



FutureThink

Formerly DeJONG-HEALY

FINAL REPORT

Lower Moreland Township School District

Enrollment Projection Study
January 29, 2019

Lower Moreland Township School District

INTRODUCTION

FutureThink was contracted to develop enrollment projections for the Lower Moreland Township School District.

This report contains ten-year enrollment projections, which were developed for the Lower Moreland Township School District by analyzing the following data:

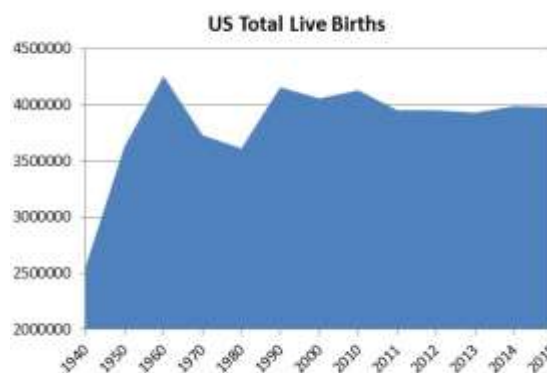
- ▶ Live birth data
- ▶ Historical enrollment
- ▶ Cyber/Charter school enrollment
- ▶ Non-public school enrollment
- ▶ Community demographics
- ▶ Housing information

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

Lower Moreland Township School District

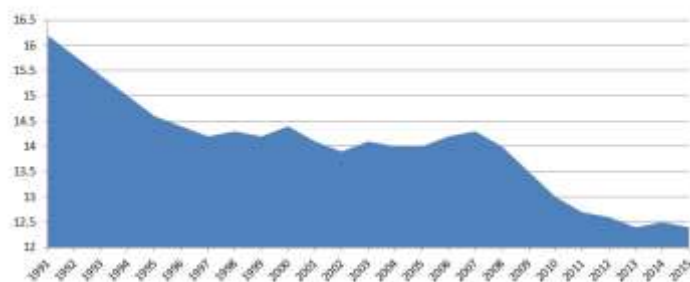
NATIONAL TRENDS IN ENROLLMENT

Tracing the landscape of the country's public school enrollment back over the past 70+ years reveals demographic, economic, and social changes. The United States as a whole continues to undergo major shifts in public student enrollment. The baby boom of the late 1940s and 50s was followed by the baby bust of the 1960s and 70s. An "echo" baby boom occurred in the 1980s, which then was followed by the echo baby bust from 1990 to 2000. There was a slight uptick from 2000 to 2010. Since 2011, the total number of births has been relatively flat.



Source: CDC, National Vital Statistics Reports, Vol. 66 No.1, January 5, 2017

US Population - Live Birth Rate
per 1,000 Population



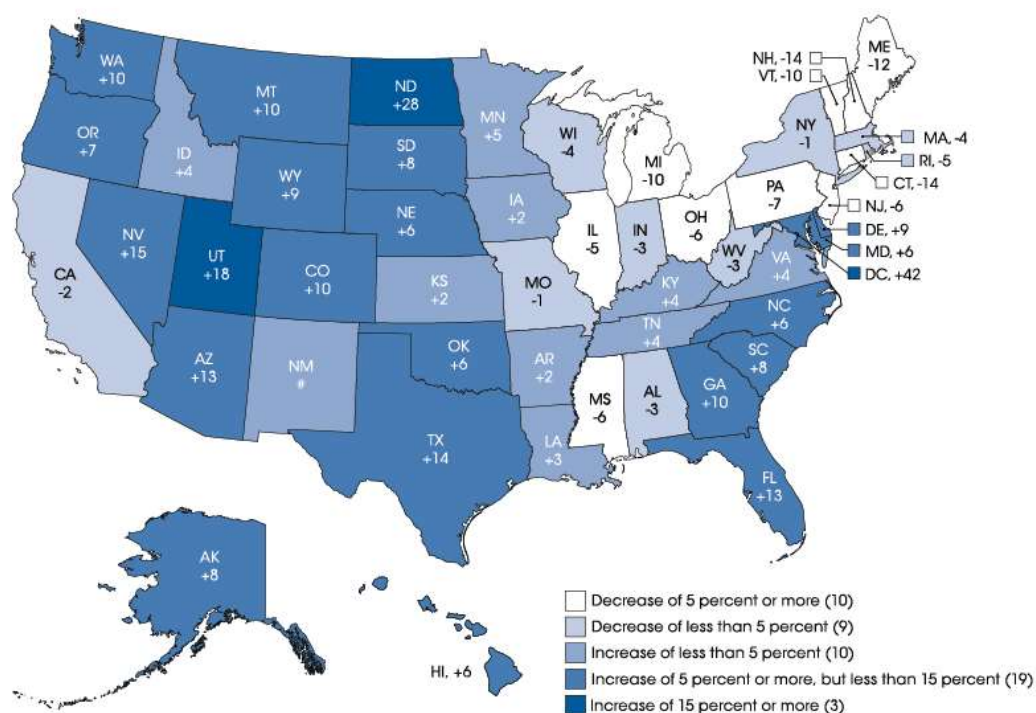
Source: CDC, National Vital Statistics System

With the live birth rate, there was an increase for the first time in several years in 1998. Other increases occurred in 2000, 2006, and 2007. Since 2007, the birth rate has resumed a descending pattern, reaching an all-time low in 2013. In 2014, there was a slight uptick, but declined again in 2015.

In 2013-14, approximately 55.4 million students were enrolled in grades Pre-K-12 in the United States. From 2006-07 to 2013-14, enrollment increased by 100,000 students. Overall, enrollment is projected to increase by approximately 2 percent by the 2025-26 school year.

The figure below illustrates the projected change in Pre-K-12 public school enrollment from the 2014-15 to the 2026-27 school year. Growth is expected to continue primarily in the southeast and west. Washington, D.C.; North Dakota; and Utah are projected to experience the most growth. Pennsylvania is projected to experience a decrease of 7 percent.

