



# SCHOOL ENROLLMENT PROJECTIONS

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PREPARED FOR:  
METHACTON SCHOOL DISTRICT

PREPARED BY:



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## **Introduction**

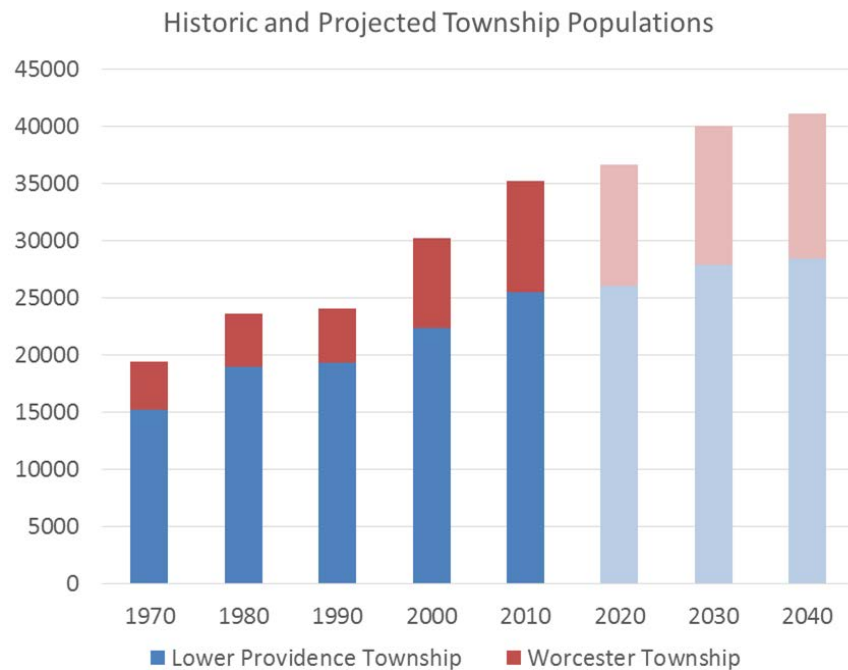
The Methacton School District contracted with Milone & MacBroom, Inc. to prepare detailed school enrollment projections for the district, which were last prepared in early 2015. The districtwide and school-specific projections in this report are meant to serve as a planning tool for the future to represent the most likely direction of the Methacton School District and inform decisions on facility needs.

This report examines a range of factors that impact school enrollments, namely trends in demographics, births, housing and development, and private school enrollments. These trends are accounted for in the methodology used to project districtwide enrollments on a grade-by-grade level, as well as projecting the trajectory of enrollments in each of Methacton's individual elementary schools. As with any enrollment projection report, the Methacton School District should pay close attention to the variables that are discussed in this report, as changes can impact enrollment and resulting facility needs. Through ongoing updates, these enrollment projections can be fine-tuned to increase accuracy, providing Methacton with an ongoing planning tool to assist in determining the future direction of the district.

## Demographics

The two townships that compose Methacton Public Schools, Lower Providence and Worcester, together are home to a residential population of 35,637 persons as of 2014 estimates. Lower Providence, the more densely populated of the two communities, has an estimated population of 25,603 persons, while Worcester's population is estimated at 10,034 persons. Both townships have experienced significant growth over the past several decades, with Worcester in particular expanding rapidly in population between 1990 and 2010. However, estimates of population increase since 2010 are low in comparison to previous decades, indicating that the slowdown in home sales and residential construction that have occurred in the community since the onset of the Great Recession have been felt in the trajectory of Lower Providence and Worcester's population.

Population projections prepared by the Delaware Valley Regional Planning Commission (DVRPC) indicate that the recent slowdown in growth is likely to persist through 2020 (see Figure 1). The projections envision a rebound in growth rates in the following years; however, these longer-term projections should be treated with skepticism, as long-term population growth is sensitive to regional-scale economic trends that are highly uncertain.



