Report of Residential Development and its Potential Impact on Future School Enrollment

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Prepared For:

South Middleton School District
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A Collaborative Report Prepared by Township and School District Staff





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1. Methodology

1.1 General Methodology

Projecting future enrollment is inherently an inexact science. There are events and trends that simply can't be anticipated, which may have significant impact on future enrollment. The 2008 subprime mortgage crisis and subsequent impact to the economy would not have been anticipated in earlier projections. COVID-19 will have an impact on how people want to live and work for years to come, and the long-term effects on birth rates are unknown, all of which could not have been reasonably assumed in earlier projections.

However, projections should be made for long term planning purposes. They can be made based upon sound assumptions and logical approaches. As such, this report attempts to do just that, while at the same time recognizing the inherent imprecision of such projections.

The first step in the report's methodology was to examine available historic data. By looking back, it can be seen what has occurred in the past and use that to make reasonable assumptions based upon what is anticipated to occur. The data that was examined in this regard was previous school enrollment numbers, the number of building permits the Township has issued for each various types of housing units, historic population data for the Township, and a previous report from the Pennsylvania Economy League about population data and its impact to school enrollment.

The initial enrollment projection is provided by the PA Department of Education.

The next step was to examine active and potential development projects, and determine how many of each housing units by type are anticipated to be built.

Once that determination is complete, the number of students that will be created by those developments can be projected.

And, then a discussion on how that, and other factors, may impact enrollment.

1.2 Dwelling Unit Types

For the purposes of this study, new housing units are categorized as follows:

- Single Family Detached (SFD) Units are stand-alone dwellings on their own lot intended to house one family.
- Single Family Attached (SFA) Units that share common side walls, on one or both sides of the dwelling (e.g. – towhomes and duplexes). Can also be referred as Semidetached. Depending on the type of ownership (fee simple vs. condominium), they may or may not be on a separate lot.

• Multifamily (MF) – Buildings with multiple dwelling units that share common walls or are stacked on top of each and house several families in separate housing units.

2. Historical Information

2.1 Past School Enrollment Data

| | | | | Table | 1: Pa | st Scl | hool E | nroll | ment | | | | | |
|-------------|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|-------|
| School Year | К | 1 st | 2 nd | 3 rd | 4 th | 5 th | 6 th | 7 th | 8 th | 9 th | 10 th | 11 th | 12 th | Total |
| 1975-1976 | 159 | 151 | 146 | 116 | 161 | 127 | 178 | 180 | 191 | 176 | 155 | 134 | 217 | 2091 |
| 1976-1977 | 131 | 165 | 146 | 135 | 115 | 170 | 131 | 207 | 180 | 189 | 165 | 149 | 198 | 2081 |
| 1977-1978 | 147 | 130 | 163 | 127 | 130 | 108 | 161 | 133 | 188 | 156 | 152 | 149 | 215 | 1959 |
| 1978-1979 | 116 | 147 | 133 | 147 | 130 | 125 | 100 | 168 | 127 | 188 | 122 | 136 | 211 | 1850 |
| 1979-1980 | 118 | 126 | 136 | 133 | 140 | 135 | 131 | 108 | 149 | 139 | 149 | 122 | 215 | 1801 |
| 1980-1981 | 131 | 119 | 107 | 133 | 132 | 129 | 135 | 145 | 104 | 145 | 123 | 147 | 186 | 1736 |
| 1981-1982 | 114 | 142 | 113 | 99 | 132 | 132 | 138 | 143 | 133 | 102 | 130 | 117 | 207 | 1702 |
| 1982-1983 | 101 | 135 | 125 | 111 | 102 | 130 | 138 | 152 | 129 | 139 | 88 | 115 | 163 | 1628 |
| 1983-1984 | 103 | 120 | 137 | 120 | 110 | 109 | 133 | 145 | 145 | 123 | 104 | 85 | 177 | 1611 |
| 1984-1985 | 104 | 123 | 102 | 127 | 117 | 112 | 122 | 158 | 135 | 142 | 96 | 95 | 148 | 1581 |
| 1985-1986 | 128 | 127 | 118 | 116 | 131 | 121 | 123 | 153 | 134 | 142 | 130 | 95 | 161 | 1679 |
| 1986-1987 | 125 | 130 | 126 | 108 | 105 | 136 | 124 | 130 | 133 | 137 | 137 | 126 | 122 | 1639 |
| 1987-1988 | 123 | 143 | 129 | 119 | 109 | 111 | 138 | 137 | 121 | 136 | 152 | 141 | 120 | 1679 |
| 1988-1989 | 115 | 137 | 142 | 126 | 117 | 121 | 102 | 150 | 124 | 123 | 133 | 154 | 137 | 1681 |
| 1989-1990 | 118 | 139 | 142 | 134 | 132 | 130 | 125 | 106 | 140 | 131 | 119 | 133 | 145 | 1694 |
| 1990-1991 | 152 | 125 | 140 | 142 | 140 | 131 | 135 | 119 | 114 | 151 | 128 | 118 | 128 | 1723 |
| 1991-1992 | 138 | 162 | 133 | 139 | 141 | 145 | 139 | 139 | 125 | 117 | 152 | 125 | 118 | 1773 |
| 1992-1993 | 118 | 159 | 160 | 133 | 146 | 146 | 151 | 137 | 154 | 128 | 116 | 152 | 116 | 1816 |
| 1993-1994 | 149 | 138 | 156 | 167 | 137 | 150 | 147 | 162 | 139 | 158 | 120 | 119 | 145 | 1887 |
| 1994-1995 | 139 | 160 | 149 | 175 | 175 | 152 | 150 | 154 | 165 | 142 | 153 | 128 | 116 | 1958 |
| 1995-1996 | 141 | 153 | 172 | 158 | 176 | 184 | 151 | 159 | 159 | 167 | 146 | 141 | 125 | 2032 |
| 1996-1997 | 127 | 149 | 149 | 174 | 151 | 180 | 181 | 155 | 167 | 162 | 166 | 135 | 153 | 2049 |
| 1997-1998 | 151 | 142 | 151 | 154 | 176 | 161 | 186 | 190 | 165 | 161 | 163 | 168 | 139 | 2107 |
| 1998-1999 | 127 | 169 | 142 | 150 | 151 | 175 | 159 | 182 | 187 | 175 | 151 | 157 | 169 | 2094 |