Lower Moreland Township School District



SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2014-15; and Public State Elementary and Secondary Enrollment Model: 1980–2026. See *Digest of Education Statistics 2016*, [table 203.20](#).

Lower Moreland Township School District

HISTORICAL ENROLLMENT

Over the past ten years, student enrollment in the Lower Moreland Township School District has increased by 250 students in grades K – 12. Total enrollment for the 2018-19 school year is 2,323 students. The following tables illustrate the District's enrollment history from 2009-10 through 2018-19.

Lower Moreland Township School District
Historical Enrollment

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
K	129	130	144	152	132	114	134	110	145	149
1	142	139	136	149	160	132	128	149	124	171
2	145	146	145	153	150	172	152	141	158	135
3	153	148	153	154	156	155	187	167	158	169
4	149	156	148	152	167	162	165	193	168	169
5	176	156	160	150	165	166	176	183	208	170
6	170	190	167	167	158	168	176	190	182	221
7	150	183	193	170	171	164	182	191	194	194
8	159	158	183	199	174	178	173	188	192	197
9	192	170	162	186	199	176	176	185	199	189
10	171	192	175	165	185	200	183	182	182	195
11	175	175	194	179	166	186	197	189	185	177
12	162	174	181	204	186	179	186	204	190	187
K - 12 Total	2,073	2,117	2,141	2,180	2,169	2,152	2,215	2,272	2,285	2,323

Source: Pennsylvania Department of Education, Lower Moreland Township School District

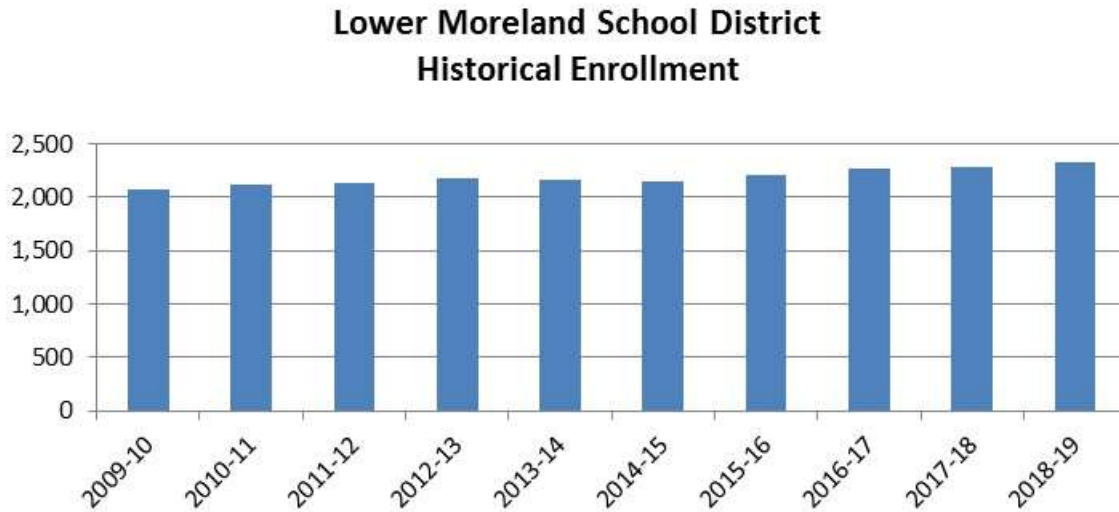
Lower Moreland Township School District
Historical Enrollment by Grade Group

Grade	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
K - 5	894	875	886	910	930	901	942	943	961	963
6 - 8	479	531	543	536	503	510	531	569	568	612
9 - 12	700	711	712	734	736	741	742	760	756	748
K - 12 Total	2,073	2,117	2,141	2,180	2,169	2,152	2,215	2,272	2,285	2,323

Source: Pennsylvania Department of Education, Lower Moreland Township School District

Lower Moreland Township School District

The following graph illustrates the District's K – 12 enrollment history from 2009-10 through 2018-19.



Lower Moreland Township School District

ALTERNATIVE SCHOOL ENROLLMENT

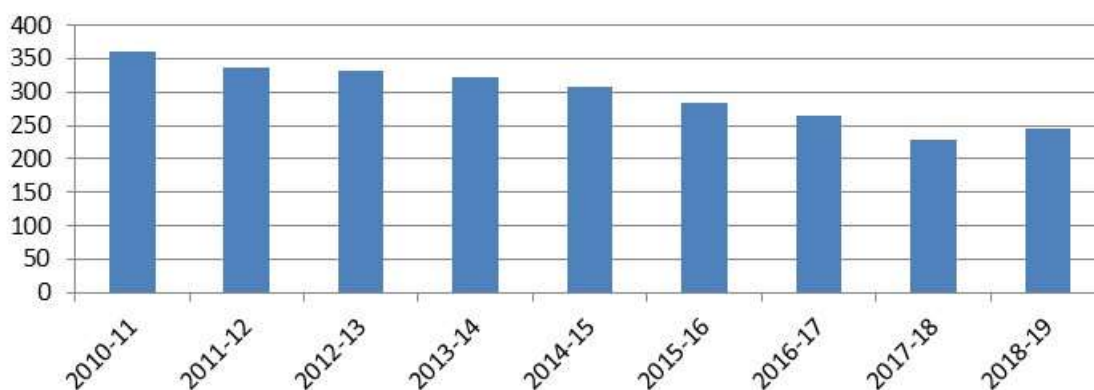
Since 2010-11, the number of Lower Moreland Township School District students attending private, home or cyber/charter schools has decreased from 361 to 245 students or approximately 32 percent. Private school enrollment accounts for the entire decrease. Both homeschool and cyber/charter school enrollment have increased from 2010-11 to 2018-19, which shows some fluctuation over the years.