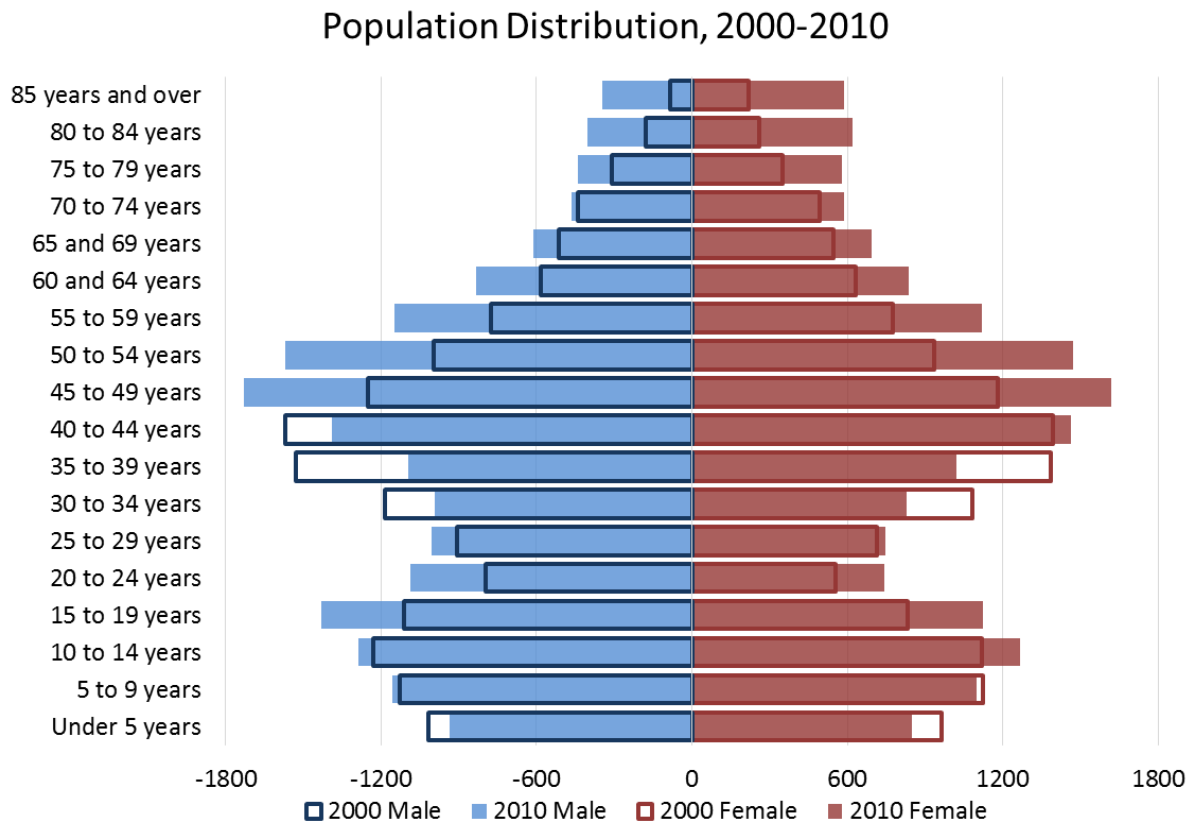
Sources: historic population: NHGIS, U.S. Census Bureau; projected population: DVRPC

Figure 1: DVRPC Population Projections

## Population Distribution and Characteristics

The most recent reliable demographic data on the community's population by age and sex is the 2010 Decennial Census. Comparing this dataset to 2000's age cohorts (see Figure 2), increases in the pre-teen to young adult population (10 to 24 years) and in older working-age adults (45 to 64 years of age) account for the bulk of absolute population increase, while the rate of growth is greatest among the oldest age cohorts (80 and older), which have collectively grown by 262% over the decade. Conversely, the population between 30 and 44 years of age—the cohorts at the prime age for starting families—declined in size over the same time period, as did the youngest cohort of

children under 5 years old.



Source: 2000 and 2010 U.S. Census

Figure 2: Population by Age

The net effect of the population changes illustrated in Figure 2 has been a significant rise in both townships’ median ages; each rose by more than 4 years between 2000 and 2010. Lower Providence’s median age of 40.8 is comparable to that of Montgomery County, at 40.6, but Worcester’s median resident is 44.0 years of age. The rising median age reflects declines in both the school-age population and the population of females of child-bearing age (as discussed below).

The geographic distribution of the district’s population is depicted in Maps 1 and 2 (in Appendix A of this report), and is most densely concentrated in the eastern end of Lower Providence, proximate to the Woodland and Eagleville districts. By contrast, the predominately rural northern end of Worcester is least densely populated. The greatest gain in population over the past decade has taken place in the Audubon district area, where the age-restricted Shannondell development has brought a new influx of older residents. However, Worcester’s population has also grown by over 25% over the past decade. These changes are depicted in Map 3.

Changes in the school-age population since 2000 has largely followed the same pattern as changes in overall populations, with growth observed in most Census Tracts (see Maps 4 and 5). The Audubon-area Tract that contains the Shannondell development is a clear exception to this trend, as the school-age population has declined here as well as in the Woodland-area Tract to the north.

The population of potential mothers is an important demographic indicator of expected future births in the community. A decline in this population, combined with decreasing birthrates seen in many communities and populations, points towards fewer expected births and lower school enrollments in the future. In contrast to the gains in total population and school-age children, the population of women between 18 and 44—the population of potential mothers—declined across much of the District. Map 7 shows the distribution of this decline, which has most greatly affected Worcester as a whole, as well as neighborhoods of Lower Providence attendance Woodlands, Audubon, and Eagleville. This overall decline has been borne out in the District’s birthrate, which has experienced a slow decline since the early 2000s in terms of absolute number of births.

**Births**

Births to parents within the community are a primary driver of future student enrollment in Methacton, and growth or decline in student population tends to track (with some variation) births that occurred in Lower Providence and Worcester five years earlier. Historically, births have ranged between approximately 280 and 380 annually, peaking in 2000 before beginning an ongoing decline.

