligible to enter

Table 5-9

AVON GROVE SCHOOL DISTRICT

Ratios of Kindergarten Entries to Births  
2005-06 to 2008-09

<u>School Year</u>	<u>Kindergarten Enrollment</u>	<u>School Year Births 5 Years Earlier</u>		<u>Ratio of K Entries to Births</u>
		<u>School Year</u>	<u>Births</u>	
2005-06	309	1999-2000	278	1.1115
2006-07	331	2000-01	276	1.1993
2007-08	309	2001-02	299	1.0334
2008-09	302	1997-98	275	1.0982
2009-10	322	1998-99	300	1.0733

kindergarten in a given school year, because birth data are published only by month, the school year figures used in this analysis reflect the period September 1 through August 31.

The resulting figures reveal that the births in calendar year 2005 were 331; for the school year September 2004 through August 2005 (those who will enter kindergarten in 2010-11) the figure was 335. Birth figures for calendar year 2006 were 360, and for school year 2005-06 births totaled 340. Calendar year births for 2007 were 353, and for school year 2006-07 births were 363. Preliminary birth figures for 2008 were 332, and for school year 2007-08 births were 325. (See Table 5-10.)

Table 5-10

AVON GROVE SCHOOL DISTRICT

Relationship Between Calendar Year and School Year Births  
2005 to 2008<sup>1/</sup>

<u>Kindergarten Year</u>	<u>Calendar Year Births</u>		<u>School Year Births</u>	
	<u>CY</u>	<u>#</u>	<u>SY</u>	<u>#</u>
2010-11	2005	331	2004-05	335
2011-12	2006	360	2005-06	340
2012-13	2007	353	2006-07	363
2013-14	2008 <sup>1/</sup>	332	2007-08 <sup>1/</sup>	325

<sup>1/</sup> Preliminary figures.

The use of resident births and the “cohort survival rate” to project kindergarten entries restricts “high confidence” estimates of future enrollments for all grades to the fifth school year beyond the most recent year for which birth data are available. For example, preliminary data on resident births for the Avon Grove School District are currently available through calendar year 2008. Projections of kindergarten enrollments, then, can be made through the 2013-14 school year based on the cohort survival rate and the birth figures covering September 2007 through August 2008 (which represent the main source of kindergarten entries in the 2013-14 school year). PEL’s primary projections, however, extend five years beyond the current school year or to school year 2014-15—one year beyond the birth data available to determine kindergarten entries. To fill this gap, the average birth figure for the three most recent years was used to calculate kindergarten entries in 2014-15. When birth figures for 2009 become available, the projections of kindergarten pupils for the 2014-15 school year may change slightly.

Enrollment projections for the secondary grades could be carried five years further because they are based primarily on births that have already occurred and on pupils currently in the elementary levels of the school system. Extended projections of district enrollments beyond the 2014-15 school year are provided later in this chapter.

The effect of changing births patterns can be demonstrated by measuring their impact on total enrollments in the absence of net in- or out-migration; that is, the ratios of kindergarten entries to births in the district five years prior would equal 1.0, as would all grade progression ratios. A school district that had experienced a steady 18-year pattern of 100 births annually—in the absence of net in- or out-migration—would have a total K-12 enrollment of 1,300 pupils. If this district were to begin experiencing increases in births of five per year (that is, in the first year, five more births than in the base year, in the second year, ten more than the base year, etc.), the effect on total enrollments (again, in the absence of net in-or out-migration) would be an increase of five pupils in the fifth year after births began to rise (the year when children from the first year of the increase would enter kindergarten). The total enrollment in that year would be 1,305 or just 0.4 percent higher than in the base year. However, in subsequent years the increase would compound and grow to 75 pupils in the ninth year after births began to rise—equivalent to PEL’s fifth projected year (when the children resulting from the first year of the increase in births would reach the fourth grade). Total enrollments in that year would reach 1,375—an increase of 5.8 percent over the base year. The increase would further compound to 275 pupils

in the 15<sup>th</sup> year after births began to rise—equivalent to PEL’s tenth projected year (when the children resulting from the first year of the increase would reach the ninth grade). Total enrollments in that year would reach 1,575 and be 21.2 percent higher than in the base year.

Conversely, if the same district were to begin experiencing decreases in births of five per year, the effect on total enrollments—in the absence of net in- or out-migration—would be a loss of five pupils in the fifth year after births began to fall. The total enrollments would decline slightly in that year to 1,295 or by 0.4 percent. The decrease in enrollments would compound to 75 pupils in the tenth year after births began to drop—equivalent to PEL’s fifth projected year—when enrollments would total 1,225 and be 5.8 percent below the base year. The decrease would further compound to 275 pupils in the 15<sup>th</sup> year after births began to decrease—equivalent to PEL’s tenth projected year—and total enrollments in that year would be 1,025, down by 21.2 percent from the base year.

The theoretical impact of the changes in birth patterns based on these points of reference would likely not occur precisely as outlined in these examples because of year-to-year variations in birth patterns and because of the effect of in- and out-migration during the pre-school years and as children move through the grades. But, the nature of the impact that changing births patterns can have on enrollments is apparent: births have a powerful influence on future enrollments independent of migration patterns (that can compound or neutralize the impact of births); there is a five-year delay in the impact of changes in birth patterns; and a series of similar changes will have a compounding effect. With respect to the scenario used here, it should also be noted that the precise size of the changes in enrollments would be influenced by the relative magnitude of births in a given district and by the relative and absolute size of the changes in birth patterns. For example, births in the Avon Grove School District during the past ten years—on average—were about three times the figure used in this example, and during this period they rose by almost eight per year, on average—or more than the figure in the model outlined above.

In developing and refining its projection methodology PEL was very sensitive to the recent and expected future impact of the Avon Grove Charter School on the district’s enrollments, as well as several other potential influences: renovations and the possible expansion of St. Mary’s School; the long-rumored construction of a Catholic high school in southern Chester County; the opening of the Chester County Technical College High School by the Chester County Intermediate Unit; and the continuing role of St. Mark’s High School.

With respect to the Avon Grove Charter School (which has experienced a growth in the enrollment of Avon Grove residents from 264 in the fall of 2002—its initial year—to 534 in the current school year, the Dean of Students reports that future overall growth is expected to be more modest than in the past, and that this slowed pace of growth will be particularly true with respect to the number of Avon Grove children enrolled. In 2006-07, 2007-08, and 2008-09, the number of Avon Grove children at the charter school remained stable at about 43 percent of the charter school's total enrollment; in the current school year the number of Avon Grove residents enrolled is down to 38.6 percent of the total. It is reported that in recent years relatively more charter school pupils have come from neighboring districts, and it is believed that a higher proportion of future charter school enrollments enrollment are also likely to come from the neighboring districts.

The charter school's purchase and use of the district's former Kemblesville Elementary Building as its Early Learning Center starting in the fall of 2008 has allowed it to provide an additional section of kindergarten (approximately 20 children). Otherwise, the Early Learning Center is not believed to have directly resulted in any expansion in the scope of the charter school, and it is not expected to result in future expansion in the near-term. Reportedly, the expanded facility is designed primarily to help the charter school prevent overcrowding and aid in improving the overall educational climate.

Given the nature of the new the Chester County Technical College High School (which opened in Jennersville in the fall of 2008) and the availability of more programs, the participation of Avon Grove pupils has doubled from what was previously the case at the Brandywine Campus—from about 110 to 220. However, because the program at the new facility is primarily half-day (that is, the pupils attend class in the district in the morning and at the new facility in the afternoon—as was the case at Brandywine), the vast majority of participating pupils are included in the enrollment counts of the Avon Grove School District (and the home districts of other pupils). As such, the new campus has not had—nor is it expected to have—any material impact on the district's enrollments for purposes of these projections (which are based on district figures as of October 1 of each year).

The Principal of the Assumption Blessed Virgin Mary Parish School in West Grove (also known as St. Mary's) reported that there are no immediate plans for expansion. The school was recently renovated, and, in addition to updating and improving the appearance of the facility, it

allowed for a new pre-K section to become operational in the fall of 2008. This has not had—nor is it expected to have—any material impact on public school enrollments in the district. While the Principal indicated that the parish hopes to expand the school at some point in the future to provide additional classroom space, she indicated that this is not in the two-year plan.

With respect to the long-rumored Catholic high school in the area, it is not expected that any new 9-12 facility in southern Chester County will be operational within the next five years (at a minimum). The archdiocese is building a new high school in Upper Providence Township near Royersford in Montgomery County (Pope John Paul II) which is expected to open in the fall of 2010. In addition, the archdiocese expects to begin construction next year of a new high school in Hilltown Township in the Pennridge School District in Bucks County (bordering Montgomery County). This facility will be known as Lansdale Catholic Regional High School and will allow for the relocation of the current Lansdale Catholic High School from Lansdale Borough. Barring unforeseen delays, it is believed that this building will be operational in the fall of 2012.

In view of all this, PEL's projections of future enrollments in the Avon Grove School District do not factor in any impact from the expansion of St. Mary's or the opening of a Catholic high school in the area. Nonetheless, the district should be mindful of these two possibilities and maintain an ongoing dialogue with representatives of the parish and its school, and also keep a watchful eye on the status of the proposal to construct a Catholic high school in southern Chester County. In that way district administrators can learn more about the timeline for these projects, how many additional children the new facilities expect to draw from Avon Grove, and, ultimately, the overall potential impact of a new Catholic high school on the district's market share and pupil population.

Discussion with a representative of St. Mark's High School revealed no specific plans for expansion, and, in fact, an expectation that, overall, enrollments would remain fairly stable. As such, there should be no noticeable increase (or decrease) in the number of Avon Grove residents attending St. Mark's. Therefore, PEL's methodology with respect to projecting high school enrollments in the Avon Grove School District reflects no material change in the impact of St. Mark's from that experience over the past several years.

### Enrollment Projections—Primary Period

The projections that follow are based on the numbers and type of new housing that is expected to be constructed in the approved and proposed subdivisions in the Avon Grove School District in the next ten years as well as additional housing that can reasonably be assumed to be built during this period (all as outlined in Chapter 2)—factoring in—to the extent possible—the belief that some of the approved and proposed projects (and the one under discussion, as well) may not move forward in a timely fashion, may be scaled back, or may not occur at all due to the continuing turmoil in the housing and mortgage industries; weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; bankruptcies; or other reasons. It should also be noted that there has been speculation that the "growth philosophies" of some of the district's municipalities may be affected by the outcome of the November 2009 election, and this, in turn, may also have an effect on the future pace of development. The methodology is also sensitive to the expected number of age-restricted and similar housing units that will likely be built during the next ten years and the ongoing turnover of mature housing. Further, the methodology assumes that overall migration and related patterns will remain consistent with expected patterns, that the role of nonpublic education will be compatible with the recent past and current expectations, and the district will continue its current policies relative to its kindergarten, voc-tech, and special education programs and maintain other key policies.

Given these assumptions and conditions, PEL projects that enrollments in Avon Grove will total 5,716 in 2014-15—271 pupils (5.0 percent) higher than the 2009-10 level. Increases are expected in all years during this period. The largest annual growth (95 or 1.7 percent) will occur in 2012-13; the smallest rise (18 or 0.3 percent) will be recorded in 2011-12. The overall projected increase averages 54 pupils yearly compared with an annual average net increase of 91 pupils during the most recent five years. (See Tables 5-11 and 5-12 and Graph 5-1.)