**Lower Moreland Township School District
Alternative School Historical Enrollment**

Grade	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Private School	332	319	318	302	286	263	249	204	209
Homeschool	18	11	10	13	11	13	10	17	21
Cyber/Charter School	11	7	4	6	10	7	6	7	15
Total	361	337	332	321	307	283	265	228	245

Source: Lower Moreland Township School District

**Lower Moreland School District
Alternative School Enrollment**



Lower Moreland Township School District

LIVE BIRTH DATA

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

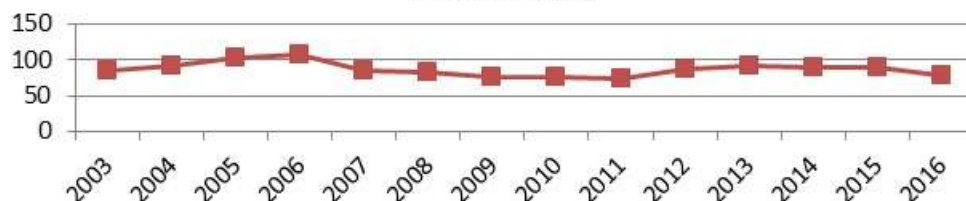
Data is arranged by the residence of the mother. The following table and graph include the live birth counts for Lower Moreland Township.

**Lower Moreland Township School District
Birth Counts
2003-2016**

Year	Birth Counts
2003	86
2004	91
2005	103
2006	107
2007	85
2008	83
2009	77
2010	76
2011	74
2012	87
2013	92
2014	90
2015	89
2016	78

Source: Pennsylvania Department of Health, Birth Statistics

**Lower Moreland Township School District
Birth Counts**



Lower Moreland Township School District

DEMOGRAPHICS

The Lower Moreland Township School District is comprised of Lower Moreland Township in Montgomery County. General demographic data is included in the following tables for the areas located completely or partially in the District.

General Demographic Information

	Montgomery County	Pennsylvania
Per Capita Income	\$45,048	\$31,476
Median Household Income	\$84,791	\$56,951
Persons Below Poverty	6.4%	13.1%

Source: US Census, American Community Survey, 2017 5-Year Estimates

Total Population

	2000 Census	2010 Census
Montgomery County	750,097	799,874
Lower Moreland Township	11,281	12,982

Source: Census Summary File 1, 2000 and 2010

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

ESRI also employs a time series of building permits and housing starts plus residential deliveries. Data sources are integrated and then analyzed by Census Block Groups.

Sources of data include:

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

Lower Moreland Township School District

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

Household:

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

Average family size:

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

Family household (Family):

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

Householder:

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

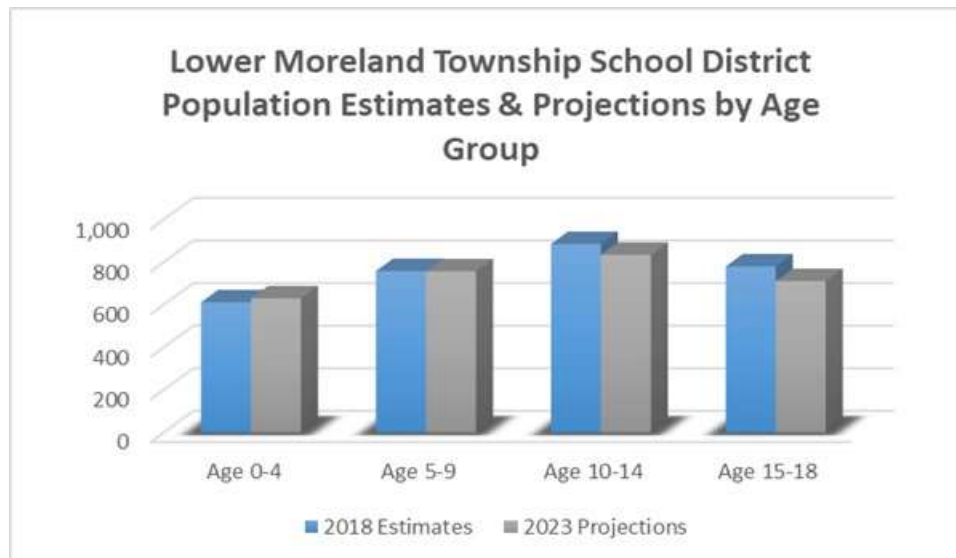
Lower Moreland Township School District

The following tables illustrate the current estimates and 5-year population projections based on block groups that comprise the school district, indicating areas of current and projected growth. The tables have been developed to determine selected age group projections and projections for household income, family size, and total households.

The total population in the District is 13,625. This population is projected to increase by 356 people, or approximately 3% over a 5-year period. The 0-18 year-old population in the District currently totals 3,038. This population is projected to decrease by 102 people, or approximately 3 percent. The median age is projected to increase by approximately 2%, from 47.5 to 48.2 years of age.

Lower Moreland Township School District	2018 Estimates	2023 Projections	Change 2018-23	Change 2018-23 (%)
Total Population	13,625	13,981	356	2.6%
Age 0-4	612	631	19	3.1%
Age 5-9	759	758	-1	-0.1%
Age 10-14	886	835	-51	-5.8%
Age 15-18	781	712	-69	-8.8%
Total Age 0-18	3,038	2,936	-102	-3.4%
Median Age	47.5	48.2	0.7	1.5%