| 4000 0000 | 124 | 4.47 | 474 | 455 | 4.64 | 4.60 | 405 | 4.64 | 400 | 404 | 470 | 4.46 | 454 | 2422 |
|-----------|-----|------|-----|-----|------|------|-----|------|-----|-----|-----|------|-----|------|
| 1999-2000 | 134 | 147 | 171 | 155 | 161 | 160 | 185 | 161 | 182 | 194 | 173 | 146 | 154 | 2123 |
| 2000-2001 | 150 | 147 | 151 | 168 | 158 | 158 | 156 | 182 | 157 | 183 | 198 | 171 | 149 | 2128 |
| 2001-2002 | 123 | 167 | 151 | 153 | 163 | 162 | 175 | 171 | 187 | 168 | 187 | 192 | 163 | 2163 |
| 2002-2003 | 137 | 137 | 167 | 152 | 160 | 160 | 175 | 179 | 167 | 194 | 178 | 178 | 188 | 2172 |
| 2003-2004 | 146 | 149 | 142 | 164 | 147 | 162 | 169 | 171 | 172 | 179 | 191 | 164 | 184 | 2140 |
| 2004-2005 | 144 | 158 | 156 | 153 | 180 | 149 | 169 | 176 | 173 | 190 | 176 | 189 | 173 | 2186 |
| 2005-2006 | 154 | 158 | 157 | 147 | 163 | 184 | 166 | 187 | 189 | 190 | 194 | 179 | 195 | 2263 |
| 2006-2007 | 164 | 142 | 161 | 159 | 15 | 152 | 187 | 172 | 188 | 210 | 191 | 196 | 182 | 2257 |
| 2007-2008 | 144 | 164 | 142 | 163 | 162 | 158 | 156 | 191 | 164 | 201 | 198 | 181 | 205 | 2227 |
| 2008-2009 | 152 | 170 | 149 | 141 | 171 | 161 | 164 | 160 | 183 | 187 | 192 | 184 | 188 | 2202 |
| 2009-2010 | 150 | 142 | 155 | 170 | 155 | 172 | 161 | 171 | 158 | 202 | 176 | 186 | 199 | 2197 |
| 2010-2011 | 168 | 152 | 145 | 162 | 173 | 162 | 178 | 169 | 169 | 180 | 185 | 172 | 194 | 2209 |
| 2011-2012 | 163 | 181 | 146 | 153 | 154 | 175 | 162 | 160 | 163 | 177 | 161 | 181 | 179 | 2155 |
| 2012-2013 | 139 | 173 | 177 | 144 | 155 | 154 | 181 | 180 | 162 | 175 | 160 | 155 | 178 | 2133 |
| 2013-2014 | 179 | 151 | 173 | 182 | 14 | 163 | 161 | 177 | 169 | 168 | 177 | 165 | 155 | 2162 |
| 2014-2015 | 120 | 180 | 149 | 176 | 177 | 148 | 164 | 163 | 179 | 174 | 159 | 175 | 165 | 2129 |
| 2015-2016 | 139 | 120 | 188 | 146 | 176 | 176 | 155 | 165 | 158 | 190 | 164 | 162 | 166 | 2105 |
| 2016-2017 | 160 | 140 | 126 | 193 | 155 | 179 | 178 | 153 | 166 | 169 | 184 | 170 | 157 | 2130 |
| 2017-2018 | 145 | 167 | 150 | 132 | 198 | 165 | 189 | 174 | 152 | 167 | 168 | 175 | 160 | 2142 |
| 2018-2019 | 136 | 156 | 170 | 144 | 142 | 189 | 160 | 201 | 168 | 153 | 167 | 160 | 176 | 2122 |
| 2019-2020 | 136 | 141 | 154 | 180 | 151 | 148 | 191 | 164 | 199 | 178 | 147 | 167 | 160 | 2116 |
| 2020-2021 | 124 | 137 | 150 | 145 | 168 | 152 | 144 | 187 | 156 | 191 | 179 | 147 | 168 | 2048 |