Table 5-11

AVON GROVE SCHOOL DISTRICT

Total Enrollment Projections (Grades K-12)  
2009-10 to 2014-15

<u>School Year</u>	<u>Enrollment K-12</u>	<u>Change From Previous Year</u>	
		<u>#</u>	<u>%</u>
2009-10 (actual)	5,445	45	0.8
2010-11	5,490	45	0.8
2011-12	5,508	18	0.3
2012-13	5,603	95	1.7
2013-14	5,674	71	1.3
2014-15	5,716	42	0.7
Change 2009-10 to 2014-15		271	5.0

Table 5-12

## AVON GROVE SCHOOL DISTRICT

Total Projected Enrollments by Grade  
2009-10 to 2014-15

<u>Year</u>	<u>K</u>	<u>1</u>	<u>2</u>	<b>Total</b> <b><u>K-2</u></b>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<b>Total</b> <b><u>3-6</u></b>	<u>7</u>	<u>8</u>	<b>Total</b> <b><u>7-8</u></b>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<b>Total</b> <b><u>9-12</u></b>	<b>Total</b> <b><u>K-12</u></b>
2009-10 (actual)	322	343	390	<b>1,055</b>	396	387	447	418	<b>1,648</b>	452	465	<b>917</b>	458	443	491	433	<b>1,825</b>	<b>5,445</b>
2010-11	358	375	353	<b>1,086</b>	402	405	394	451	<b>1,652</b>	451	458	<b>909</b>	500	436	434	473	<b>1,843</b>	<b>5,490</b>
2011-12	363	417	386	<b>1,166</b>	363	411	413	398	<b>1,585</b>	486	457	<b>943</b>	493	476	427	418	<b>1,814</b>	<b>5,508</b>
2012-13	388	423	429	<b>1,240</b>	397	371	419	417	<b>1,604</b>	429	492	<b>921</b>	492	469	466	411	<b>1,838</b>	<b>5,603</b>
2013-14	347	452	436	<b>1,235</b>	442	406	378	423	<b>1,649</b>	450	435	<b>885</b>	529	468	459	449	<b>1,905</b>	<b>5,674</b>
2014-15	366	404	466	<b>1,236</b>	449	452	414	382	<b>1,697</b>	456	456	<b>912</b>	468	503	458	442	<b>1,871</b>	<b>5,716</b>
<u>Pupil Change</u>																		
2009-10 to																		
2014-15	44	61	76	<b>181</b>	53	65	-33	-36	<b>49</b>	4	-9	<b>-5</b>	10	60	-33	9	<b>46</b>	<b>271</b>
<u>Percent Change</u>																		
2009-10 to																		
2014-15	13.7	17.8	19.5	<b>17.2</b>	13.4	16.8	-7.4	-8.6	<b>3.0</b>	0.9	-1.9	<b>-0.5</b>	2.2	13.5	-6.7	2.1	<b>2.5</b>	<b>5.0</b>

Projections of elementary enrollments (grades K-2) suggest that they will total 1,236 in 2014-15 and be 181 pupils or 17.2 percent higher than in 2009-10. Increases will occur in all years during this period except 2013-14 when a drop of five pupils (0.4 percent) is expected. The largest annual gain (80 or 7.4 percent) will be in 2011-12; the smallest (one or 0.1 percent) will be recorded in 2014-15. The overall projected net increase in enrollments averages 36 pupils yearly compared with a net rise of 13 pupils yearly (on average) during the past five years. The acceleration in the overall rate of increase in the pupil population in grades K-2 is caused primarily by higher annual births in the district in most of the years of the current decade, partially offset by a slight decline in the relationship between kindergarten entries and births in the district five years prior and slightly lower grade progression ratios at the elementary level. (See Tables 5-12 and 5-13 and Graph 5-2.)

Table 5-13

AVON GROVE SCHOOL DISTRICT

Elementary Enrollment Projections (Grades K-2)  
2009-10 to 2014-15

<u>School Year</u>	<u>Enrollment K-2</u>	<u>Change From Previous Year</u>	
		<u>#</u>	<u>%</u>
2009-10 (actual)	1,055	6	0.6
2010-11	1,086	31	2.9
2011-12	1,166	80	7.4
2012-13	1,240	74	6.3
2013-14	1,235	-5	-0.4
2014-15	1,236	1	0.1
Change 2009-10 to 2014-15		181	17.2

Projections of intermediate enrollments (grades 3-6) suggest that the pupil population will reach 1,697 in 2014-15—49 or 3.0 percent higher than in the current school year. Increases will be recorded in all years during this period except 2011-12, when a drop of 67 (4.1 percent) will occur. The largest annual rise will be experienced in 2014-15 (48 or 2.9 percent); the smallest will occur in 2010-11 (four or 0.2 percent). The projected net growth will average ten pupils annually compared with an average net yearly increase of 17 pupils during the most recent five-years. The slowing in the overall pattern of growth in the intermediate grades during the primary projection period is a function of a slight decline in net in-migration rates in these grades in recent years and is consistent with enrollment trends at the elementary level in the past three years and the expected pattern during the next several years, which, in turn, reflect the recent grade progression experience. (See Tables 5-12 and 5-14 and Graph 5-3.)

Table 5-14

AVON GROVE SCHOOL DISTRICT

Intermediate Enrollment Projections (Grades 3-6)  
2009-10 to 2014-15

<u>School Year</u>	<u>Enrollment</u> <u>3-6</u>	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
2009-10 (actual)	1,648	-4	-0.2
2010-11	1,652	4	0.2
2011-12	1,585	-67	-4.1
2012-13	1,604	19	1.2
2013-14	1,649	45	2.8
2014-15	1,697	48	2.9
Change 2009-10 to 2014-15		49	3.0

Projections for the middle school (grades 7-8) suggest that enrollments will total 912 in 2014-15 and be five pupils or 0.5 percent lower than in the current school year. Three annual decreases and two increases will occur during this period. The largest drop in pupils (36 or 3.9 percent) will be in 2013-14; the smallest decline (eight or 0.9 percent) is expected in 2010-11. The increases will occur in 2011-12 (34 or 3.7 percent) and 2014-15 (27 or 3.1 percent). The projected average annual net decrease in enrollments at the middle school will be one pupil compared with a net average increase of 20 pupils during the most recent five years. The reversal from a noticeable pace of growth in grades 7 and 8 in the recent past to a very slight net loss of pupils is in keeping with the actual pattern of enrollments in the lower grades during the past two years and the projected pattern in these grades during the next few years. (See Tables 5-12 and 5-15 and Graph 5-4.)

Table 5-15

AVON GROVE SCHOOL DISTRICT

Middle School Enrollment Projections (Grades 7-8)  
2009-10 to 2014-15

<u>School Year</u>	<u>Enrollment</u> <u>7-8</u>	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
2009-10 (actual)	917	31	3.5
2010-11	909	-8	-0.9
2011-12	943	34	3.7
2012-13	921	-22	-2.3
2013-14	885	-36	-3.9
2014-15	912	27	3.1
Change 2009-10 to 2014-15		-5	-0.5

Projections for the high school (grades 9-12) indicate that enrollments will total 1,871 in 2014-15—up by 46 pupils or 2.5 percent from the current school year. Increases are projected to occur in all years during this period except 2011-12 (when a decrease of 29 or 1.6 percent is expected) and 2014 (when a drop of 34 or 1.8 percent is expected). The largest growth in high school enrollments (67 or 3.6 percent) will be recorded in 2013-14; the smallest (18 or 1.0 percent) will be in 2010-11. The projected average annual net rise will be nine pupils compared with an average net gain of 41 pupils annually during the most recent five years. The noticeable deceleration in the overall rate of increase in high school enrollments during the primary projection period reflects the movement into these grades of intermediate level classes from the recent past and the first several projected years that exhibit somewhat slower rates of growth than the classes that preceded them and, in some cases, outright decreases in enrollments. (See Tables 5-12 and 5-16 and Graph 5-5.)

Table 5-16

AVON GROVE SCHOOL DISTRICT

High School Enrollment Projections (Grades 9-12)  
2009-10 to 2014-15

<u>School Year</u>	<u>Enrollment</u> 9-12	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
2009-10 (actual)	1,825	12	0.7
2010-11	1,843	18	1.0
2011-12	1,814	-29	-1.6
2012-13	1,838	24	1.3
2013-14	1,905	67	3.6
2014-15	1,871	-34	-1.8
Change 2009-10 to 2014-15		46	2.5

### Enrollment Projections—Extended Period

As stated in the discussion of the methodology employed to generate these projections, high confidence projections can be offered for a limited period beyond the most recent year for which actual birth figures are available. To go further would involve estimating or projecting future births, the key component in new kindergarten entries. This limitation, however, does not apply to secondary enrollments because they rely largely on children already born and/or in the school system. In order to provide a long-term perspective while recognizing methodological limitations, extended projections for the district's enrollments have been prepared for the years 2015-16 through the 2019-20.

If births hold steady at the average level of the three most recent years for which data are available (343), the total number and type of housing units in the district rise at the expected rate (as outlined in Chapter 2), overall migration and related patterns, including the role of nonpublic education, remain in keeping with expected patterns, and key policies relative to the district's kindergarten program, the voc-tech program, special education programs, etc., remain unchanged, total enrollments in the Avon Grove School District will rise from 5,716 in 2014-15 to 6,013 in 2019-20. The figure projected for 2019-20 is 297 or 5.2 percent higher than the projection for 2014-15 and, given the increase of 271 pupils projected between 2009-10 and 2014-15, it will be 568 pupils or 10.4 percent above the actual figure for the current school year.

During the extended period increases in total enrollments will be recorded in all years. The largest gain (86 or 1.5 percent) will occur in 2018-19; the smallest growth (27 or 0.5 percent) will be in 2017-18. The annual increase during the extended period will average 59 pupils compared with an average increase of 54 pupils per year during the first five projected years and an average net increase of 91 pupils per year during the past five years. Based on the assumptions used, beyond school year 2019-20 total enrollments are likely to grow somewhat, then decrease slightly, and eventually stabilize at a level modestly above the projected figure for 2019-20. (See Tables 5-17 and 5-18 and Graph 5-6.)

Table 5-17

AVON GROVE SCHOOL DISTRICT

Extended Total Enrollment Projections (Grades K-12)<sup>1/</sup>  
2014-15 to 2019-20

<u>School Year</u>	<u>Enrollment K-12</u>	<u>Change From Previous Year</u>	
		<u>#</u>	<u>%</u>
2014-15	5,716	42	0.7
2015-16	5,770	54	0.9
2016-17	5,828	58	1.0
2017-18	5,855	27	0.5
2018-19	5,941	86	1.5
2019-20	6,013	72	1.2
Change 2014-15 to 2019-20		297	5.2
Change 2009-10 to 2019-20		568	10.4

<sup>1/</sup> Based on births fixed at 343.