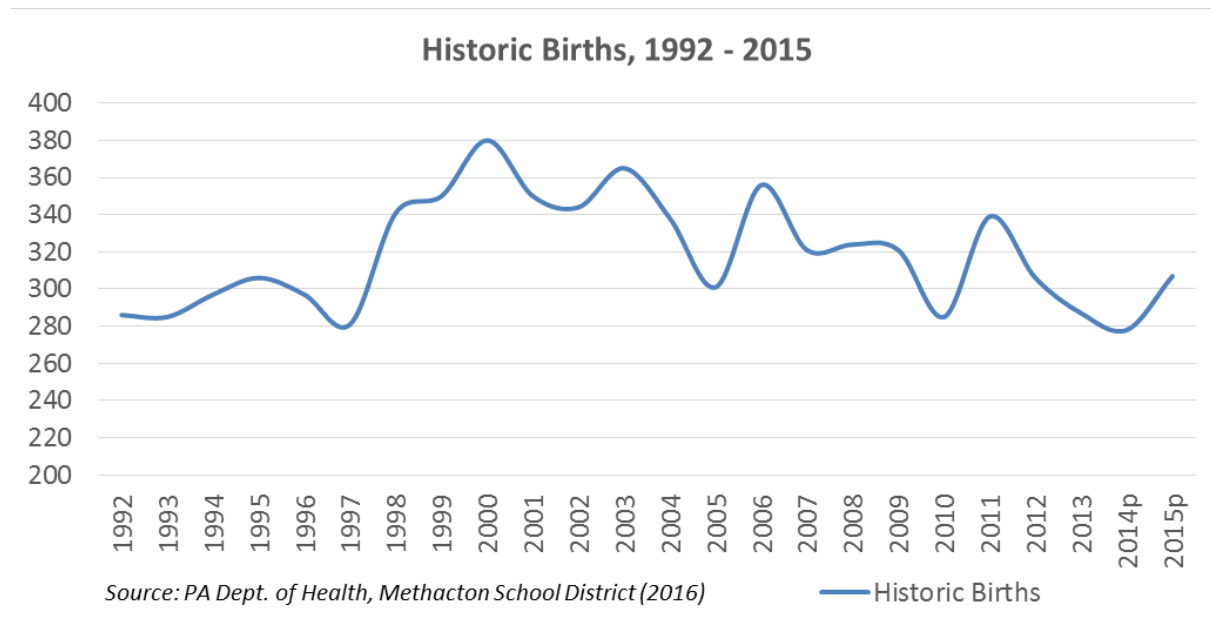


Figure 3: Historic Births

Known births from 2012 through 2015 will age into Methacton Public Schools’ next three incoming kindergarten cohorts; beyond those four years of known birth data, projected births form the basis for projected future kindergarten cohorts. Projected births were generated through 2026 based on both regression-based and fertility-based methods. Given the limited historical sample of birth years and inherent volatility associated with the rate of births in a relatively small community, these models are not intended as rigorous predictions, but rather as data-driven scenarios depicting different rates of natural increase in the community.

The regression-based model relates births to housing and labor market indicators that are often associated with changes in birthrates. Historic births were regressed on District-wide housing sales and regional unemployment rates to estimate the effects of these predictors; after assessing a

number of model specifications with varying lags, the model chosen employed current-year housing sales and Montgomery County’s unemployment rate on a three year lag. The resulting regression and individual covariates were statistically significant (model  $F < 0.001$ , covariate  $P < 0.05$ ) and the model R-square was 0.57, indicating a moderately good fit to the data. The regression equation predicting births in year  $Y$  is as follows:

$$Births_Y = 331.8 + (0.085 * Housing\_Sales_Y - 11.33 * Unemployment\_Rate_{Y-3})$$

Using these coefficients, economic scenarios ranging from sustained growth to a moderate downturn in the economy were applied to produce projected births. All economic scenarios indicated an increase in births in coming years, with births in 2021 projected to rise to anywhere between 314 and 340. These projections are the basis of the high and medium-growth enrollment projection scenarios.

To better reflect a low-enrollment future scenario, recent fertility rates recorded by the 2014 American Community Survey were applied to Lower Providence and Worcester’s projected future population of females of child-bearing age (as projected by the Delaware Valley Regional Planning Commission) to generate estimated future births on an annual basis. An average of the birthrates of Lower Providence and Worcester (weighted by current population) from 2010-2014 and the birthrate of Montgomery County as a whole for 2014 was taken to blend the specificity of the former and the currency of the latter. The resulting birthrates are shown in Figure 4, along with the number of women in each age category projected by the DVRPC circa 2020. Births for intervening years are interpolated based on existing and intermediate population data.

Age Range	Birth Rate per 1,000 women	Projected 2020 Population
Women 15 to 50 years	<b>44.6</b>	<b>6,745</b>
15 to 19 years	12.2	1,195
20 to 34 years	86.9	2,429
35 to 50 years	24.0	3,121

*Figure 4: Fertility-Based Birth Projection Data*

The end result of this model is to carry the low average birthrates of recent years into the near future. It projects between 301 and 304 births through the projection horizon. Although this birth projection is intended to form the lowest scenario for the coming years, it nevertheless maintains higher levels of annual births than 2012 through 2014. In this way, the model remains conservative in terms of potential enrollment declines in the latter half of the projection horizon.