Source: ESRI



Lower Moreland Township School District

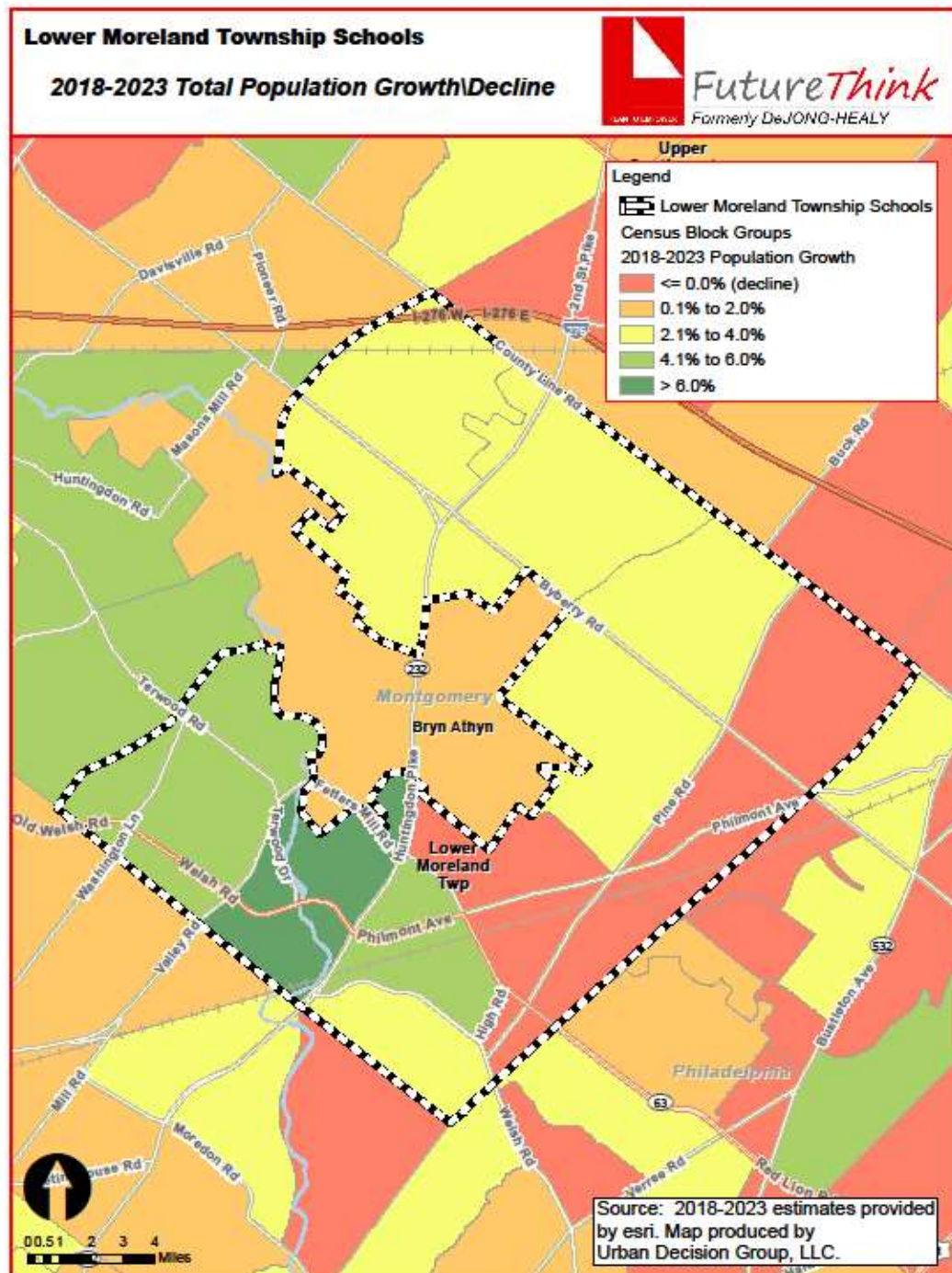
Median and average household incomes in the District are projected to increase by approximately 4% and 7%, respectively over a 5-year period. The average family size is projected to increase slightly, and the number of family households is projected to increase by approximately 2 percent.

Lower Moreland Township School District	2018 Estimates	2023 Projections	Change 2018-23	Change 2018-23 (%)
Median Household Income	\$107,547	\$112,002	\$4,455	4.1%
Average Household Income	\$141,592	\$151,655	\$10,063	7.1%
Average Family Size	3.24	3.26	0.02	0.6%
Total Family Households	3,761	3,827	66	1.8%