Enrollments at the elementary level (grades K-2) are expected to total to 1,233 in 2019-20—a net decrease of three pupils (0.2 percent) from 2014-15. Enrollments in these grades in 2019-20, however, will still be 178 or 16.9 percent higher than in 2009-10 given the increase of 181 pupils projected for the period 2009-10 to 2014-15. Enrollments will drop by 27 (2.2 percent) in 2015-16, increase by 24 (2.0 percent) in 2016-17, and remain unchanged in the final three projected years of the extended period. The net decrease in enrollments in grades K-2 during the extended period will average one pupil yearly compared with an average net increase of 36 pupils per year during the first five projected years and a net rise of 13 pupils per year during the most recent five years. The reversal from the pattern of growth in grades K-2 during the primary projection period to a pattern of very modest net decline during the extended projection period is largely a function of the constant number of births on which the projection model is based. After 2019-20—given the assumptions used—enrollments in grades K-2 can be expected to remain stable. (See Tables 5-18 and 5-19 and Graph 5-7.)

Table 5-18

## AVON GROVE SCHOOL DISTRICT

Extended Total Enrollment Projections by Grade Based on Births Fixed at 343  
2014-15 to 2019-20

<u>Year</u>	<u>K</u>	<u>1</u>	<u>2</u>	<b>Total <u>K-2</u></b>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<b>Total <u>3-6</u></b>	<u>7</u>	<u>8</u>	<b>Total <u>7-8</u></b>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<b>Total <u>9-12</u></b>	<b>Total <u>K-12</u></b>
2014-15	366	404	466	<b>1,236</b>	449	452	414	382	<b>1,697</b>	456	456	<b>912</b>	468	503	458	442	<b>1,871</b>	<b>5,716</b>
2015-16	366	427	416	<b>1,209</b>	480	459	461	418	<b>1,818</b>	412	462	<b>874</b>	491	445	492	441	<b>1,869</b>	<b>5,770</b>
2016-17	366	427	440	<b>1,233</b>	428	491	468	466	<b>1,853</b>	451	417	<b>868</b>	497	467	436	474	<b>1,874</b>	<b>5,828</b>
2017-18	366	427	440	<b>1,233</b>	453	438	500	473	<b>1,864</b>	502	457	<b>959</b>	449	473	457	420	<b>1,799</b>	<b>5,855</b>
2018-19	366	427	440	<b>1,233</b>	453	464	446	505	<b>1,868</b>	510	508	<b>1,018</b>	492	427	463	440	<b>1,822</b>	<b>5,941</b>
2019-20	366	427	440	<b>1,233</b>	453	464	473	450	<b>1,840</b>	544	517	<b>1,061</b>	547	468	418	446	<b>1,879</b>	<b>6,013</b>
<u>Pupil Change</u>																		
2014-15 to																		
2019-20	-	23	-26	<b>-3</b>	4	12	59	68	<b>143</b>	88	61	<b>149</b>	79	-35	-40	4	<b>8</b>	<b>297</b>
<u>Percent Change</u>																		
2014-15 to																		
2019-20	-	5.7	-5.6	<b>-0.2</b>	0.9	2.7	14.3	17.8	<b>8.4</b>	19.3	13.4	<b>16.3</b>	16.9	-7.0	-8.7	0.9	<b>0.4</b>	<b>5.2</b>
<u>Pupil Change</u>																		
2009-10 to																		
2019-20	44	84	50	<b>178</b>	57	77	26	32	<b>192</b>	92	52	<b>144</b>	89	25	-73	13	<b>54</b>	<b>568</b>
<u>Percent Change</u>																		
2009-10 to																		
2019-20	13.7	24.5	12.8	<b>16.9</b>	14.4	19.9	5.8	7.7	<b>11.7</b>	20.4	11.2	<b>15.7</b>	19.4	5.6	-14.9	3.0	<b>3.0</b>	<b>10.4</b>

Table 5-19

AVON GROVE SCHOOL DISTRICT

Extended Elementary Enrollment Projections (Grades K-2)<sup>1/</sup>  
2014-15 to 2019-20

<u>School Year</u>	<u>Enrollment K-2</u>	<u>Change From Previous Year</u>	
		<u>#</u>	<u>%</u>
2014-15	1,236	1	0.1
2015-16	1,209	-27	-2.2
2016-17	1,233	24	2.0
2017-18	1,233	NC	NC
2018-19	1,233	NC	NC
2019-20	1,233	NC	NC
Change 2014-15 to 2019-20		-3	-0.2
Change 2009-10 to 2019-20		178	16.9

<sup>1/</sup> Based on births fixed at 343.

Intermediate enrollments (grades 3-6) will total 1,840 in 2019-20 and be 143 or 8.4 percent higher than in 2014-15. Increases will occur in all years during this period except 2019-20 when a drop of 28 (1.5 percent) is expected. The increases in the pupil population will range from four (0.2 percent) in 2018-19 to 121 (7.1 percent) in 2015-16. Enrollments in these grades in 2019-20 will be 192 pupils or 11.7 percent higher than in 2009-10 given the increase of 49 pupils projected for the period 2009-10 through 2014-15. The annual net increase in enrollments in grades 3-6 during the extended period will average 29 pupils yearly compared with an average annual net increase of ten pupils per year during the first five projected years and an annual net increase of 17 pupils during the most recent five-year period. The overall acceleration in enrollment growth in the intermediate grades during the extended period is consistent with the pattern of enrollments in the lower grades that is projected for the early years of the next decade. Given the assumptions used, subsequent to 2019-20 enrollments in grades 3-6 can be expected to increase very slightly and then stabilize. (See Table 5-18 and 5-20 and Graph 5-8.)

Table 5-20

AVON GROVE SCHOOL DISTRICT

Extended Intermediate Enrollment Projections (Grades 3-6)<sup>1/</sup>  
2014-15 to 2019-20

<u>School Year</u>	<u>Enrollment</u> 3-6	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
2014-15	1,697	48	2.9
2015-16	1,818	121	7.1
2016-17	1,853	35	1.9
2017-18	1,864	11	0.6
2018-19	1,868	4	0.2
2019-20	1,840	-28	-1.5
Change 2014-15 to 2019-20		143	8.4
Change 2009-10 to 2019-20		192	11.7

<sup>1/</sup> Based on births fixed at 343.

Middle school enrollments (grades 7-8) will total 1,061 in 2019-20 and be 149 pupils or 16.3 percent higher than in 2014-15. Increases will occur in all years during this period except 2015-16 (when a decrease of 38 pupils or 4.2 percent is expected) and 2016-17 (when a decline of six pupils or 0.7 percent will be experienced). The largest annual rise (91 or 10.5 percent) is expected in 2017-18; the smallest growth (43 or 4.2 percent) will be in 2019-20. Middle school enrollments in 2019-20 will be 144 pupils or 15.7 percent higher than in 2009-10 given the decrease of five pupils projected for the period 2009-10 through 2014-15. The net increase in middle school enrollments during the extended period will average 30 pupils yearly compared with an average annual net decrease of one pupil per year during the first five projected years and a net gain of 20 during the most recent five-year period. The reversal from a very modest net loss in enrollments in grades 7 and 8 during the primary projected period to a noticeable overall pace of pupil growth during the extended period follows from the projected pattern of enrollments in the intermediate grades during the middle years of the next decade. Subsequent to 2019-20, middle school enrollments can be expected to decrease and then increase and stabilize

at a level slightly below the projection for 2019-20—based on the assumptions used. (See Table 5-18 and 5-21 and Graph 5-9.)

Table 5-21

AVON GROVE SCHOOL DISTRICT

Extended Middle School Enrollment Projections (Grades 7-8)  
2014-15 to 2019-20

<u>School Year</u>	<u>Enrollment</u> <u>7-8</u>	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
2014-15	912	27	3.1
2015-16	874	-38	-4.2
2016-17	868	-6	-0.7
2017-18	959	91	10.5
2018-19	1,018	59	6.2
2019-20	1,061	43	4.2
Change 2014-15 to 2019-20		149	16.3
Change 2009-10 to 2019-20		144	15.7

High school enrollments (grades 9-12) will total 1,879 in 2019-20 and be eight pupils or 0.4 percent higher than in 2014-15. Increases will be recorded in all years during the extended projection period except 2015-16 (when a decrease of two or 0.1 percent is expected) and 2017-18 (when a decline of 75 or 4.0 percent will occur). The largest growth (57 or 3.1 percent) will occur in 2019-20; the smallest (five or 0.3 percent) will be in 2016-17. High school enrollments in 2019-20 will be 54 or 3.0 percent higher than in 2009-10 given the increase of 46 projected for the period 2009-10 through 2014-15. The net rise in enrollments in grades 9-12 during the extended period will average two pupils yearly compared with an average net growth of nine pupils per year during the first five projected years and an annual gain of 41 pupils during the most recent five-year period. The slowed rate of increase in enrollments at the high school level during the extended projection period is in keeping with the projected pattern of pupil population in the lower grades in the prior school years. Subsequent to 2019-20, given the assumptions

used, high school enrollments can be expected to experience several increases and a decrease, and ultimately stabilize at a level well above the figure projected for 2019-20. (See Table 5-18 and 5-22 and Graph 5-10.)

Table 5-22

AVON GROVE SCHOOL DISTRICT

Extended High School Enrollment Projections (Grades 9-12)  
2014-15 to 2019-20

<u>School Year</u>	<u>Enrollment</u> 9-12	<u>Change From</u> <u>Previous Year</u>	
		<u>#</u>	<u>%</u>
2014-15	1,871	-34	-1.8
2015-16	1,869	-2	-0.1
2016-17	1,874	5	0.3
2017-18	1,799	-75	-4.0
2018-19	1,822	23	1.3
2019-20	1,879	57	3.1
Change 2014-15 to 2019-20		8	0.4
Change 2009-10 to 2019-20		54	3.0

Alternative Extended Enrollment Projections

In contrast with the extended projections based on the average of births of the most recent three years for which data are available (the “preferred” projections), alternative extended projections based on the births fixed at the highest annual figure during the past several years (363—the 2006-07 school year figure) suggest that total enrollments in 2019-20 would be 6,167—429 pupils (7.5 percent) higher than the preferred extended projection resulting from using the average birth figure of the past three years. This figure (6,167) is 429 pupils or 7.5 percent above the figure projected for 2014-15 and 722 or 13.3 percent higher than the actual 2009-10 level.

Enrollments in grades K-2 using this alternative approach would be 1,306 in 2019-20 compared with the preferred extended projection of 1,233. This figure (1,306) is 48 or 3.8

percent higher than in 2014-15 and 251 or 23.8 percent higher than in 2009-10. Enrollments in the intermediate grades (3-6) resulting from this use of the higher birth figure would be 1,921 in 2019-20 compared with the preferred extended projection of 1,840. This figure (1,921) is 224 or 13.2 percent higher than in 2014-15 and 273 or 16.6 percent higher than in 2009-10. Middle and high school enrollments would be unchanged from the preferred extended projections because the use of different birth figures has no effect on the extended projections beyond grade 6 during the next ten years, and, therefore, any impact would not be reflected in these grades until the early years of the decade of the 2020s. (See Table 5-23.)

A somewhat different picture develops if projections are based on the assumption that births will remain constant at the lowest level of the past several years (325—the 2007-08 school year figure). Total enrollments using this alternative approach would reach 5,869 in 2019-20—just 172 pupils (3.0 percent) above the projected figure for 2014-15, and 424 pupils (7.8 percent) higher than in 2009-10. The resulting 2019-20 figure would be 144 pupils (2.4 percent) lower than the preferred extended projection and 298 pupils (4.8 percent) lower than the projection resulting from the use of the highest recent birth figure.