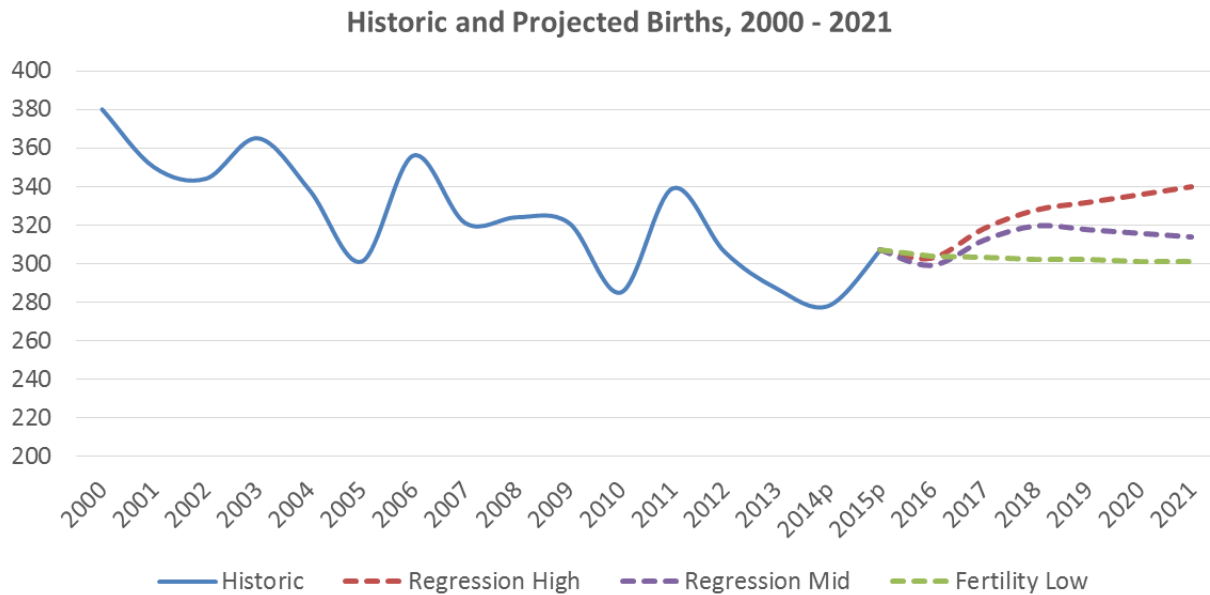


Figure 5: Projected Births

### Local and Regional Planning Context

In order to better understand the housing and economic context of Lower Providence and Worcester, the project team reviewed and investigated plans, initiatives, and known developments underway in both communities. Consultations were held with local planning staff, including members of the Montgomery County Planning Commission, as well as planning and community development staff with both townships. The team reviewed local plans, including Worcester Township’s 2008 Comprehensive Plan and 2014 Vision for Center Point Village, and Lower Providence’s 2001 Comprehensive Plan. Regional planning documents were also reviewed for trends relevant to the District, including Montgomery County’s 2040 Comprehensive Plan, recent Montgomery County data briefs, and Delaware Valley Regional Planning Commission reports, projections, and indicators.

Review of economic development plans, trends, and initiatives have indicated a variety of potential drivers of regional economic development that may have effects on population and employment growth or decline in Lower Providence and Worcester. Major development projects proximate to Methacton include the King of Prussia mall expansion that was recently completed and the adjacent King of Prussia town center development that is currently underway; at a more regional scale, Drexel University’s proposed Schuylkill Yards mixed-use development, which could provide long-term growth in research and technical jobs in the region. Regional infrastructure projects and initiatives are also a potential driver of both residential and economic development; locally, the Route 522 bridge improvements slated for completion in 2018 and the SEPTA rail extension into King of Prussia may improve regional access to and from Lower Providence and Worcester, enhancing both communities’ attractiveness to homebuyers. Other regional infrastructure projects of note include dredging to deepen the Delaware River’s shipping channel; Philadelphia International Airport’s slate of improvements planned under the Capacity Enhancement Program; and various potential opportunities associated with the development of a Marcellus Shale pipeline and related proposals.



## **Municipal Comprehensive Plans**

Worcester's Comprehensive Plan strongly emphasizes the Township's rural character and lays out steps to preserve that character while drawing appropriate development into the township's village centers. The Plan notes that while DVRPC population forecasts project substantial growth in Worcester, it cautions that this scenario "poses a considerable challenge to a township that would like to retain its rural character and open space as much as possible," and notes that the projected growth of some 1,500-1,700 new households would consume the majority of undeveloped land under predominant 2-acre zoning without measures to preserve land and allow for more compact development.

The Plan advocates a multi-pronged approach towards ensuring that future growth does not occur in a manner harmful to the Township's character, including implementing new regulations (such as the Transfer of Development Rights ordinance adopted in 2012) and zone changes, limiting sewer expansion, and directly acquiring high-quality open space and agricultural lands.

Lower Providence's Plan was prepared in 2001 and as such predates significant developments that have occurred as the township has grown over the past 15 years. The Plan places emphasis on the protection of existing residential neighborhoods that form the backbone of Lower Providence as a suburban community, while promoting both open space preservation and infill development in appropriate locations and styles.

The Plan's vision of land use and zoning changes primarily emphasized tweaks and adjustments to non-residential zoning districts. The document's Schematic Plan designates large swaths of land for low- and moderate-density residential development, covering most of the vacant parcels identified through the buildout analysis conducted in this report (discussed below). In its discussion of housing goals, however, it noted a shift in policy towards allowing "the construction of age-restricted townhouses [...] provided [the township] feels the request satisfies a legitimate need," and also notes measures to increase the compatibility of residential infill with existing uses.