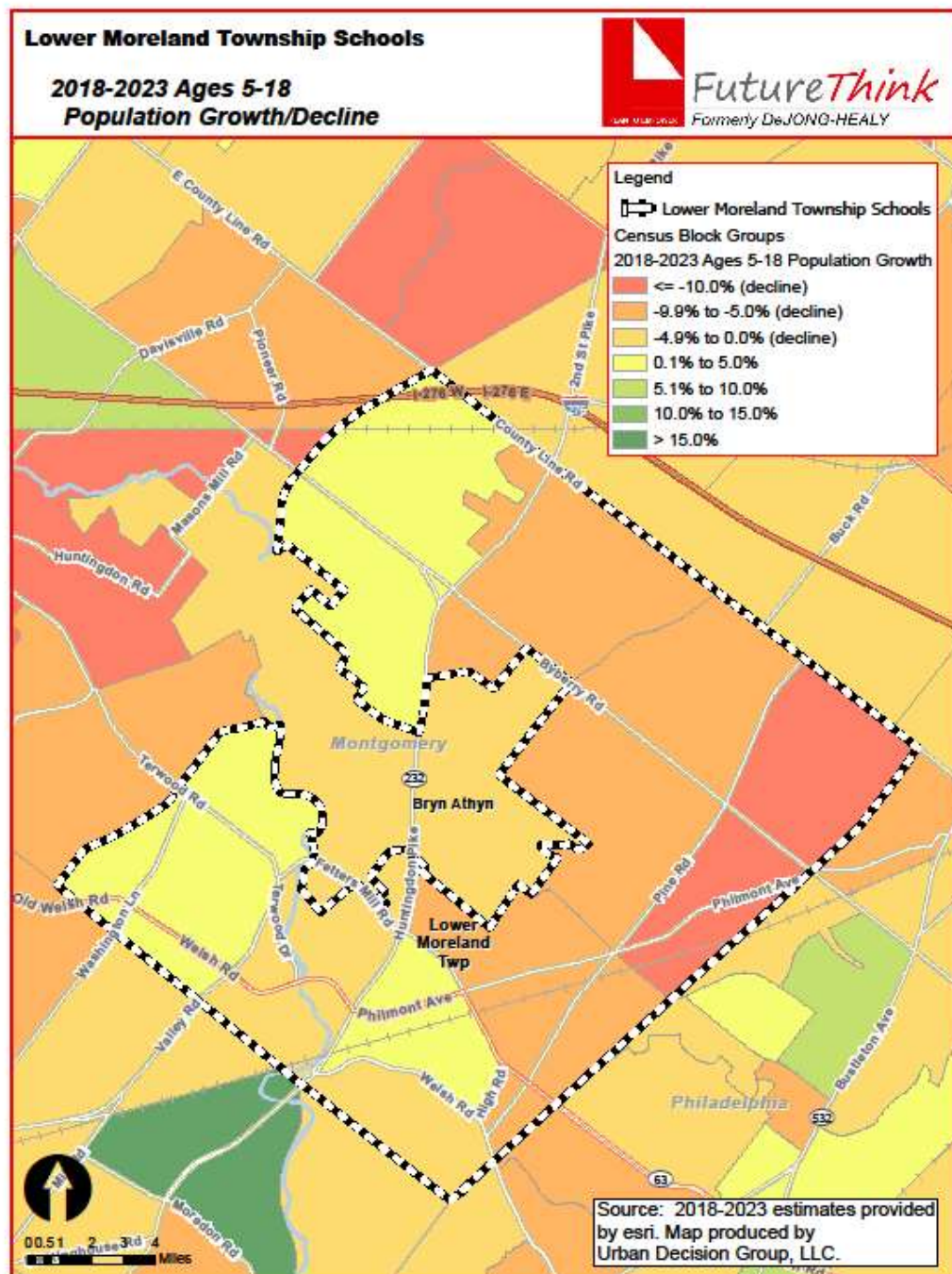
Source: ESRI

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

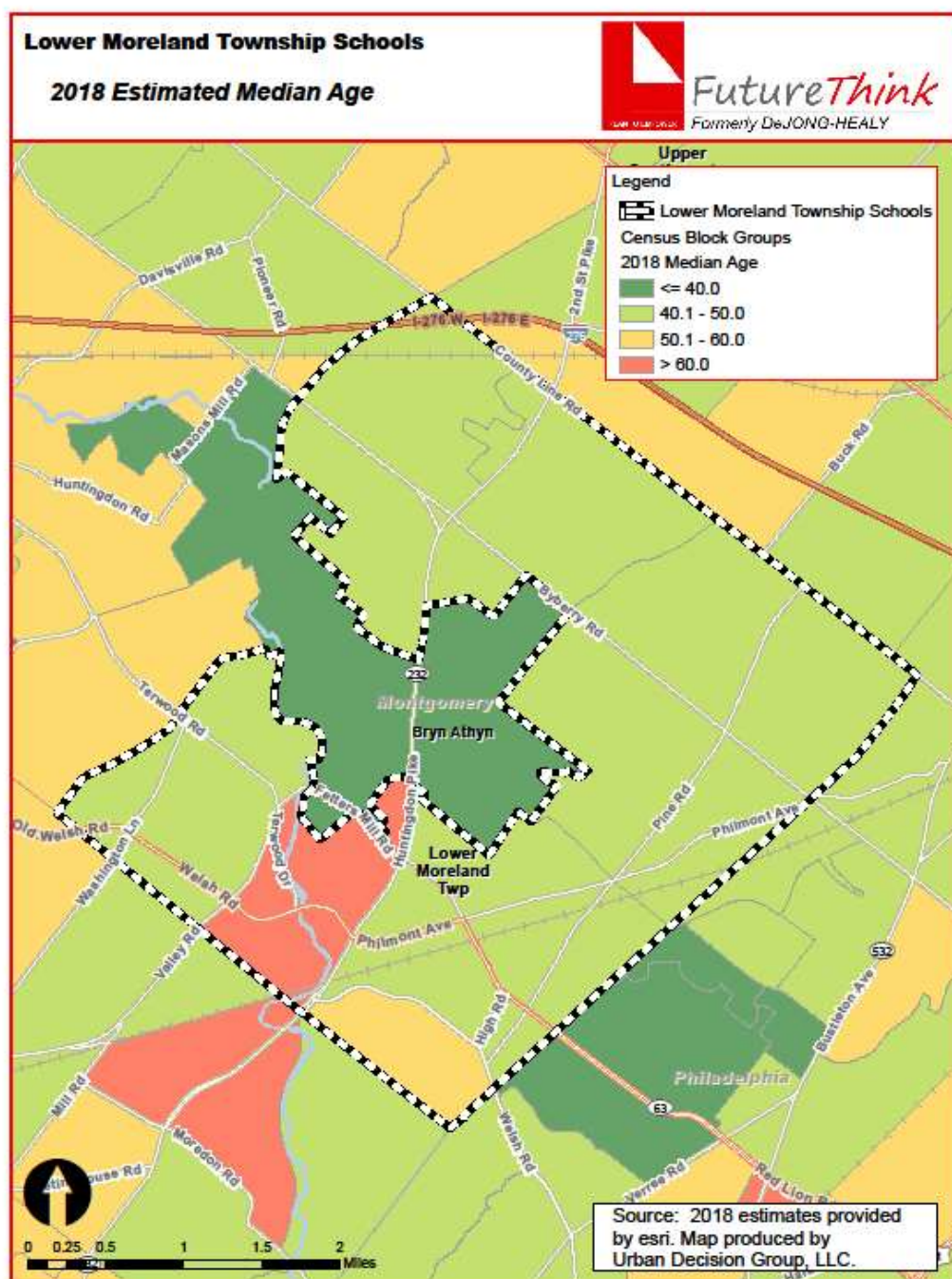
Lower Moreland Township School District



Lower Moreland Township School District

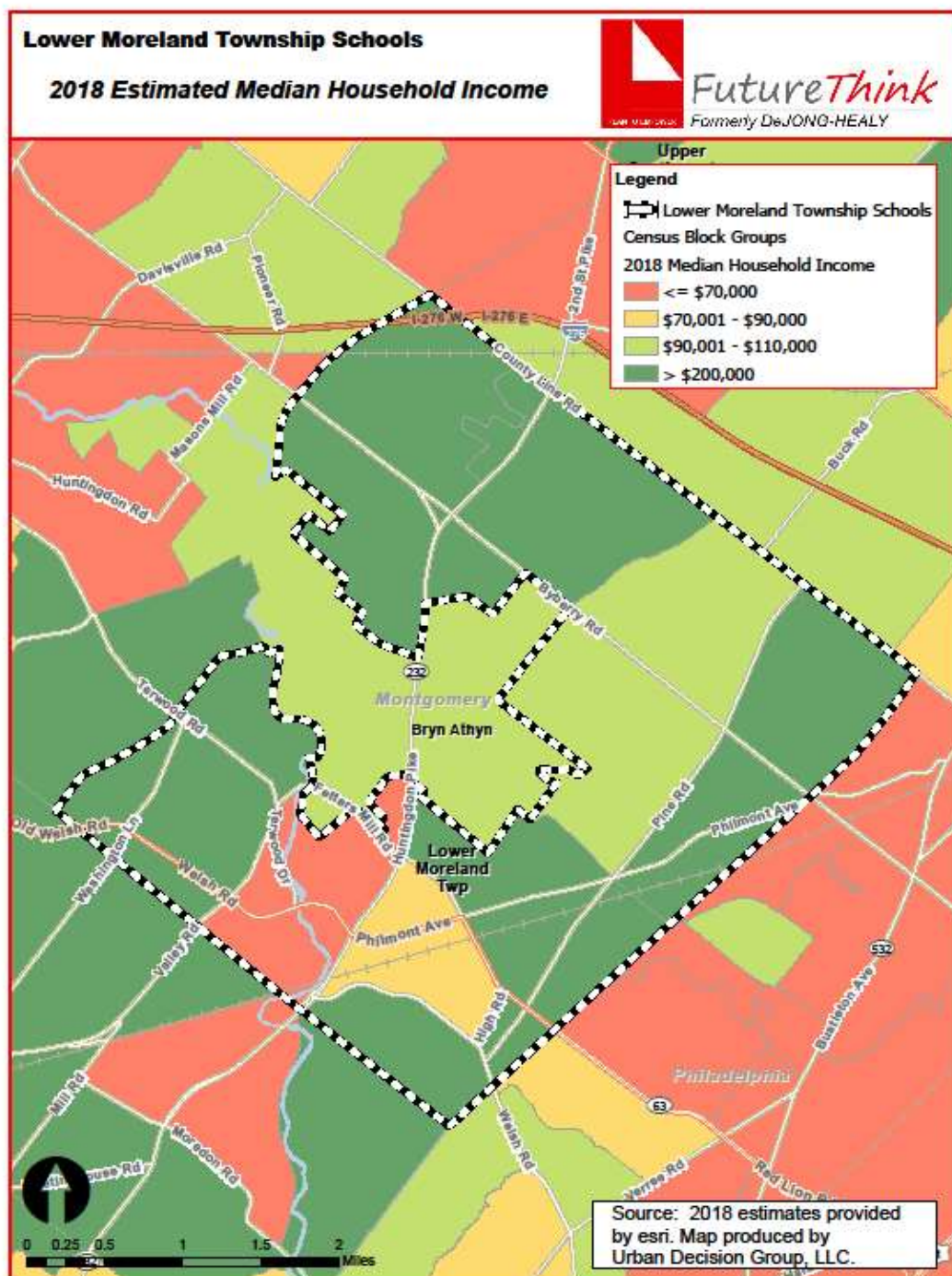


Lower Moreland Township School District

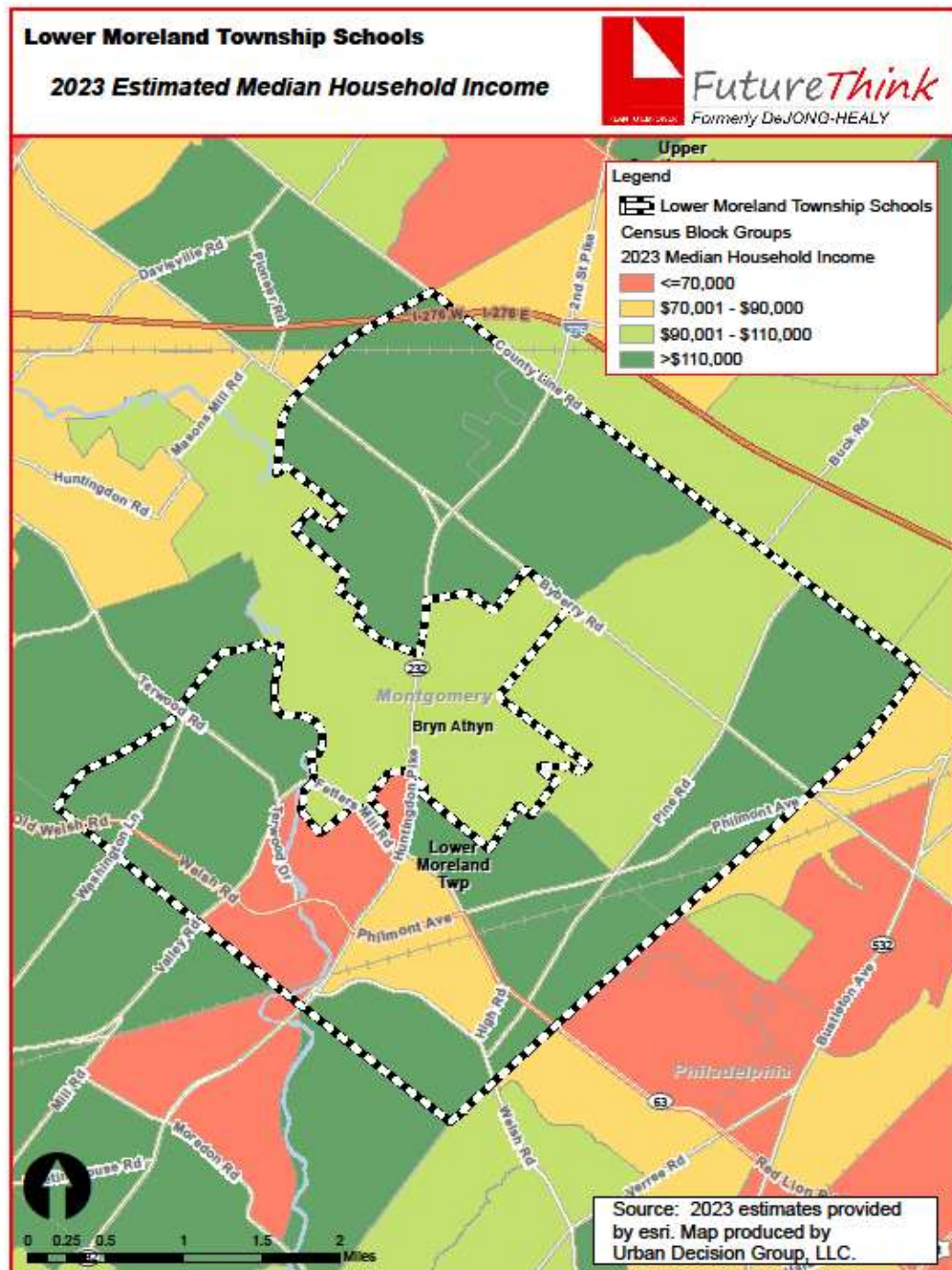




Lower Moreland Township School District



Lower Moreland Township School District



Lower Moreland Township School District

HOUSING INFORMATION

The chart below illustrates the number of single-family dwelling building permits issued each year in Lower Moreland Township and Montgomery County.

of Building Permits Issued for Single Family Dwellings

Year	Lower Moreland Township	Montgomery County
2008	32	1,274
2009	20	643
2010	13	879
2011	3	668
2012	24	915
2013	4	1,000
2014	10	892
2015	2	1,006
2016	1	1,153
2017	0	1,089
2018*	1	816

Source: SOCDS Building Permits Database

* through October 2018

Lower Moreland Township identified the following potential housing developments, totaling approximately 629 units. (The number is approximate due to the unknown number of units at the 3530 Buck Road property.) Please note that the Philmont Country Club is planned to be age-restricted. The Philmont & Tomlinson TOD will be subject to some revisions based on density. The Township has not had much direction from the property owner or developer at this time. There are no specific plans for Byberry & Meadowlark or the Morrissey Tract, and there is no active plan for 1200 Calvin Road.