Enrollments in grades K-2 resulting from this alternative scenario would be 1,167 in 2019-20 compared with the preferred extended projection of 1,233. This figure (1,167) is 50 pupils or 4.1 percent lower than the projected level for 2014-15, and 112 pupils or 10.6 percent higher than in 2009-10. Intermediate enrollments (grades 3-6) resulting from this approach would be 1,762 in 2019-20 compared with the preferred extended projection of 1,840. This figure (1,762) is 65 pupils or 3.8 percent higher than the projected level for 2014-15 and 114 pupils or 6.9 percent higher than in 2009-10. Middle and high school enrollments would be unchanged from the preferred extended projections. (See Table 5-24.)

Table 5-23

## AVON GROVE SCHOOL DISTRICT

Alternative Extended Total Enrollment Projections by Grade Based on Births Fixed at 363  
2014-15 to 2019-20

<u>Year</u>	<u>K</u>	<u>1</u>	<u>2</u>	<b>Total</b> <b><u>K-2</u></b>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<b>Total</b> <b><u>3-6</u></b>	<u>7</u>	<u>8</u>	<b>Total</b> <b><u>7-8</u></b>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<b>Total</b> <b><u>9-12</u></b>	<b>Total</b> <b><u>K-12</u></b>
2014-15	388	404	466	<b>1,258</b>	449	452	414	382	<b>1,697</b>	456	456	<b>912</b>	468	503	458	442	<b>1,871</b>	<b>5,738</b>
2015-16	388	452	416	<b>1,256</b>	480	459	461	418	<b>1,818</b>	412	462	<b>874</b>	491	445	492	441	<b>1,869</b>	<b>5,817</b>
2016-17	388	452	466	<b>1,306</b>	428	491	468	466	<b>1,853</b>	451	417	<b>868</b>	497	467	436	474	<b>1,874</b>	<b>5,901</b>
2017-18	388	452	466	<b>1,306</b>	480	438	500	473	<b>1,891</b>	502	457	<b>959</b>	449	473	457	420	<b>1,799</b>	<b>5,955</b>
2018-19	388	452	466	<b>1,306</b>	480	491	446	505	<b>1,922</b>	510	508	<b>1,018</b>	492	427	463	440	<b>1,822</b>	<b>6,068</b>
2019-20	388	452	466	<b>1,306</b>	480	491	500	450	<b>1,921</b>	544	517	<b>1,061</b>	547	468	418	446	<b>1,879</b>	<b>6,167</b>
<u>Pupil Change</u>																		
2014-15 to																		
2019-20	-	48	-	<b>48</b>	31	39	86	68	<b>224</b>	88	61	<b>149</b>	79	-35	-40	4	<b>8</b>	<b>429</b>
<u>Percent Change</u>																		
2014-15 to																		
2019-20	-	11.9	-	<b>3.8</b>	6.9	8.6	20.8	17.8	<b>13.2</b>	19.3	13.4	<b>16.3</b>	16.9	-7.0	-8.7	0.9	<b>0.4</b>	<b>7.5</b>
<u>Pupil Change</u>																		
2009-10 to																		
2019-20	66	109	76	<b>251</b>	84	104	53	32	<b>273</b>	92	52	<b>144</b>	89	25	-73	13	<b>54</b>	<b>722</b>
<u>Percent Change</u>																		
2009-10 to																		
2019-20	20.5	31.8	19.5	<b>23.8</b>	21.2	26.9	11.9	7.7	<b>16.6</b>	20.4	11.2	<b>15.7</b>	19.4	5.6	-14.9	3.0	<b>3.0</b>	<b>13.3</b>

Table 5-24

## AVON GROVE SCHOOL DISTRICT

Alternative Extended Total Enrollment Projections by Grade Based on Births Fixed at 325  
2014-15 to 2019-20

<u>Year</u>	<u>K</u>	<u>1</u>	<u>2</u>	<b>Total</b> <b><u>K-2</u></b>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<b>Total</b> <b><u>3-6</u></b>	<u>7</u>	<u>8</u>	<b>Total</b> <b><u>7-8</u></b>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<b>Total</b> <b><u>9-12</u></b>	<b>Total</b> <b><u>K-12</u></b>
2014-15	347	404	466	<b>1,217</b>	449	452	414	382	<b>1,697</b>	456	456	<b>912</b>	468	503	458	442	<b>1,871</b>	<b>5,697</b>
2015-16	347	404	416	<b>1,167</b>	480	459	461	418	<b>1,818</b>	412	462	<b>874</b>	491	445	492	441	<b>1,869</b>	<b>5,728</b>
2016-17	347	404	416	<b>1,167</b>	428	491	468	466	<b>1,853</b>	451	417	<b>868</b>	497	467	436	474	<b>1,874</b>	<b>5,762</b>
2017-18	347	404	416	<b>1,167</b>	428	438	500	473	<b>1,839</b>	502	457	<b>959</b>	449	473	457	420	<b>1,799</b>	<b>5,764</b>
2018-19	347	404	416	<b>1,167</b>	428	438	446	505	<b>1,817</b>	510	508	<b>1,018</b>	492	427	463	440	<b>1,822</b>	<b>5,824</b>
2019-20	347	404	416	<b>1,167</b>	428	438	446	450	<b>1,762</b>	544	517	<b>1,061</b>	547	468	418	446	<b>1,879</b>	<b>5,869</b>
<u>Pupil Change</u>																		
2014-15 to 2019-20	-	-	-50	<b>-50</b>	-21	-14	32	68	<b>65</b>	88	61	<b>149</b>	79	-35	-40	4	<b>8</b>	<b>172</b>
<u>Percent Change</u>																		
2014-15 to 2019-20	-	-	-10.7	<b>-4.1</b>	-4.7	-3.1	7.7	17.8	<b>3.8</b>	19.3	13.4	<b>16.3</b>	16.9	-7.0	-8.7	0.9	<b>0.4</b>	<b>3.0</b>
<u>Pupil Change</u>																		
2009-10 to 2019-20	25	61	26	<b>112</b>	32	51	-1	32	<b>114</b>	92	52	<b>144</b>	89	25	-73	13	<b>54</b>	<b>424</b>
<u>Percent Change</u>																		
2009-10 to 2019-20	7.8	17.8	6.7	<b>10.6</b>	8.1	13.2	-0.2	7.7	<b>6.9</b>	20.4	11.2	<b>15.7</b>	19.4	5.6	-14.9	3.0	<b>3.0</b>	<b>7.8</b>

The alternative projections for the elementary level (grades K-2) in 2019-20 based on the higher birth figure result in 73 (5.9 percent) more pupils than the preferred extended projections; conversely, alternative projections for these grades in 2019-20 using the lower birth figure would be 66 (5.4 percent) below the preferred extended projection. (See Table 5-25 and Graph 5-7.)

Table 5-25

AVON GROVE SCHOOL DISTRICT

Comparison of Preferred and Alternative Extended  
Elementary Projections (Grades K-2)  
 2014-15 to 2019-20

<u>School Year</u>	<b>Preferred</b> Based On Births <u>Fixed at 343</u>	<b>Alternative B</b> Based On Births <u>Fixed at 363</u>	<b>Alternative C</b> Based On Births <u>Fixed at 325</u>
2014-15	1,236	1,258	1,217
2015-16	1,209	1,256	1,167
2016-17	1,233	1,306	1,167
2017-18	1,233	1,306	1,167
2018-19	1,233	1,306	1,167
2019-20	1,233	1,306	1,167
<b>Change 2014-15 #</b>	<b>-3</b>	<b>48</b>	<b>-50</b>
<b>to 2019-20 %</b>	<b>-0.2</b>	<b>3.8</b>	<b>-4.1</b>
<b>Change 2009-10 #</b>	<b>178</b>	<b>251</b>	<b>112</b>
<b>to 2019-20 %</b>	<b>16.9</b>	<b>23.8</b>	<b>10.6</b>

The alternative projections for the intermediate level (grades 3-6) in 2019-20 based on the higher birth figure result in 81 (4.4 percent) more pupils than the preferred extended projections; conversely, alternative enrollment projections for these grades in 2019-20 using the lower birth figure would be 78 or (8.3 percent) below the preferred extended projection. (See Table 5-26 and Graph 5-8.)

Table 5-26

AVON GROVE SCHOOL DISTRICT

Comparison of Preferred and Alternative Extended  
Intermediate Projections (Grades 3-6)  
 2014-15 to 2019-20

<u>School Year</u>	<b>Preferred</b> Based On Births <u>Fixed at 343</u>	<b>Alternative B</b> Based On Births <u>Fixed at 363</u>	<b>Alternative C</b> Based On Births <u>Fixed at 325</u>
2014-15	1,697	1,697	1,697
2015-16	1,818	1,818	1,818
2016-17	1,853	1,853	1,853
2017-18	1,864	1,891	1,839
2018-19	1,868	1,922	1,817
2019-20	1,840	1,921	1,762
<b>Change 2014-15 #</b>	<b>143</b>	<b>224</b>	<b>65</b>
<b>to 2019-20 %</b>	<b>8.4</b>	<b>13.2</b>	<b>3.8</b>
<b>Change 2009-10 #</b>	<b>192</b>	<b>273</b>	<b>114</b>
<b>to 2019-20 %</b>	<b>11.7</b>	<b>16.6</b>	<b>6.9</b>

Middle and high school enrollments using these two alternative approaches do not differ from each other or from the preferred projection because the effect of using the different birth figures would not be reflected in these grades until early in the decade of the 2020s. As such, the variation in projected total enrollments produced by the three approaches is narrower on a proportionate basis than at the elementary and intermediate levels (grades K-2 and grades 3-6). At their widest points (in 2019-20), the alternative projection resulting from use of the higher birth figure is 154 pupils or 2.6 percent more than the preferred extended projection; using the

lower birth figure, the alternative is 144 pupils or 2.4 percent lower than the preferred extended projection. (See Table 5-27 and Graph 5-6.)

Table 5-27

AVON GROVE SCHOOL DISTRICT

Comparison of Preferred and Alternative Extended Total Projections  
2014-15 to 2019-20

<u>School Year</u>	<b>Preferred</b> Based On Births <u>Fixed at 343</u>	<b>Alternative B</b> Based On Births <u>Fixed at 363</u>	<b>Alternative C</b> Based On Births <u>Fixed at 325</u>
2014-15	5,716	5,738	5,697
2015-16	5,770	5,817	5,728
2016-17	5,828	5,901	5,762
2017-18	5,855	5,955	5,764
2018-19	5,941	6,068	5,824
2019-20	6,013	6,167	5,869
<b>Change 2014-15 #</b>	<b>297</b>	<b>429</b>	<b>172</b>
<b>to 2019-20 %</b>	<b>5.2</b>	<b>7.5</b>	<b>3.0</b>
<b>Change 2009-10 #</b>	<b>568</b>	<b>722</b>	<b>424</b>
<b>to 2019-20 %</b>	<b>10.4</b>	<b>13.3</b>	<b>7.8</b>

### Recap

The updated and revised projections of total enrollments for the Avon Grove School District presented in this report reveal a slower rate of growth in pupil population during the first five years projected in PEL's January 2008 study for the district (that is, through 2012-13) and would result in a somewhat lower enrollment in that school year than the prior projections suggested. During the second five years projected by PEL in 2008 (2013-14 through 2017-18), the updated figures also show slower growth than previously projected. As a result, the updated projections indicate that the pupil population in the most distant year projected in the prior report (2017-18) will be noticeably lower than the 2008 projections.