Lower Providence's Plan also incorporates previous parkland planning initiatives, which compared the estimated population of the Township at full buildout against currently available parks and open space resources. The result of this analysis was a target of adding over 190 acres of parkland across the community through partial dedications of open space to be developed, recommended land acquisitions, expansion of existing parks, and leases of state land.

## **Housing**

The District's housing market and pace of development activity is a useful measure of recent and future migration into and out of the community, and contextualizes the historic enrollment trends and birth patterns observed in the community.

Census records provide estimates of the community's existing housing stock. The 2010 Decennial Census indicated 13,001 housing units across both Lower Providence and Worcester. Of these, approximately 75% were owner-occupied, 20% were renter occupied, and 5% were vacant. (Changes in 2010 figures estimated by the American Community Survey during the 2010-2014 time period are smaller than the sampling error, indicating that housing growth since that time has not occurred on a large enough scale to be captured in these aggregate statistics.)

The Census also records homeownership by age of householder, which provides a measurement of older homeowners in the community, which are depicted in Map 9 in Appendix A. The presence of age-restricted units results in a high concentration of owners over 65 years of age without necessarily indicating future availability of units for younger buyers. However, the northern end of Worcester also has a high number of older homeowners who present a potential driver of housing turnover in future years. Across the community, an estimated 2,207 owner-occupied units have householders over age 65, or nearly 23% of all owner-occupied units.

From 2000 to 2010, Lower Providence and Worcester gained nearly 2,300 housing units as major expansions in the housing supply took place, driven in large part by the age-restricted Shannondell development. By contrast, development activity recorded by the Montgomery County Planning Commission from 2010 through 2015 has proceeded at a significantly slower pace, with 348 total units built over these six years or an average 58 units per year—about a quarter of the average pace of increase during the first decade of the 2000s. Construction of both attached and detached single-family units has shifted towards Worcester as vacant land has become scarce in Lower Providence.