2.2 Building Permits issued by Dwelling Type

The Township provides annual updates to Cumberland County summarizing permit activity for the previous year. The chart below includes the number of permits issued for the housing types examined as part of this analysis.

| T | able 2: Township I | ssued Building Pe | rmits |
|------|---------------------------------|---------------------------------|-------------------|
| Year | Single-Family Detached Units | Single Family Attached Units | Multifamily Units |
| 1990 | 80 | 177 | 0 |
| 1991 | 74 | 59 | 0 |
| 1992 | 88 | 31 | 0 |
| 1993 | 86 | 45 | 0 |
| 1994 | 103 | 50 | 0 |
| 1995 | 68 | 54 | 9 |
| 1996 | 68 | 37 | 15 |
| 1997 | 84 | 21 | 8 |
| 1998 | 82 | 4 | 8 |
| 1999 | 93 | 16 | 4 |
| 2000 | 85 | 0 | 40 |
| 2001 | 88 | 8 | 0 |
| 2002 | 103 | 15 | 0 |
| 2003 | 118 | 37 | 0 |
| 2004 | 82 | 17 | 0 |
| 2005 | 98 | 21 | 0 |
| 2006 | 80 | 34 | 0 |
| 2007 | 62 | 50 | 0 |
| 2008 | 38 | 28 | 0 |
| 2009 | 40 | 19 | 0 |
| 2010 | 39 | 10 | 0 |
| 2011 | 40 | 0 | 0 |
| 2012 | 35 | 0 | 0 |
| 2013 | 56 | 6 | 0 |
| 2014 | 50 | 4 | 0 |
| 2015 | 47 | 8 | 96 |
| 2016 | 23 | 0 | 86 |
| 2017 | 41 | 6 | 64 |
| 2018 | 64 | 8 | 82 |
| 2019 | 52 | 3 | 0 |
| 2020 | 82 | 4 | 0 |

2.3 Population Data

The Township, in its 2007 Comprehensive Plan, projected population increase from 2000 through 2020. A detailed explanation of the methodology is provided there, so there is no need to repeat it here. The projections were completed prior to the 2010 Census as follows:

| Т | Table 3: Population Projections | | | | | | | | | | | |
|---|---------------------------------|--------|--------|--------|--|--|--|--|--|--|--|--|
| Method Used | 2004 | 2005 | 2010 | 2020 | | | | | | | | |
| Tri-County Regional Planning Commission | | 14,871 | 15,769 | 17,300 | | | | | | | | |
| US Census | 13,721 | | | | | | | | | | | |
| South Middleton – Arithmetic | | 13,879 | 14,818 | 16,697 | | | | | | | | |
| South Middleton – Exponential | | 14,426 | 16,085 | 19,995 | | | | | | | | |
| South Middleton – Shared Ratio of County Population | | 14,956 | 15,139 | 16,324 | | | | | | | | |

The actual 2010 Census population was 14,633. So, it would appear that South Middleton calculation based on the Arithmetic increase most closely predicted the actual population. If that trend continues, the 2020 population would be slightly less than 17,000, and this assumption can be verified by the 2020 Census once it is released.

An examination of previous Census population data indicates that the Township's population is skewing lower in the 18-24 and 25-44 age groups, while skewing slightly higher in both the 45-64 and 65+ age groups (as compared to state and national population percentages). Both of these trends have been progressing since 1980, and demonstrate a decrease in the population with the highest fertility rates.

| | Table 4: Age Characteristics | | | | | | | | | | | | |
|---------------------|------------------------------|-------------|-------------|-------------|-------------------|-------------------|--|--|--|--|--|--|--|
| Age Group | 1980 | 1990 | 2000 | 2010 | PA Data (2010) | US Data (2010) | | | | | | | |
| Under 5 years | 600 (7%) | 635 (6%) | 703 (5%) | 736 (5%) | 6% | 7% | | | | | | | |
| 5-17 | 1,889 (21%) | 1,848 (18%) | 2,377 (18%) | 2,501 (17%) | 16% | 17% | | | | | | | |
| 18-24 | 1,006 (11%) | 822 (8%) | 724 (6%) | 769 (5%) | 10% | 10% | | | | | | | |
| 25-44 | 2,613 (29%) | 3,338 (32%) | 3,543 (27%) | 3,130 (21%) | 25% | 27% | | | | | | | |
| 45-64 | 1,993 (22%) | 2,341 (23%) | 3,392 (26%) | 4,548 (31%) | 28% | 26% | | | | | | | |
| 65+ | 830 (9%) | 1,356 (13%) | 2,200 (17%) | 2,979 (20%) | 15% | 13% | | | | | | | |
| Total Population | 8,941 | 10,340 | 12,939 | 14,633 | | | | | | | | | |
| Percent Change | 39% | 16% | 25% | 13% | | | | | | | | | |

^{*}Some percentages may not equal 100% due to rounding

The building permit data indicates that the predominant development type over the past 20 years has been single-family detached dwellings. Because the percentage of the population that can afford a typical home today has been shrinking as the average home size increases - the Township has captured a migration of older, more affluent residents.