The slowed overall increase from that reflected in the prior projections is, in large measure, a function of the slowed growth in housing as evidenced by the dramatic decline in permits issued for construction of new residential units during the most recent years and the shrinkage in the number and size of the approved and proposed subdivisions, projects known to be under discussion, and the units that are expected to result from infill, minor subdivision activity, miscellaneous housing construction. The slowed growth is, in turn, partially responsible for the slight decrease in the relationship between kindergarten entries and births in the district five years prior (partially offset by continued growth in annual births) and the slowed immigration of children as they move through the public school system. However, the impact of the change in the grade progression ratios differs from grade grouping to grade grouping. For example, while there is a noticeable overall decrease in the ratios in the elementary and intermediate grades, at the high school level the decline has been just very slight. Conversely, at the middle school there has been a very modest increase in the aggregate ratio in recent years.

In keeping with this, the updated projections of enrollments in all grade groupings do not necessarily reflect the same departure from the 2008 PEL projections as the total enrollments. For example, the revised projections in the elementary grades (K-2) show somewhat faster growth than projected in the first five years of the prior study (a function of the growing births), and the same is true for the revised projections for the second five-year period projected in PEL's 2008 report. The updated projections suggest that elementary enrollments in 2017-18 (the most distant year projected in the prior PEL study) will be somewhat higher than the prior projections.

The current projections of enrollments at the intermediate level (grades 3-6) indicate a modest absolute decline through the 2012-13 compared with a rise projected in the prior study.

During the period 2013-14 through 2017-18 the updated projections show noticeably faster growth than the 2008 projections. The new projections reveal that enrollments in 2017-18 will still be just slightly lower than the prior projections given the enrollment decrease during the period ending in 2012-13.

The updated projections for the middle school (grades 7-8) suggest more modest enrollment growth through the 2012-13 school year compared with projections in the prior study, and during the period 2013-14 through 2017-18 the new projections also reflect a slower rise than the 2008 projections. The current projections indicate that middle school enrollments in 2017-18 will be noticeably lower than the prior projections.

The revised projections for the high school grades (9-12) rise at a much slower rate than outlined in PEL's prior projections for the first five projected years, and during the second five-year period they show a modest drop compared with the accelerating growth of the previous projections. In 2017-18 the updated projections reflect noticeably lower enrollments in grades 9-12 than previously projected and a modest net decrease from 2009-10.

Overall, based on the assumptions used, the revised and updated projections for Avon Grove indicate a modest rise in enrollments to 5,716 in the 2014-15 school year (up by 271 pupils or 5.0 percent from the current school year) and a slightly more rapid rate of growth (297 or 5.2 percent) to 6,013 in 2019-20 when they will be 568 or 10.4 percent higher than the actual figure for 2009-10.

Projections of elementary enrollments suggest that they will total 1,236 in 2014-15 and be 181 pupils or 17.2 percent higher than in 2009-10. They are then expected to fall very slightly (by three pupils or 0.2 percent) to 1,233 in 2019-20—still up by 178 or 16.9 percent from the current school year.

Projections for the intermediate grades reveal that enrollments will total 1,697 in 2014-15 and be 49 pupils or 3.0 percent higher than in 2009-10. In the subsequent five years in enrollments in grades 3-6 are expected to rise by 143 or 8.4 percent to 1,840. As a result, in 2019-20 enrollments in these grades will be 192 or 11.7 percent higher than in the 2009-10 school year.

Middle school enrollments are expected to total 912 in 2014-15—down by five pupils or 0.5 percent from the current school year. Between 2014-15 and 2019-20, however, enrollments

in grades 7 and 8 will be up by 149 or 16.3 percent and reach 1,061—144 pupils or 15.7 percent above the 2009-10 level.

Projections for the high school grades indicate that enrollments will total 1,871 in 2014-15 and be 46 (2.5 percent) higher than in the current school year. Enrollments at the high school will total 1,879 in 2019-20 and be just eight pupils or 0.4 percent higher than the 2014-15 projection, but will be up by 54 pupils or 3.0 percent from 2009-10.

### Perspective on Accuracy

Accurate projections of public school enrollments for periods of five to ten years or more are difficult, at best, because of so many unpredictable variables. Furthermore, such efforts are highly dependent on “full disclosure” and 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 one 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 projections in other districts which relied on similar methodologies with the actual enrollments which PEL attempted to project, and calculating the mean absolute percentage error (MAPE). The MAPE “is the most frequently utilized forecast error measure for quantitative forecast models. By averaging the percentage errors in absolute terms, the forecaster is being given an indicator of expected error, on average.” (Howard A. Frank, *Budgetary Forecasting In Local Government: New Tools and Techniques*, Westport Connecticut and London: Quorum Books, 1993, p 82.)

Since 1986 PEL’s Central PA Division has examined demographics, community growth, and enrollment trends in numerous central and eastern Pennsylvania school districts and, using the techniques employed in this analysis, generated projections of enrollments covering a ten-year period. Those projections undertaken more than ten years ago have ten years on which to judge accuracy; some projections allow only eight or nine years’ experience to be viewed; some six, five, and so forth; and for others there has been only one year of actual figures on which to make judgments regarding PEL’s accuracy.

Based on preliminary enrollment figures through the fall of 2008, the Mean Absolute Percentage Error in all central and eastern Pennsylvania districts studied by PEL for the primary projection period—the first five years—is 2.90 percent; for all years for which there are actual figures to compare with PEL projections (which in many districts includes all ten years), the

MAPE is 4.57 percent. (The literature suggests that projections within 5.0 percent (+/-) after five years are “acceptable.”)

Projections developed by PEL for the Avon Grove School District during the 2007-08 school year indicate that the pupil population would rise from 5,442 in that year to 5,509 in 2008-09 and 5,631 in the current school year. These projections proved to be 109 pupils or 2.0 percent higher than the actual figure in 2008-09 and 186 or 3.3 percent higher than the actual figure in the current school year. The average difference between PEL’s projections and the actual figures for these two years was 2.65 percent. The failure of actual enrollments to mirror the projections can be traced primarily to the unanticipated disruption in the mortgage and housing industries and the abrupt and dramatic downturn in the national, regional, and local economies which combined to bring housing construction and the turnover of mature housing in the district almost to a standstill. This, in turn, triggered a drop in the relationship between kindergarten entries and births in the district five years prior (partially offset by the continuing rise in annual births) and an overall decline in aggregate grade progression ratios.



It must be recognized that the projections generated for the Avon Grove School District are a product of certain assumptions. Specifically, it was assumed that the total number and type of new housing units built in the district during the next ten years will be in keeping with expected levels of construction in the approved and proposed subdivisions as well as additional housing that can reasonably be assumed to be built during this period (all as outlined in Chapter 2)—factoring in (to the extent possible) the belief that some of the approved and proposed projects (and the one under discussion, as well) may not move forward in a timely fashion, may be scaled back, or may not occur at all due to the continuing turmoil in the housing and mortgage industries; weaknesses in the local, regional, and national economies; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; bankruptcies; or other reasons. It should also be noted that there has been speculation that the "growth philosophies" of some of the district’s municipalities may be affected by the outcome of the November 2009 election, and this, in turn, may also have an effect on the future pace of development. The methodology is also sensitive to the expected number of age-restricted and similar housing units that will likely be built during the next ten years and the ongoing turnover of mature housing.

Further, the methodology assumes that overall migration and related patterns will remain consistent with expected patterns, that the role of nonpublic education will be compatible with the recent past and current expectations, and the district will continue its current policies relative to its kindergarten, voc-tech, and special education programs and maintain other key policies.

Projections represent calculations based on hard data and analysis of relevant events in the Avon Grove School District in recent years. Because the projections were made on the basis of averages of data which varied from year to year, future enrollments can be expected to vary from year to year from these projections. Although actual enrollments in future years may fluctuate around the projections, over a period of years the projections generated in this manner will normally present a valid picture of the enrollment trend in a given district.

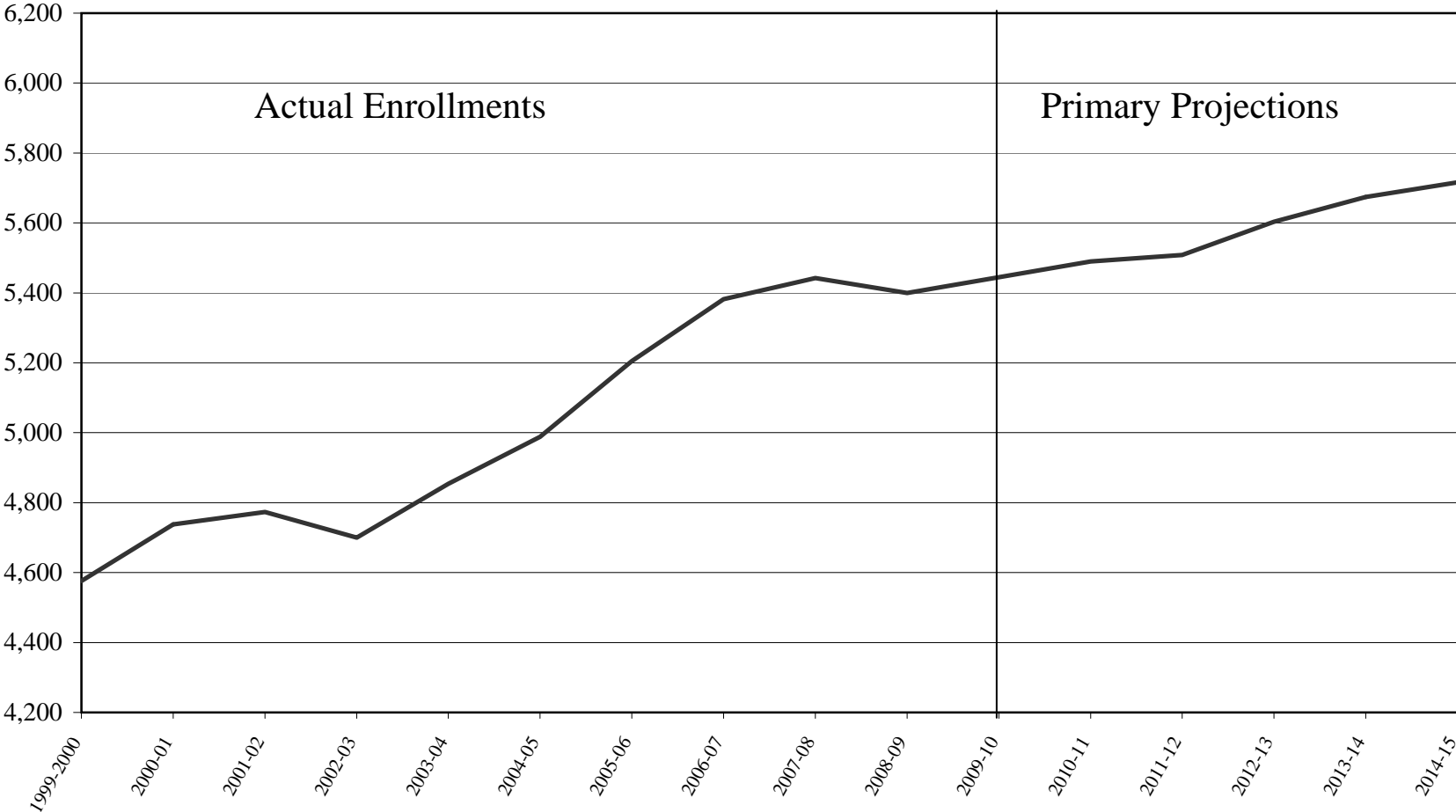
Uncertain events that can influence and alter pupil projections are such that no projections, no matter how carefully constructed, can guarantee complete accuracy. Changes in birth patterns; nonpublic school enrollments; migration patterns; internal policies (such as, retention and acceleration of pupils, age requirements for admission to school, half-day/full-day kindergarten programs, who provides special education programs and to whom they are provided); statewide policies on “school choice,” vouchers, and other aspects of the educational program; the formation and/or termination of charter schools; economic climate; zoning and land use controls; infrastructure considerations; and interest rates, the housing market, and the state of the mortgage industry as they influence residential development activity and the turnover of mature housing, can all affect these projections. Also, policy changes by external parties, such as major employers, can have a significant and lasting impact on enrollment patterns as can a teachers’ strike or even the serious threat of a strike. As such, various influencing factors must be monitored and analyzed every year by district officials. In this way, significant changes in current and projected patterns can be quickly identified and the appropriate adjustments can be made.