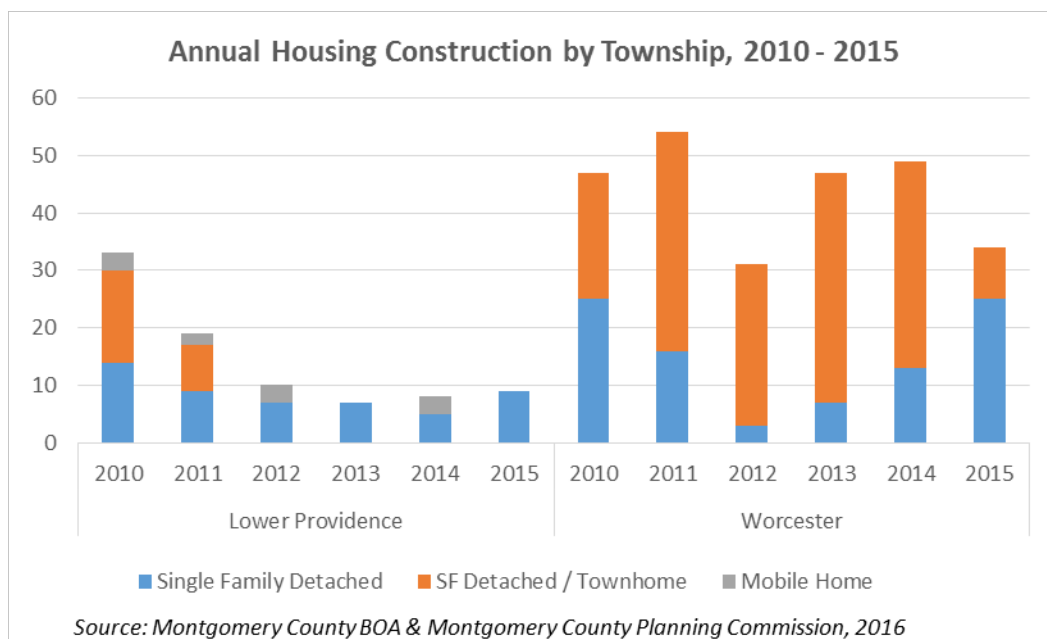


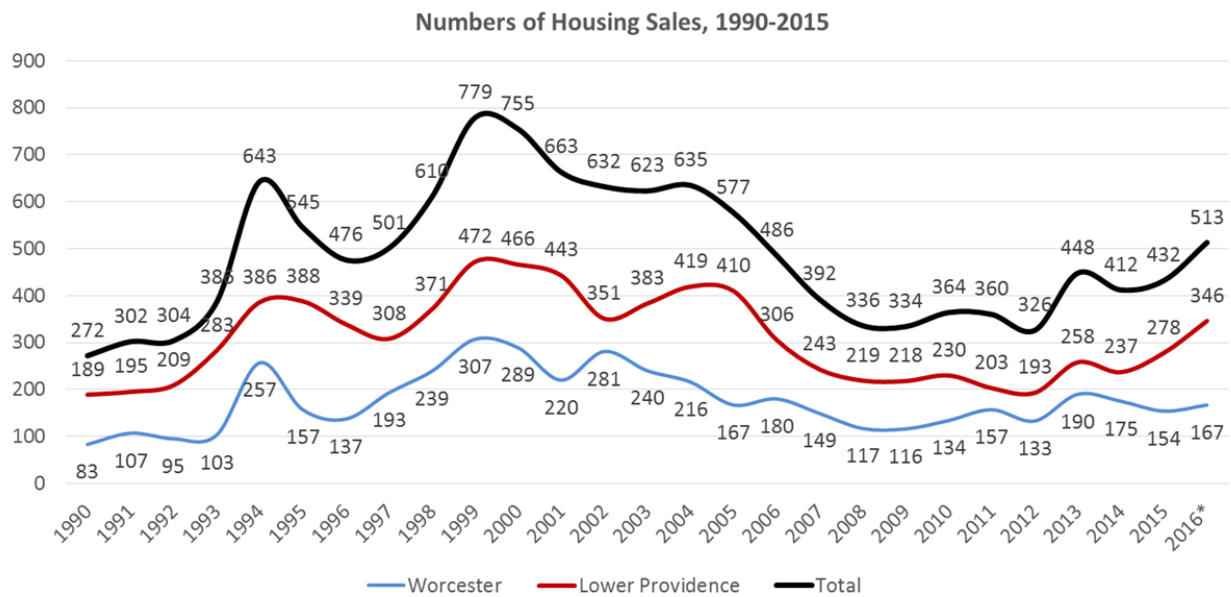
Figure 6: Construction Rates

Housing sales are the primary metric of market activity in Lower Providence and Worcester: more than three quarters of district households live in owner-occupied residences, according to 2014 American Community Survey estimates. Home sales for both communities have historically ranged from approximately 300 to 800 sales annually; peak sales activity occurred in the late 1990s and early 2000s before declining ahead of the national housing market crash and remaining at depressed levels from 2008 to 2012 (see Figure 7). The last three years have seen substantial increases in sales, and preliminary 2016 sales numbers suggest this upward trend will be sustained, driven by a sharp uptick in sales in Lower Providence.

While both townships in the Methacton School District boast home prices above Montgomery County averages, Worcester’s median sale price for all homes of \$392,500 in 2015 is significantly higher than Lower Providence’s median of \$287,650. Single-family homes have higher average

prices, with Lower Providence single family prices averaging \$307,500 and Worcester averaging \$468,750. Both townships saw year-over-year declines in sales prices from 2014, but median prices remain up from those prevalent in 2011 and 2012.

As a point of comparison, county-wide sales prices stood at a median of \$270,350 across all units and \$315,000 for single family units. Worcester ranked sixth of 62 municipalities for highest single-family sales prices, and stands at the highest price point of all neighboring communities except Whitpain. Lower Providence’s prevailing home prices run below those of Colledgeville and Upper Providence, but higher than those of East and West Norriton and Upper Merion.



Source: Montgomery County Property Records Database, 09/16. 2016 sales are estimated based on current and prior YTD sales.

Figure 7: Housing Sales

### Future Development Potential

Multiple approaches were taken to understanding potential scenarios for future residential development in Lower Providence and Worcester. Communications with the Montgomery County Planning Commission and town planning staff for both townships indicated ongoing and expected (re)development projects that are currently anticipated to produce impacts in the coming decade. This tally includes both projects that have made applications for and/or received formal development approval, and prospective projects that are known to township and county staff but have not yet begun the formal approval process.

A parallel buildout analysis of vacant and underutilized land in the county provides a scenario outlining the maximum extent of new development possible on vacant land under current zoning provisions. This exercise takes existing land use and existing zoning as its starting point. The potential residential yield of different zoning districts on a per-acre basis is calculated and applied to potentially developable parcels, excluding lands that are typically undevelopable due to steep slopes, wetlands, and soil conditions, as dictated by local land use regulations.

The buildout scenario has several limitations, and is not intended as a forecast or prediction of development over a defined timeline. The buildout is based on parcel and assessment data provided by Montgomery County, which is not fully complete with respect to land uses and other data points; where gaps existed, key fields were approximated from other available data sources. It also relies upon statewide environmental constraint layers that may not depict conditions on the ground with full accuracy. The scenario does not consider detailed dimensional standards, potential density bonuses or variances, or transfer of development rights options, all of which may further impact the potential yield of these parcels. It does not consider the potential market conditions that may spur or inhibit development, nor the economic viability of any given development. Finally, it does not consider the redevelopment potential of existing multifamily, commercial, or industrial properties, nor the potential to achieve greater densities through parcel assembly. Instead, it intends to provide a guide to the maximum extent of predominately single family housing development that might be experienced across Lower Providence and Worcester, likely over the course of decades, should current regulations and land protections remain in place.

The buildout analysis identifies three types of land that are potentially developable. Vacant residential land is the most clearly developable category of land, including all parcels that are zoned for residential use, have no existing uses, and are not subject to preferential assessment as farm or forest land. The second category of interest are underutilized residential land, defined as those parcels which are at least 2.5 times as large as the minimum lot size of their zoning. These parcels are potential candidates for subdivision and construction of additional residences. Finally, agricultural land includes properties currently used for agricultural, forest, or pasture purposes (and typically subject to preferential assessment) but which are not protected by any conservation easement or other formal protection.