Housing Developments in Lower Moreland Township School District

Project	Total Units	Type of Unit	Status
The Greens at Huntingdon Valley	56	SFD	Under Construction
Stone Mill at Huntingdon Valley	60	SFD	Under Construction
Philmont Country Club	176	SFA	Very Likely/Age Restricted
Philmont & Tomlinson TOD	143	MF	Potential
1200 Calvin Road	28	SFA	Potential
Byberry & Meadowlark	63	SFA	Potential
Morrissey Tract	93	SFA	Potential
3530 Buck Road	less than 7	SFD	Potential
3636 Pine Road	2	lot split	Potential
3357 Huntingdon Pike	2	lot split	Potential
Total	629		

Source: Montgomery County Planning Commission; Lower Moreland Township

Lower Moreland Township School District

SURVIVAL RATIOS

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

- Birth to Kindergarten: This ratio indicates the number of children born in the area who attend kindergarten in the District 5 years later. Percentages less than 100% result from movement out of the district, attendance at a non-public or charter school, or residence in another district within the same area.

The following table illustrates the survival ratios for the Lower Moreland Township School District. On average, the survival ratios for grades K>1 through 11>12 exceed 100 percent.

from	to	birth -> K	K->1	1->2	2->3	3->4	4->5	5->6	6->7	7->8	8->9	9->10	10->11	11->12
2009	2010	126.2%	107.8%	102.8%	102.1%	102.0%	104.7%	108.0%	107.6%	105.3%	106.9%	100.0%	102.3%	99.4%