**Despite these words of caution, PEL believes the projections offered in this report are as reasonable and as realistic as possible in light of the available facts, and they should serve the district well in its short- and long-term planning. However, given a variety of**

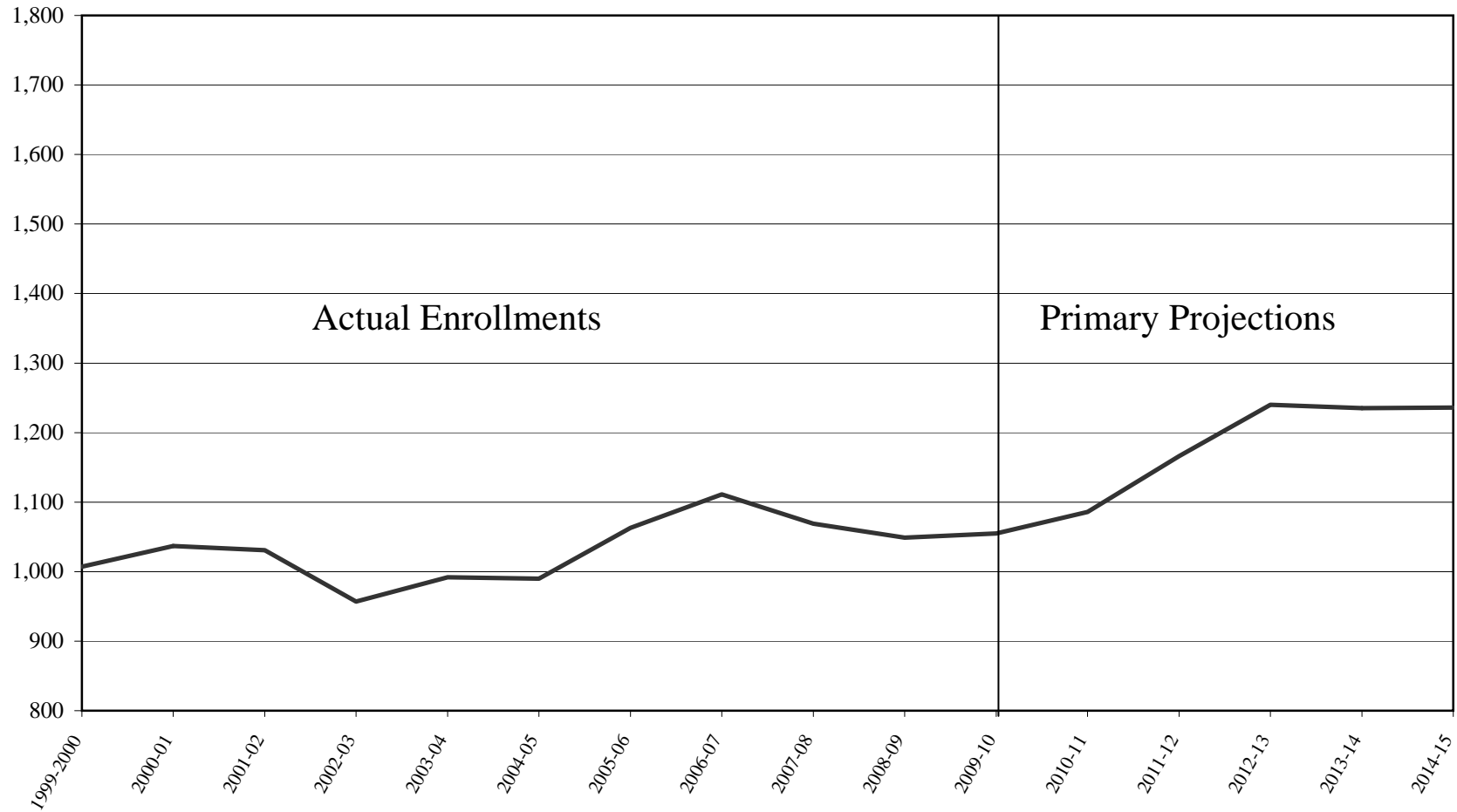
uncertainties including the turmoil in the mortgage and housing industries; the overall state of the economy; sewage collection and treatment issues; ongoing farmland and open space preservation efforts; and bankruptcies, as well as speculation that the "growth philosophies" of some of the district's municipalities may be affected by the outcome of the November 2009 election, PEL suggests that district administrators remain in contact with municipal officials with respect to the pace of residential construction and housing turnover in the district. Further, given the possibility of expansion at St. Mary's school at some point in the future and the potential impact on elementary enrollments in Avon Grove, the district should maintain an ongoing dialogue with representatives of the parish and its school. Similarly, the district should keep a watchful eye on the status of the proposal to construct a Catholic high school in southern Chester County.

## APPENDIX 5

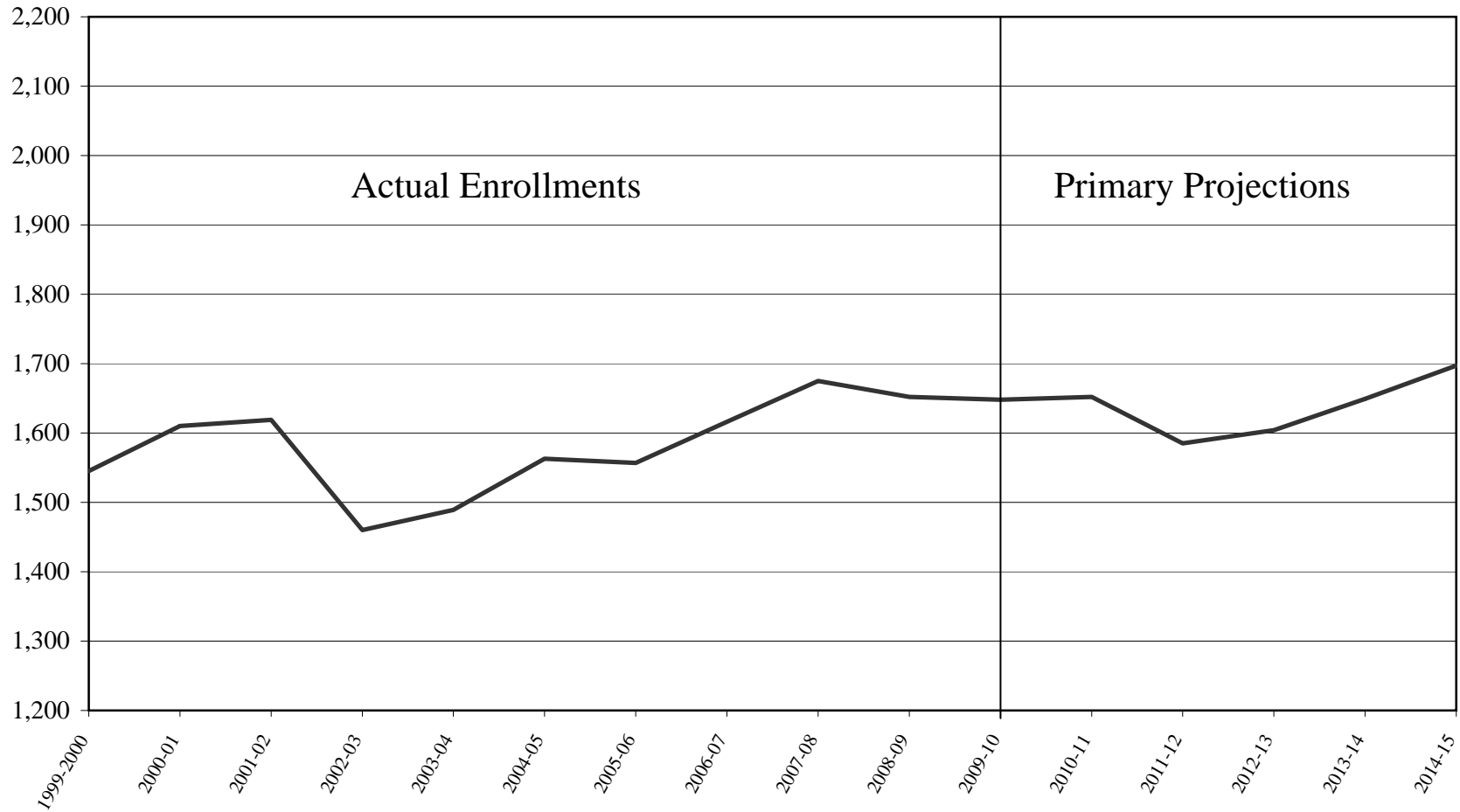
**Graph 5-1**  
Avon Grove School District  
Total Enrollment Trends and Projections  
1999-2000 to 2014-15