2.4 Pennsylvania Economy League Study (2004)

In 2004, the South Middleton Township School District commissioned the Pennsylvania Economy League to conduct a study of future growth patterns for the purpose of projecting public school enrollments in South Middleton Township. Their conclusions were that "public school enrollments over the next ten years will be dependent more on recent and future births, migration patterns, the age composition of the child population, and the role of nonpublic education 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 population growth."

A summary of some of their findings indicates the following:

Births per 1,000 Population

Births averaged 14.1 during the 1970s, decreasing, in the 1980s to 12.2, and in the 1990s, to 10.9 per 1,000 Population. During the years 2000-2002, the number of births continued to decrease to 9.3. The highest number of births (17.0), occurred in 1971, with the lowest number (8.6), occurring in 2001.

Births per 1,000 Housing Units

In the 1970s, births per 1,000 housing units averaged 42.7, decreasing to 33.2 in the 1980s, and to 27.6 in the 1990s. In the first three years of the present decade, births averaged 22.2. The highest number (53.6) occurred in 1971, and the lowest (20.1) in 2001.

Number of Public School Children per Housing Unit

In 1970-71, there were 0.857 public school children per housing unit. Between 1980-81 (0.527) and 1990-91(0.435), the number decreased to slightly more than half of the 1970-71 figure. For 2000-01 the number continued to decrease to 0.403, and in 2003-2004 the decrease continued to 0.366.

Both births per 1,000 population and births per housing unit declined in the 30+ year analysis period. The number of housing units permitted increased from 35.4% in the decade 1970-1980, while the number of public school children decreased by 16.8%. By 1990-91, there was a 24.3% increase in the number of housing units, and an increase in the enrollments of 2.6%, resulting in a decreased ratio of children/housing unit of slightly more than one-half of the 1970-71 figure. Children per housing unit for the 2003-04 school year decreased to 0.366. These decreases were reflected in all 4 grade groupings – K-3, 4-5, 6-8 and 9-12. Although the number of housing units continues to increase, the ratio of public school children per housing unit has decreased from 1970 through 2003-04.

3. Residential Development Projects

3.1 Active Residential Projects and Projected Number of Housing Units

To simplify matters somewhat, projects with less than 10 proposed dwelling units were not included in the analysis. Only a handful of those projects exist, and won't have a significant impact on the projected number of units.

The following are active residential projects within the Township:

| 1 | Table | 5: Act | ive Re | esiden | tial Pr | ojects | } | | | | |
|--------------------------------------|--------------|--------|--------|--------|---------|--------|------|------|------|------|------|
| Project | Unit Type | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| The Villas Sections 1 & 2 | SFD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Netherby Phase 4A & 4B | SFD | 8 | 8 | | | | | | | | |
| Westgate Phases 5-7 | SFD | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | | |
| Westgate Phase 8 | SFA | | | | | | | 4 | 4 | 4 | |
| Forgedale Crossing Sections 10-13 | SFD | 12 | 11 | 10 | 11 | 10 | 7 | 7 | 6 | 6 | 6 |
| Sable Chase | SFA | | 4 | 5 | | | | | | | |
| Parkview at Boiling Springs | SFD | 4 | 4 | 4 | 4 | 1 | | | | | |
| Morgan's Crossing Phases 2-5 | SFD | 24 | 22 | 16 | 16 | | | | | | |
| Morgan's Crossing Townshomes | SFA | | | | | | | | | | |
| Jefferson Court II | SFD | 2 | 6 | 6 | 6 | 6 | | | | | |
| Westmooreland Townhomes | SFA | 6 | 18 | 12 | 16 | 12 | 12 | 12 | 10 | | |
| Westmooreland SFD | SFD | | | 1 | | | | | 1 | | |
| Laurel Forge | SFD | 8 | 10 | 9 | 8 | 8 | | | | | |
| Georgetowne | SFD | 24 | 15 | 22 | 18 | 13 | 16 | 21 | 16 | 19 | 14 |
| Cambria Place Apartments | MF | | 72 | 108 | 132 | 24 | | | | | |
| Cambria Place Townhomes | SFA | | 18 | 18 | 16 | 8 | | | | | |
| Zenith Apartments (Smith Farm) | MF | | 36 | 36 | 36 | 36 | 36 | 36 | 34 | | |
| Smith Farm Townhomes | SFA | | | 24 | 20 | 20 | 20 | | | | |
| TOTAL SINGLE FAMILY DETACHED | SFD | 85 | 79 | 71 | 66 | 41 | 26 | 31 | 24 | 25 | 20 |
| TOTAL SINGLE FAMILY ATTACHED | SFA | 6 | 40 | 59 | 52 | 40 | 32 | 16 | 14 | 4 | 0 |
| TOTAL MULTI-FAMILY | MF | 0 | 108 | 144 | 168 | 60 | 36 | 36 | 34 | 0 | 0 |

3.2 Potential Residential Projects

These are projects that development has not been initiated and are still in the planning stages.