**Buildout Potential (in Dwelling Units)**

Land Type	Estimated Yield	% of Total
Vacant	224	8%
Underutilized	485	17%
Agricultural	2,072	75%
<b>TOTAL DUs</b>	<b>2,781</b>	<b>100%</b>

**Buildout Potential (in Dwelling Units) by Elementary District**

Land Type	Arrowhead	Audubon	Eagleville	Woodland	Worcester	TOTAL
Vacant	40	14	39	7	124	224
Underutilized	0	0	56	0	429	485
Agricultural	46	89	294	57	1,586	2072
<b>TOTAL DUs</b>	<b>86</b>	<b>103</b>	<b>389</b>	<b>64</b>	<b>2,139</b>	<b>2,781</b>

Figure 8: Buildout Summary

Across these categories, 2,781 housing units are estimated to be potentially buildable across Worcester and Lower Providence. As shown in Figure 8, three quarters of that residential potential exist on land that is currently in open space or agricultural use. To a large extent, this is a consequence of the largely built-out nature of Lower Providence, coupled with Worcester’s success in preserving its open space and rural landscape. Accordingly, a large majority of development potential across the district is located within the Worcester school district.

## Enrollment from Sales and New Development

Methacton’s two townships have experienced strong influxes of new development in the form of large-scale residential projects, including single-family subdivisions, townhomes, and multifamily development, as well as age-restricted and continuum-of-care style residences (which do not typically generate student enrollment). Large new developments of this kind can have wide variations in the number of students generated on a per-unit basis due to factors including price points, unit sizes, style, and amenities. Examining recent enrollments in known developments allows the average enrollment generation by housing type in the community to be calculated, providing a basis for estimating the potential new enrollment generated by additional residential development.

Estimated Student Generation Multipliers			
Housing Type	Students (5 Yr. Avg.)	Units	Multiplier
<b>SF Detached (sample)</b>	<b>751</b>	<b>910</b>	<b>0.83</b>
<i>Lower Providence</i>	546	669	0.82
<i>Worcester</i>	205	241	0.85
<b>Attached Fee Simple</b>	<b>487</b>	<b>1,098</b>	<b>0.44</b>
<i>Lower Providence</i>	290	484	0.60
<i>Worcester</i>	197	614	0.32
<b>Multifamily Rental (LP only)</b>	<b>224</b>	<b>953</b>	<b>0.23</b>
<b>TOTAL</b>	<b>1,462</b>	<b>2,961</b>	<b>0.49</b>

Figure 9: Student Generation Multipliers

Across the District, attached single-family (i.e. townhomes) and multifamily residences together account for slightly over 2,000 housing units (excluding age-restricted communities) and generate 711 students, equating to a multiplier of 0.35 (or 35 students per 100 units). Attached units generate substantially more student enrollment, at a multiplier 0.44 compared to 0.23 for multifamily developments. This is to be expected, as townhome-style units are typically larger and more suitable for families with school-age children. Additional analysis of attached homes by age indicate that older townhome developments generate students at higher rates (multiplier of 0.61), while newer units generate lower rates of student enrollments (multiplier of 0.35).

Estimates of the enrollment generation rates of single-family developments can be arrived at from multiple methods. Statewide sources of enrollment multipliers include Rutgers University’s Residential Demographic Multipliers, an industry-standard data source published in 2006 which provides estimates of student generation for Pennsylvania. However, the data behind this study is over a decade old, is not specific to the Methacton School District or Montgomery County, and suggests substantially lower multipliers than those initially observed in the community. For these reasons, the study team elected to develop multipliers from observed local records.

Simply averaging district attendance not attributable to multifamily units across the community’s inventory of single-family homes yields a multiplier of approximately 0.43 students per housing unit. However, multipliers derived from a (non-exhaustive) sample of ten single-family developments completed since the mid-1990s and including over 900 housing units indicates that relatively new single-family homes may generate larger numbers of students. This sample indicates an overall

multiplier of 0.81, with Worcester experiencing slightly higher rates of student generation (0.85) compared to Lower Providence (0.79).

A different metric of the housing market’s effect on enrollment trends is the number of students directly observable from housing sales. Because each student in the district is assigned a unique identifier which persists with them through the school system, both new students and those exiting the systems before graduation can be identified by comparing against previous years’ enrollment records. These new and exiting students can then be matched against geographically located housing sales to identify the subset of new enrollment attributable to these sales. (Kindergarten enrollments, which by definition are new to the district, cannot be identified in this manner.)