2010	2011	134.6%	104.6%	104.3%	104.8%	100.0%	102.6%	107.1%	101.6%	100.0%	102.5%	102.9%	101.0%	103.4%
2011	2012	178.8%	103.5%	112.5%	106.2%	99.3%	101.4%	104.4%	101.8%	103.1%	101.6%	101.9%	102.3%	105.2%
2012	2013	159.0%	105.3%	100.7%	102.0%	108.4%	108.6%	105.3%	102.4%	102.4%	100.0%	99.5%	100.6%	103.9%
2013	2014	148.1%	100.0%	107.5%	103.3%	103.8%	99.4%	101.8%	103.8%	104.1%	101.1%	100.5%	100.5%	107.8%
2014	2015	176.3%	112.3%	115.2%	108.7%	106.5%	108.6%	106.0%	108.3%	105.5%	98.9%	104.0%	98.5%	100.0%
2015	2016	148.6%	111.2%	110.2%	109.9%	103.2%	110.9%	108.0%	108.5%	103.3%	106.9%	103.4%	103.3%	103.6%
2016	2017	166.7%	112.7%	106.0%	112.1%	100.6%	107.8%	99.5%	102.1%	100.5%	105.9%	98.4%	101.6%	100.5%
2017	2018	162.0%	117.9%	108.9%	107.0%	107.0%	101.2%	106.3%	106.6%	101.5%	98.4%	98.0%	97.3%	101.1%
	average	155.59%	108.360%	107.56%	106.2%	103.42%	105.0%	105.1%	104.8%	102.9%	102.482%	100.946%	100.833%	102.769%
	standard deviation	16.845%	5.290%	4.388%	3.332%	3.083%	3.854%	2.698%	2.811%	1.838%	3.143%	2.073%	1.809%	2.590%

Lower Moreland Township School District

ENROLLMENT PROJECTION

Enrollment projections were developed after analyzing the data collected in this report. The projections indicate an increase of 350 students (or approximately 15%) from the 2018-19 to the 2028-29 school year. The following tables and graph illustrate projected enrollments by grade and by grade group through the 2028-29 school year.