Heritage Developers – This project is located between Trindle and York Road, just east of Fairview Street. A connector road is currently being constructed to serve as access to this area. In addition to the commercially and industrially zoned land, there is a large tract that is zoned high-density residential. The exact type of housing that will be built has not been determined. But, for traffic generation purposes, the developer used 130 Single Family Detached units, 215 Single Family Attached units, and 192 Multi-Family units.

Walnut Bottom Grove - This project is on south side of Walnut Bottom Road across from the old Sprint Building (Cambria Place project). This will be mostly residential with a mixture of housing types, predominantly Single Family Detached units. The potential number of units is approximately 300-500.

Orchards of Marsh Run (Church of God) – The Orchards at Marsh Run was a proposed Life Care Community proposed on the properties that surround St. Patrick's School on Marsh Drive. The project proposed a Life Care Community which offers a continuum of care from Independent Living, Assisted Living, to Full Nursing Care. Obviously, if developed in this manor, the impact to enrollment will be negligible. However, the site is being considered for re-zoning to High Density Residential in the Township's Comprehensive Plan update process.

Limestone Creek - This project is on South Spring Garden Street, just north of Union Quarries. A Preliminary Plan and Phase 1 Final Plan was approved for this project that called for 124 Single Family Detached units plus 56 Single Family Attached units. However, the developer has withdrawn the plans and the Township has received inquiries about using the property for a non-residential use.

There are several other tracts of land that are zoned residentially, but the potential for development in the near future is low. Those include:

- Edris Property This property is located on West Pine Street, west of Mount Holly Springs. This is an 86-acre lot divided by the railroad, and a stream. In 2004, a sketch plan was submitted showing 66 lots. However, the developer did not follow through because there were issues with the stream crossing(s).
- Otto Property This 86-acre parcel between Sandbank Road and West Pine Street, west of Mount Holly Springs, is zoned Low Density Residential.
- Diehl Property (Ridge Road) In 2007, Traditions of America had proposed an agerestricted community on this 77-acre parcel containing 154 single-family detached

dwellings, 36 duplexes (single-family semi-detached dwellings) and 54 townhouse units (single-family attached dwellings). Those plans were abandoned and nothing has been proposed since.

- Myers Farm This 101-acre parcel on the west side of Forge Road, just north of Hope Drive, is zoned Moderate Density Residential.
- Carothers Farm This 121-acre parcel both sides of Forge Road, just south of Lindsey Road, is a mixture of Moderate and High Density Residential, as well as Commercial.

In addition, **Wheatstone** is located on Springville Road, just east of The Oaks. A plan was previously approved for 180 Single Family Detached units. However, the developer received approvals on several zoning variances to develop the property as an age-restricted community, abandoning their plans for the Single Family Detached units. Therefore, this project was not considered within the enrollment projections.

4. Projected Student Enrollment

4.1 PA Department of Education Projected Enrollment

The Pennsylvania Department of Education projects enrollment future enrollment numbers for each school district in the Commonwealth. The projection model is a combination of a Grade Progression Model and a modified Enrollment Rate model.

The class sizes of those entering kindergarten and 1st grade are based upon birth rates provided by the PA Department of Health for the previous five and six years earlier. Subsequent years are based upon the projection model which assumes that external factors (such as increased population and housing) that influenced grade progression in the past will continue to do so in the future, and is based upon the previous five years of enrollment data.

The highlighted blocks follow the class of 2030 from kindergarten through 12th grade, and represents an average increase of 1.7% a year.

| Tabl | Table 6: PA Department of Education Projected Enrollment by Grade | | | | | | | | | | | | | |
|--------------|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|--|
| School Year | K | 1 st | 2 nd | 3 rd | 4 th | 5 th | 6 th | 7 th | 8 th | 9 th | 10 th | 11 th | 12 th | |
| 2015 – 2016* | 140 | 119 | 188 | 146 | 175 | 178 | 152 | 166 | 161 | 189 | 164 | 164 | 171 | |
| 2016 – 2017* | 160 | 141 | 126 | 194 | 157 | 178 | 178 | 154 | 166 | 172 | 184 | 167 | 161 | |
| 2017 – 2018* | 144 | 168 | 155 | 130 | 195 | 162 | 189 | 172 | 149 | 163 | 161 | 176 | 158 | |
| 2018 – 2019* | 135 | 156 | 170 | 144 | 142 | 189 | 161 | 199 | 171 | 152 | 168 | 163 | 178 | |
| 2019 – 2020* | 137 | 146 | 157 | 180 | 151 | 149 | 191 | 163 | 201 | 177 | 148 | 168 | 158 | |
| 2020 - 2021 | 141 | 178 | 152 | 163 | 190 | 154 | 151 | 193 | 162 | 206 | 173 | 148 | 164 | |
| 2021 - 2022 | 176 | 159 | 186 | 158 | 172 | 193 | 157 | 153 | 192 | 166 | 202 | 172 | 145 | |
| 2022 - 2023 | 151 | 199 | 166 | 194 | 167 | 175 | 196 | 159 | 152 | 197 | 162 | 201 | 168 | |
| 2023 - 2024 | 151 | 171 | 208 | 173 | 205 | 170 | 178 | 198 | 158 | 156 | 193 | 161 | 196 | |
| 2024 - 2025 | 148 | 171 | 179 | 216 | 183 | 208 | 173 | 180 | 197 | 162 | 153 | 192 | 157 | |
| 2025 - 2026 | 145 | 168 | 179 | 186 | 228 | 186 | 211 | 175 | 179 | 202 | 159 | 153 | 188 | |
| 2026 - 2027 | 142 | 164 | 175 | 186 | 196 | 232 | 189 | 213 | 174 | 184 | 198 | 158 | 150 | |
| 2027 - 2028 | 139 | 161 | 171 | 182 | 196 | 199 | 236 | 191 | 211 | 179 | 180 | 197 | 154 | |
| 2028 - 2029 | 136 | 157 | 168 | 178 | 192 | 199 | 202 | 239 | 190 | 217 | 175 | 179 | 192 | |
| 2029 - 2030 | 133 | 154 | 164 | 175 | 188 | 195 | 202 | 204 | 237 | 195 | 212 | 174 | 175 | |