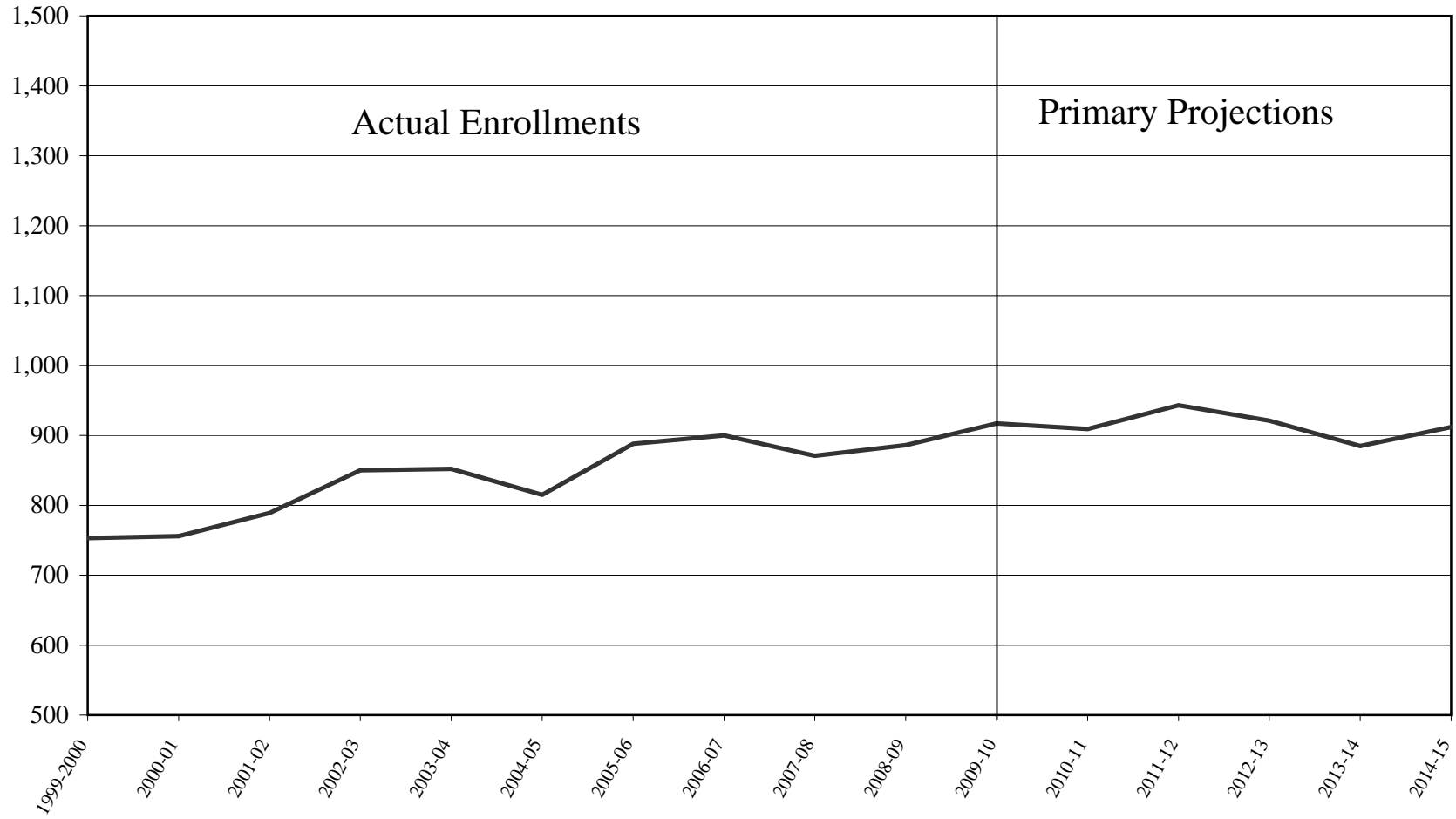
**Graph 5-2**  
Avon Grove School District  
Elementary Enrollment Trends and Projections  
1999-2000 to 2014-15



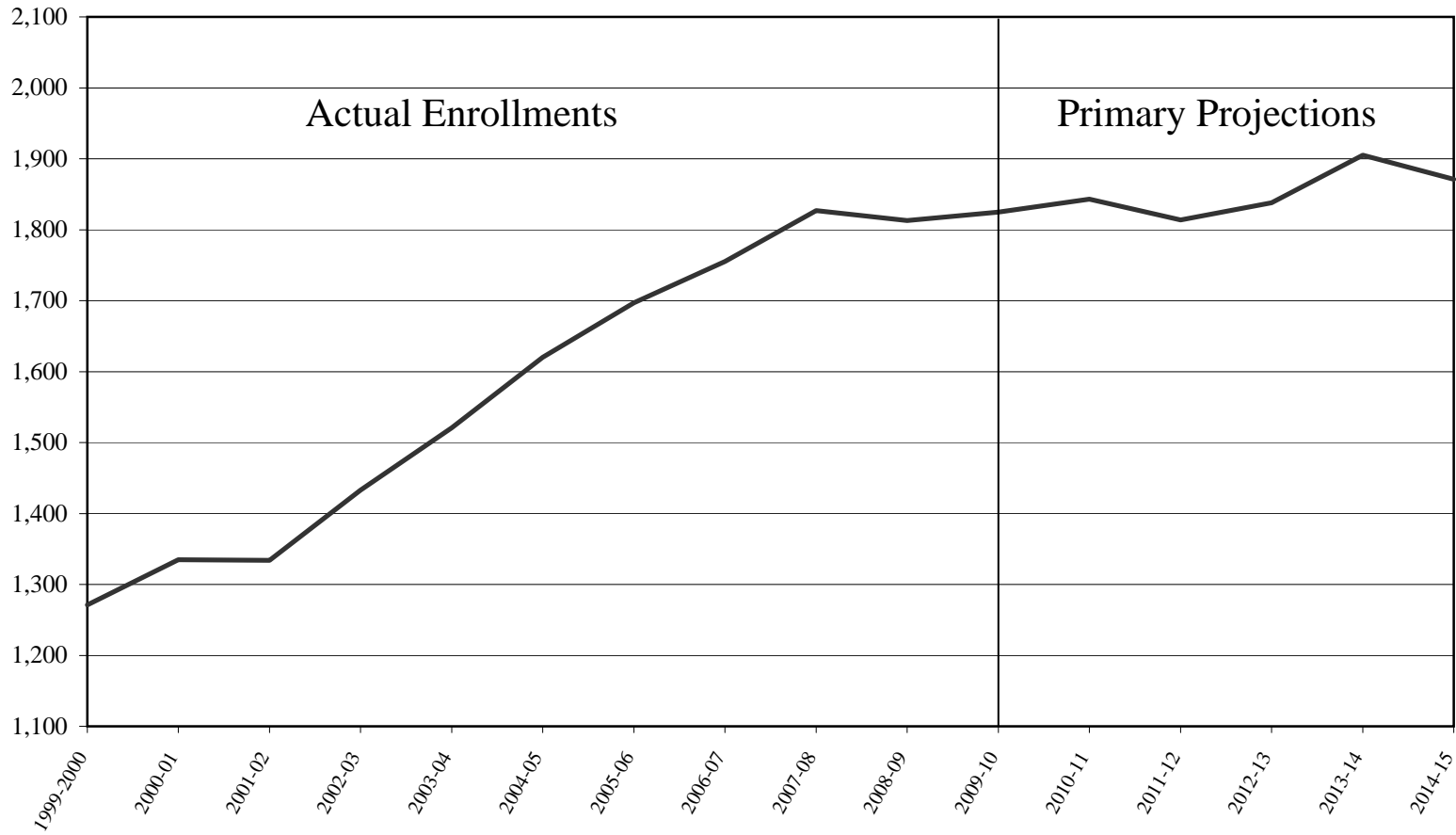
**Graph 5-3**  
Avon Grove School District  
Grades 3-6 Enrollment Trends and Projections  
1999-2000 to 2014-15



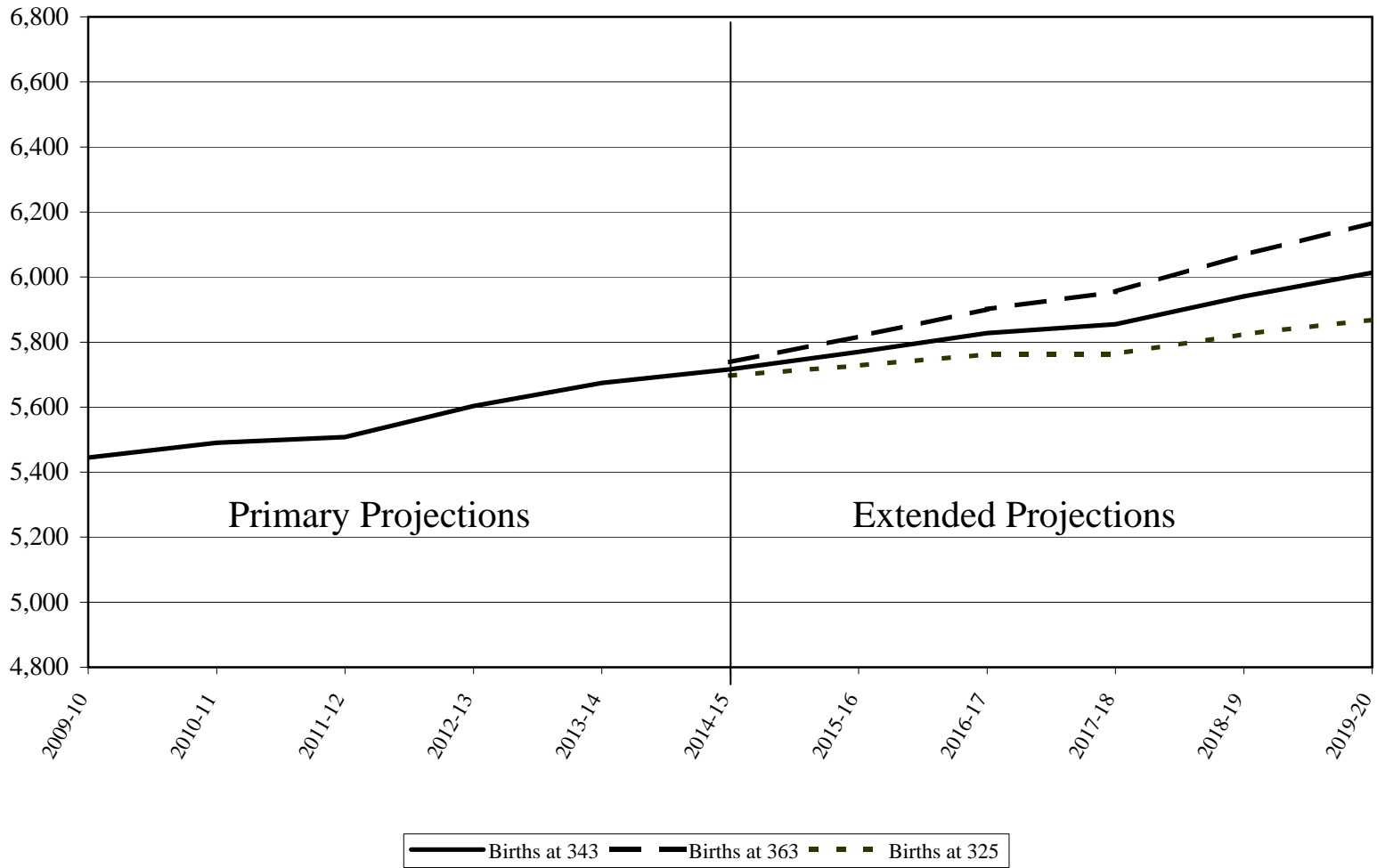
**Graph 5-4**  
 Avon Grove School District  
 Middle School Enrollment Trends and Projections  
 1999-2000 to 2014-15