Lower Moreland Township School District
Projected Enrollment

Grade	2018-19 Actual	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
K	149	148	147	129	139	140	140	140	140	140	140
1	171	170	168	166	146	157	159	159	159	159	159
2	135	186	184	182	180	158	170	172	172	172	172
3	169	147	202	199	198	196	172	185	186	186	186
4	169	175	152	208	206	204	202	177	191	192	192
5	170	179	185	161	220	218	216	214	187	202	204
6	221	181	191	197	171	234	232	230	228	200	215
7	194	234	192	202	208	181	248	245	243	241	211
8	197	198	239	195	206	212	184	253	250	248	245
9	189	200	201	242	198	209	215	187	256	253	251
10	195	189	200	201	242	198	208	215	187	256	253
11	177	196	190	200	201	242	198	209	216	187	256
12	187	180	198	192	203	204	245	201	212	218	189
K - 12 Total	2,323	2,383	2,449	2,474	2,518	2,553	2,589	2,587	2,627	2,654	2,673

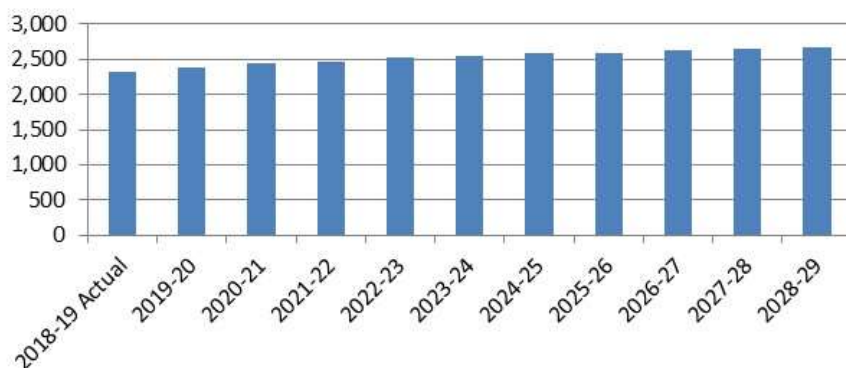
Source: FutureThink

Lower Moreland Township School District
Projected Enrollment by Grade Group

Grade	2018-19 Actual	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
K - 5	963	1,005	1,038	1,045	1,089	1,073	1,059	1,047	1,035	1,051	1,053
6 - 8	612	613	622	594	585	627	664	728	721	689	671
9 - 12	748	765	789	835	844	853	866	812	871	914	949
K - 12 Total	2,323	2,383	2,449	2,474	2,518	2,553	2,589	2,587	2,627	2,654	2,673

Source: FutureThink

Lower Moreland Township School District
Projected Enrollment



Lower Moreland Township School District

ACTUAL VS. PREVIOUS PROJECTED ENROLLMENT

In December 2016, a set of enrollment projections was developed for the Lower Moreland Township School District by the Pennsylvania Department of Education (PDE). The table below illustrates the difference between the actual and projected enrollment by grade for the 2018-19 school year. Overall, the difference was 43 students or approximately 2 percent.

**Lower Moreland Township School District
Actual vs. PDE Projected Enrollment, 2015-16**

Grade	2018-19 Actual	2018-19 EP	Difference	Percentage
K	149	154	-5	-3.36%
1	171	149	22	12.87%
2	135	138	-3	-2.22%
3	169	149	20	11.83%
4	169	153	16	9.47%
5	170	174	-4	-2.35%
6	221	213	8	3.62%
7	194	195	-1	-0.52%
8	197	206	-9	-4.57%
9	189	199	-10	-5.29%
10	195	193	2	1.03%
11	177	174	3	1.69%
12	187	183	4	2.14%
K - 12 Total	2,323	2,280	43	1.85%

Source: Lower Moreland Township School District, PDE, Division of Data Quality

Lower Moreland Township School District

In April 2016, a set of enrollment projections was developed for the Lower Moreland Township School District by the Montgomery County Planning Commission. The table below illustrates the difference between the actual and projected enrollment by grade for the 2018-19 school year. Overall, the difference was 45 students or approximately 2 percent.

**Lower Moreland Township School District
Actual vs. MCPC Projected Enrollment, Option 3**

Grade	2018-19 Actual	2018-19 EP	Difference	Percentage
K	149	155	-6	-4.03%
1	171	137	34	19.88%
2	135	139	-4	-2.96%
3	169	162	7	4.14%
4	169	153	16	9.47%
5	170	176	-6	-3.53%
6	221	214	7	3.17%
7	194	188	6	3.09%
8	197	200	-3	-1.52%
9	189	194	-5	-2.65%
10	195	194	1	0.51%
11	177	179	-2	-1.13%
12	187	187	0	0.00%
K - 12 Total	2,323	2,278	45	1.94%

Source: Lower Moreland Township School District, MCPC April 2016 Report

Both sets of projections were well within the “good” range of enrollment projections while both being slightly less than the actual enrollment. The biggest difference was at the 1st grade for both sets of projections. This difference will have a significant impact on future years of the enrollment projections as this large class size of 171 students moves through the grades over the next 10 years.

Lower Moreland Township School District

The following table illustrates the differences between the PDE, MCPC, and FutureThink enrollment projections for the 2025-26 school year (the latest year available for the PDE and MCPC projections). The FutureThink projections exceed the other two projections by approximately 7% and 9%, respectively.

**Lower Moreland Township School District
Comparison of Projections in the 2025-26 School Year**

Grade	PDE	MCPC	FutureThink
K	141	169	140
1	145	166	159
2	160	171	172
3	170	171	185
4	181	171	177
5	190	174	214
6	200	170	230
7	222	215	245
8	218	188	253
9	188	178	187
10	195	202	215
11	189	184	209
12	214	212	201
K - 12 Total	2,413	2,371	2,587

Source: PDE, MCPC, FutureThink

Lower Moreland Township School District

CONCLUSION

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

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