^{*}Actual Enrollments Reported to the Department of Education during October 1 Enrollment Collection

The model used by the Department of Education has certain limitations and external factors such as the opening or closing of a non-public school, a significant increase or decrease in new home building, or a shift in migration patterns are not included in the model.

4.2 Student Generation Rates

There is not a significant amount of research into calculating enrollment rates by housing type. The latest study by the American Society of Planning Officials (now the American Planning Association) was conducted in 1966 (Information Report No. 210). Student generation rates by housing type vary widely from source to source.

In order to provide more real world numbers, further study of "development" level student generation rates for specific housing types should be considered. For instance, with the development of the Summerbridge Apartment complex on Eastgate Drive, actual student generation rates could be ascertained for enrollment based the rates coming from that apartment complex. These rates could then be applied to the proposed Cambria Place and Zenith Apartment projects proposed. More specific enrollment rates could also be ascertained based upon lot size, which correlates to housing price, and applied to the proposed developments of similar lot sizes. This would be especially relevant to several townhome

developments throughout the Township (e.g. – Summerfield, Greenfields) that have significant populations of older residents although not specifically age-restricted housing. But, because they are smaller units (2 bedrooms or less) with no basement, the houses are attractive to older residents looking to downsize.

In lieu of those development specific rates, generation rates were developed based upon an examination of other studies from school districts in the area, noting that these are greater than the rates discussed in the 2004 Economy League Study:

| Table 7: Student Gene | Table 7: Student Generation Rates by Unit Type & School Level | | | | | | | | | | |
|-----------------------|---|-----------|----------|--|--|--|--|--|--|--|--|
| School Level | SFD Units | SFA Units | MF Units | | | | | | | | |
| Elementary | 0.30 | 0.20 | 0.15 | | | | | | | | |
| Middle School | 0.05 | 0.05 | 0.05 | | | | | | | | |
| High School | 0.15 | 0.10 | 0.10 | | | | | | | | |
| TOTAL | 0.50 | 0.35 | 0.30 | | | | | | | | |

4.3 Projected Students from New Residential Development

Based upon the number of proposed units and the above generation rates, the following tables provide the number of students generated by proposed development.

| Table 8: No | Table 8: Number of Students from Proposed Development per Year | | | | | | | | | | | | |
|---------------|--|------|------|------|------|------|------|------|------|------|--|--|--|
| Year | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | | | |
| Elementary | 27 | 48 | 55 | 55 | 29 | 20 | 18 | 15 | 8 | 6 | | | |
| Middle School | 5 | 11 | 14 | 14 | 7 | 5 | 4 | 4 | 1 | 1 | | | |
| High School | 13 | 27 | 31 | 32 | 16 | 11 | 10 | 8 | 4 | 3 | | | |

To account for those students that move up to the next school level, or graduate, a "rolling" total is provided below. For the elementary school, the previous five years is totaled, for middle school the previous 3 years, and for the high school, the previous 4.

| | Table 9: Rolling Totals for Each School | | | | | | | | | | | | | |
|---------------|---|------|------|------|------|------|------|------|------|------|--|--|--|--|
| Year | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | | | | |
| Elementary | 27 | 75 | 129 | 185 | 187 | 159 | 122 | 82 | 61 | 47 | | | | |
| Middle School | 5 | 16 | 30 | 44 | 46 | 40 | 30 | 20 | 14 | 10 | | | | |
| High School | 13 | 40 | 71 | 103 | 106 | 90 | 69 | 45 | 33 | 25 | | | | |

4.4 Discussion

The historic enrollment numbers, historic building permit information, population data, and the information from the 2004 Economy League study should be used to provide some context to these numbers. It would be incorrect to simply take these additional enrollment numbers and add them to current numbers to determine future enrollment at each school level.