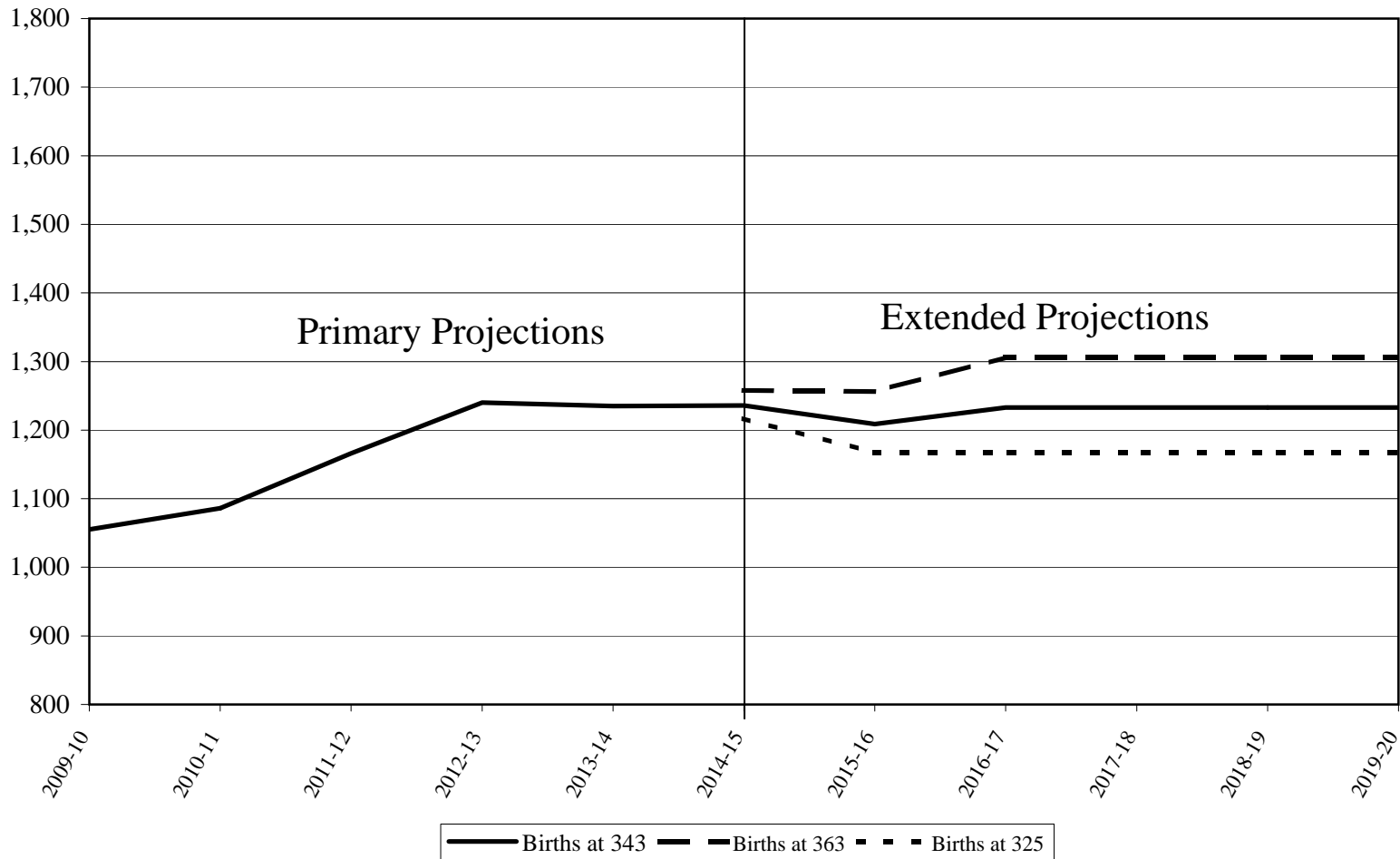
**Graph 5-5**  
Avon Grove School District  
High School Enrollment Primary/Extended Projections  
1999-2000 to 2014-15



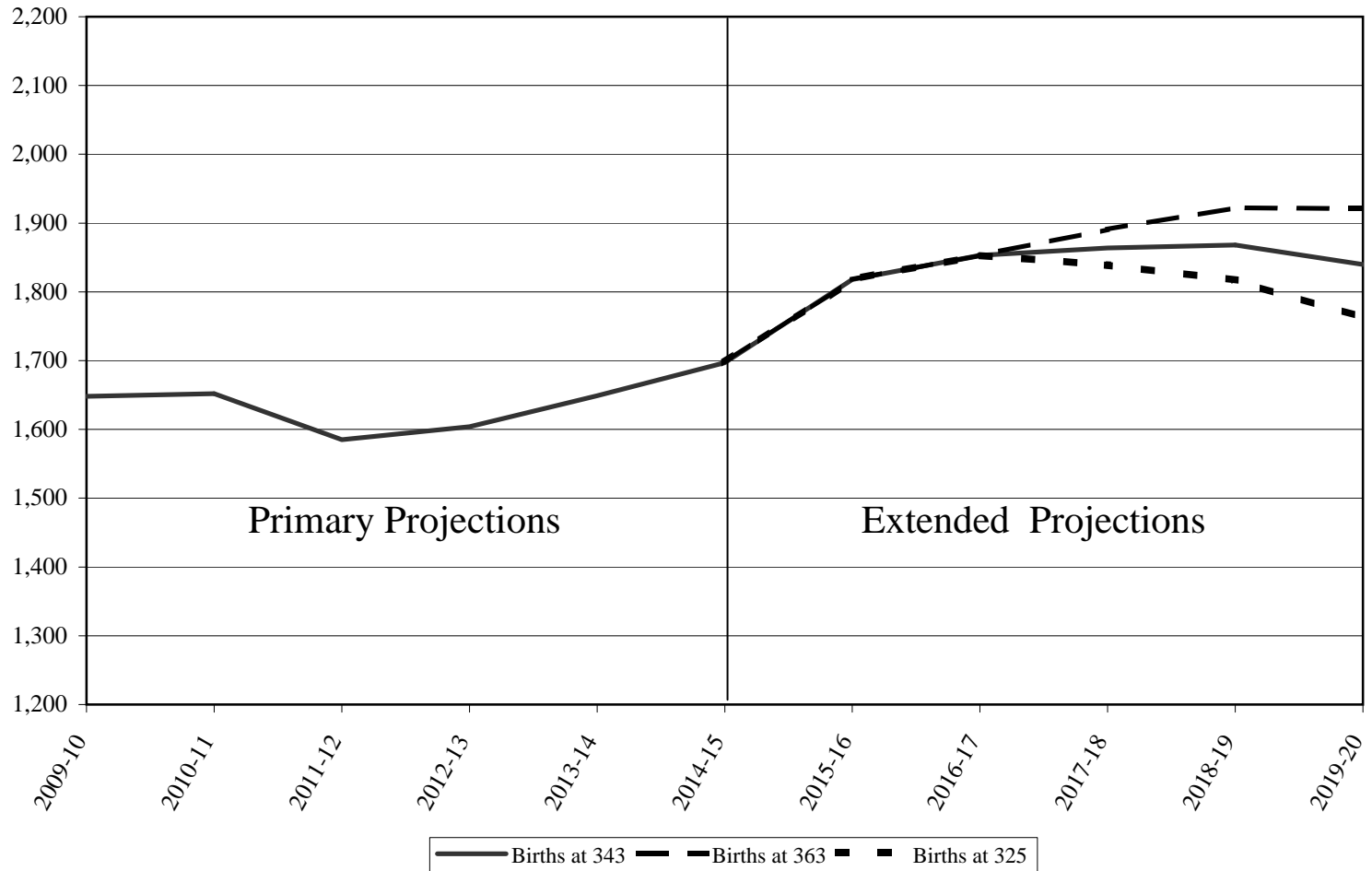
**Graph 5-6**  
 Avon Grove School District  
 Total Enrollment Primary/Extended Projections  
 2009-10 to 2019-20



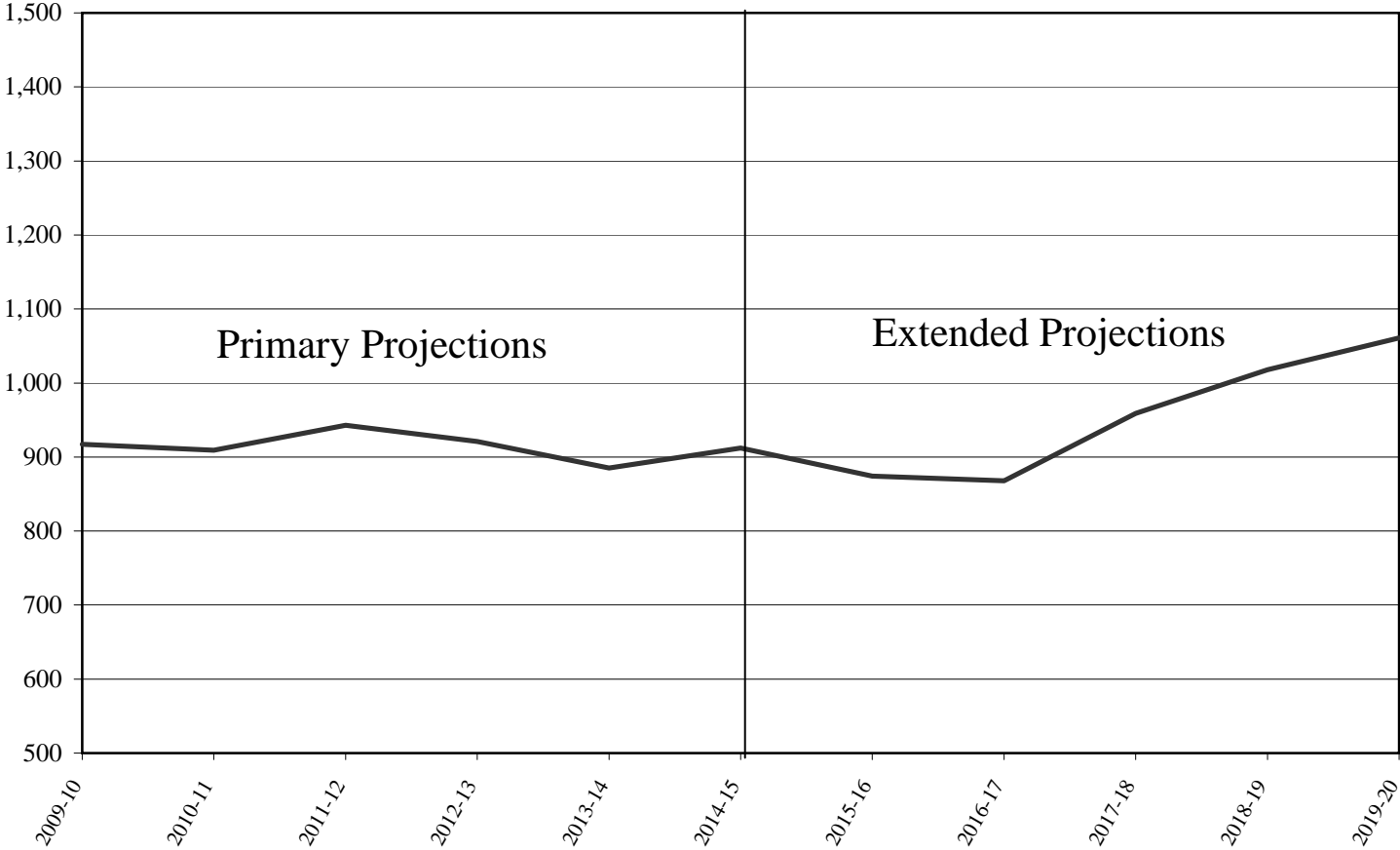
**Graph 5-7**  
 Avon Grove School District  
 Elementary Enrollment Primary/Extended Projections  
 2009-10 to 2019-20



**Graph 5-8**  
 Avon Grove School District  
 Grades 3-6 Primary/Extended Projections  
 2009-10 to 2019-20



**Graph 5-9**  
Avon Grove School District  
Middle School Enrollment Primary/Extended Projections  
2009-10 to 2019-2020



**Graph 5-10**  
Avon Grove School District  
High School Enrollment Primary/Extended Projections  
2009-10 to 2019-20