Over the past decade, the Township issued permits for 529 Single Family Detached units, 49 Single Family Attached units, and 328 Multi-Family units. Had that methodology been used 10 years ago, an increased enrollment of an additional 391 students would have been projected. That did not occur. Enrollment throughout that period was essentially constant.

Figure 1 below illustrates how total enrollment has remained steady since the turn of the century while the number of building permits varied from year to year. The vertical scale of the graph is varied for comparison purposes.

So, it would seem that there is a "baseline" amount of new residential units that balances out the aging demographic, declining birth rate, and decreased number of children coming from each house. Over the last decade, the number of single family homes being built was affected by the 2008 subprime mortgage crisis. Prior to that, the Township was issuing about 80-100 permits for Single Family Detached units. In the past decade, that number was in the 40-60 range. During that time, enrollment remained relatively constant.

However, demand has risen in the last few years, and the number of permits being issued is returning to those higher numbers. If that trend continues, that will result in an increase in enrollment similar to the increase seen throughout the 1990's. Low interest rates continue to fuel new home construction and demand for homes. However, material costs continue to increase, increasing the cost of housing. It is difficult to predict the continued housing demand.

Another new "unknown" in the Township is going to be a significant increase in the amount of apartments. From 2015-2018, the Summerbridge apartments were constructed, adding 298 apartments in the Township. However, there did not seem to be a significant increase in enrollment (yet) from the development of that project. There are two major apartment complexes proposed in the Township (Cambria Place and Zenith Apartments) within the next few years. The effect from these projects should be monitored closely.

The projected enrollment numbers also begin to decline in the later years of the analysis because the number of new housing units are based solely on the "active" projects that will be built out by that time. Some of the "potential" projects will be developed during that time, which will increase the number of housing units built; and thus, students, in the later years of the study period.

In addition, the effect of the declining birth rate due to COVID is unknown. The U.S. birth rate just hit its lowest point since 1979. Will this trend continue? Will there be a "baby boom" as a result of COVID? This will need to be monitored closely to determine its impact on enrollment.

In summary, because of the number of housing units proposed, the enrollment has the potential to increase significantly over the next decade. But, it is dependent on many factors.

The School District and Township should continue to share information, especially in regards to number of building permits being issued each year. In addition, the School District should consider examining development specific enrollment rates to better understand and project enrollment from different housing types and unit costs.

Should the current building trend continue, and the apartment complexes add a significant number of students, enrollment will increase. Should the economy, birth rate, and housing market slow, enrollments will tend to be "balanced" as they were during the previous decade.

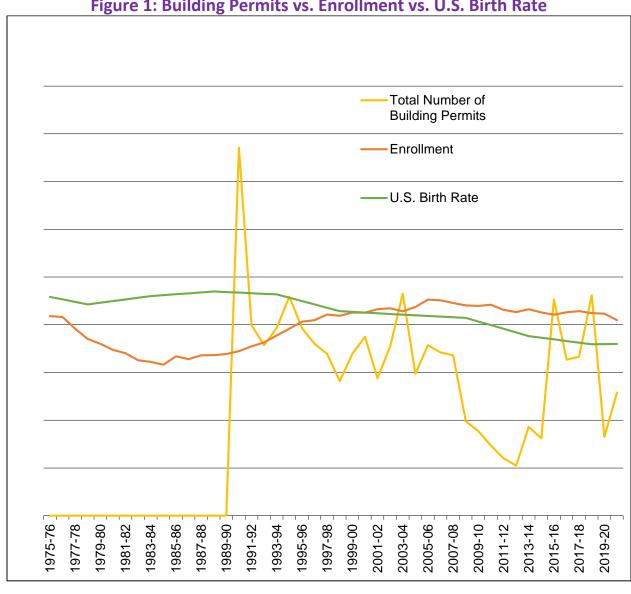


Figure 1: Building Permits vs. Enrollment vs. U.S. Birth Rate

APPENDIX A

Active Development Yearly Assumptions

Note there is no difference between the meaning of "Section" versus "Phase", this is simply the name each developer has decided to use on their plan.

The Villas – Section 1 and 2 – The Villas is located on the west side of Forge Road across from Mayapple Village. Section 1 is almost fully built out. Fine Line Homes, the developer of the project, has let the NDPES permit (DEP permit regarding water quality) expire and has not initiated any permitting activity for quite some time. The reason is not known why they haven't utilized the remaining development, but it is not anticipated that they will anytime soon.

Netherby Phases 4A & 4B – This subdivision is on the east side of Forge Road, just north of Lindsey Road. There are only two lots left in Phase 4A, and the last Phase 4B was recently approved by the and includes 14 lots. It is assumed that the 16 lots will be built upon in the next two years. The entire subdivision contained 110 lots.

Westgate Phases 5-7 – This subdivision is west of Mount Holly Springs on West Pine Street. There are 23 Single Family Detached Units remaining in Phases 5-7. Development of this subdivision has been slow, so it is projected that 3 lots per year will be built upon.

Westgate Phases 8 – This Phase of the Westgate Subdivision includes 35 Single Family Attached units. The boundary between Mount Holly Springs and South Middleton Township splits the parcel, so only 12 of the 35 units are located in South Middleton Township. The plan includes extending Westgate Drive into the Borough, connecting with Walnut Street. Associated with that are some right-of-way issues that have delayed the project, even though the developer received conditional use approval in 2009 (which has since expired). It was assumed that the units would be built in years 7, 8, & 9 of this study.

Forgedale Crossing Sections 10-13 – This subdivision is on the west side of Forge Road, just north of Lindsey Road. The first 9 phases have been completed. The last phase was approved in 2013, but the Township has recently approved Phase 10A, consisting of 23 Single Family Detached units. According to the phasing schedule, they will be submitting the next phases of the plan as follows:

- Section 10B 21 lots October 2021
- Section 11 17 lots October 2023
- Section 12 13 lots October 2025
- Section 13 12 lots October 2027

For this study, it was assumed each phase will be approved the following year, and then constructed in the two years following approval. There are 86 lots remaining from the proposed 188 lots in Sections 5-13.

Sable Chase – This subdivision consists of the townhomes (Single Family Attached dwellings) being built behind the former Rillo's restaurant on Pine Street. There is a 4-unit and 5-unit buildings that remain out the original 58 units. It was assumed they would be built in 2022 and 2023.

Parkview at Boiling Springs – This subdivision consists of Single Family Detached units just north of Spring Meadows Park on West First Street (Rt. 174). Aside from a few scattered lots in Phases 1 & 2, essentially all that remains is Phase 3. There are 17 lots remaining that have not been built upon throughout the entire development out of the 109 proposed. For this study, it was assumed they would be developed at a rate of 4 per year.

Morgan's Crossing Phase 2-5 - This subdivision is on the west side of Petersburg Road, just south of the Carlisle Evangelical Free Church. The first 5 consist of Single Family Detached units. Phase 1 has been completed, and the Township has recently approved Phase 2, consisting of 24 Single Family Detached units. According to the phasing schedule, they will be submitting the next phases of the plan as follows:

- Phase 3 22 lots March 2025
- Phase 4 16 lots March 2027
- Phase 5 16 lots March 2029

Given the pace at which the current phases are being completed and current demand for housing, it was assumed that the following phases will be submitted earlier than indicated and that each phase will be constructed over the next 4 years.

Morgan's Crossing Townhomes – The developer proposed 151 townhomes as part of the project, but this portion was removed since there were issues with sewer flow through the Municipal Authority's pump station.

Jefferson Court II – This subdivision is on Petersburg Road, south of Morgan's Crossing. There are two phases for a total of 26 lots. For the projection, it was assumed that two lots would be started in 2021, and then the remaining 24 lots would take four years to complete.

Westmooreland – This is a development that consists of 98 townhomes (Single Family Attached) and 2 Single Family Detached units. The project is located south of the intersection of Allen Road and Walnut Bottom Road. There are PennDOT permitting issues and agreements with adjacent property owners delaying the project, but it is anticipated that the project will proceed in 2021 with Phase 1 (36 SFA, 1 SFD). Phase 2 consists of 40 SFA, and Phase 3 is 22 SFA and 1 SFD. For the purposes of this study, it was assumed each Phases 1 & 2 would take three years to complete, and then Phase 3 would take two years.

Laurel Forge – This subdivision is on Lindsey Road, west of Forge Road. It consists of 43 lots. The first Phase was recently approved by the Township. For the projection, it was assumed the

first phase would take three years to complete, followed by the second phase completed in two years.

Georgetowne – This plan is currently under consideration for approval, and consists of 196 lots being constructed according to the following phasing schedule:

- Phase 1 24 lots 2021
- Phase 2 15 lots 2022
- Phase 3 22 lots 2023
- Phase 4 18 lots 2024
- Phase 5 13 lots 2025
- Phase 6 16 lots 2026
- Phase 7 21 lots 2027
- Phase 8 16 lots 2028
- Phase 9 19 lots 2029
- Phase 10 14 lots 2030
- Phase 11 18 lots 2031

Cambria Place – Cambria Place consists of 60 3-Story Townhomes and 336 Apartments in 7 different buildings. Subdivision and Land Development plans have been submitted and are in the approval process, with ground-breaking anticipated in July 2021. The rest of the property is proposed for commercial uses.

Zenith Apartments (Smith Farm) – This project involves 250 apartment units (Multi-Family) located in 22 buildings. The project is located along South Spring Garden Street, just north of I-81 and south of the Giant Food Store and recently constructed Carlisle United Methodist Church. It is anticipated that the project will begin construction in 2022 and three buildings a year will be built.

Smith Farm Townhomes – The remainder of the Smith Farm contains 50 one-bedroom townhomes, 51 units in a nursing home, 84 single family townhomes (4 buildings of six, and 12 buildings of 5). The one-bedroom housing units are to be transitional care units and not impact student enrollment. It was assumed the remaining townhomes would begin construction in 2023 and proceed with about a quarter of them being built in the subsequent years.

APPENDIX B