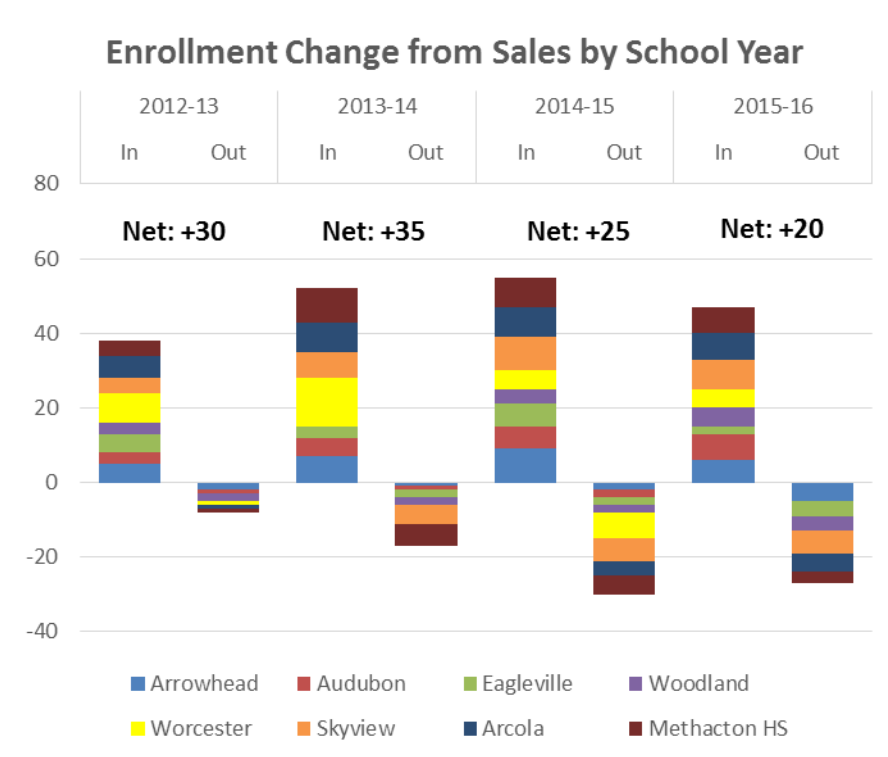


Figure 10: Net Enrollment Change from Housing Sales

In the 2012-13 through 2015-16 school years, an average of 48 students tied to homes sales were identifiable as new entrants to the District each year; of these, approximately 27 entered in the elementary grades. Comparing this rate of in-migration to housing sales in the four calendar years prior to these school years yields an estimated multiplier for home sales of 0.13; that is, approximately 13 school-age children appear to enter the system for every 100 recent sales.

Together, these per-unit and per-sale multipliers provide two metrics for estimating student generation from new developments in Methacton. The per-sale metric may provide a more useful indication of enrollment initially expected from changes in the volume of housing sales on a year-to-year basis, while per-unit multipliers provide a range of estimates for the longer-term effects of new housing development.

## Regional Economic & Employment Trends

Methacton's location within Montgomery County and the Philadelphia metropolitan area provides access to major job centers within a strong regional economy. As Figures 11 and 12 show, Philadelphia and King of Prussia both serve as major job centers for workers living in Lower Providence and Worcester, as well as Audubon, Norristown, Plymouth Meeting, and Blue Bell. Smaller regional job centers throughout Montgomery and Chester Counties are also significant destinations for workers in the District; overall, 86% of employees work within the five county Philadelphia metropolitan area. This supports our methodology of basing the regression analysis of births on the countywide employment rate.

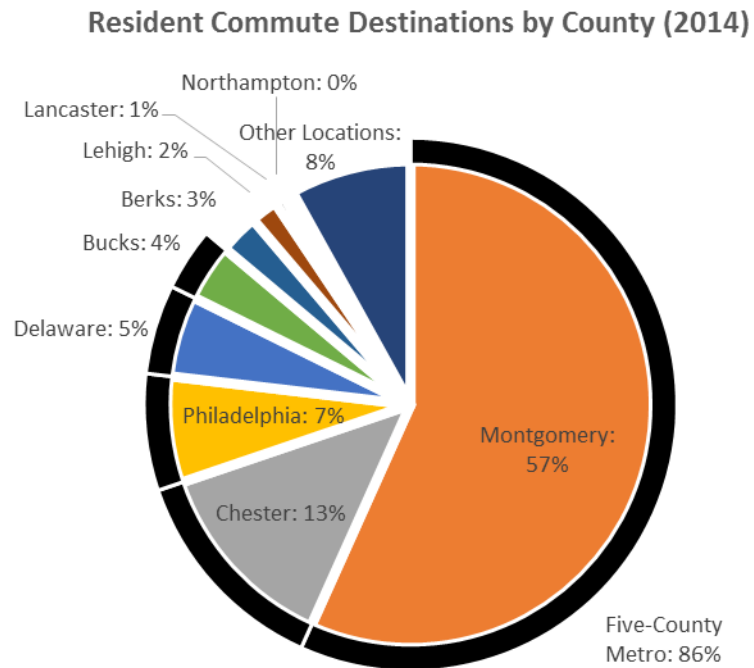


Figure 11: Commute Destinations by County

The Bureau of Labor Statistics as well as the American Community Survey report labor market statistics within region. Employment rates reported by the Bureau of Labor Statistics (BLS) for the state and Philadelphia metro area (see Figure 13) have closely mirrored each other and national trends, although the state and region peaked at lower levels of unemployment during the Great Recession than the nation. Both of these estimates reached approximately 5% unemployment by 2015. Montgomery County, by contrast, has maintained substantially lower unemployment rates over the last quarter century and through the Great Recession. During economic booms, unemployment reached levels as low as 3%, while the peak in 2010 reached a high of 6.9%, almost two percentage points lower than the region's peak in the same year.

The BLS and state sources do not provide annual township-level employment statistics; however, the American Community Survey does calculate estimates of labor market statistics over longer time frames. Because these estimates are based on a continuous sampling approach aggregated to three- to five-year time horizons, the estimates are neither temporally precise nor highly accurate (margins of error between 1-2%). However, taking the midpoints of these multi-year averages as point estimates provides a relative sense of how Lower Providence and Worcester Townships' employment status compares to the region, as shown in Figure 14.

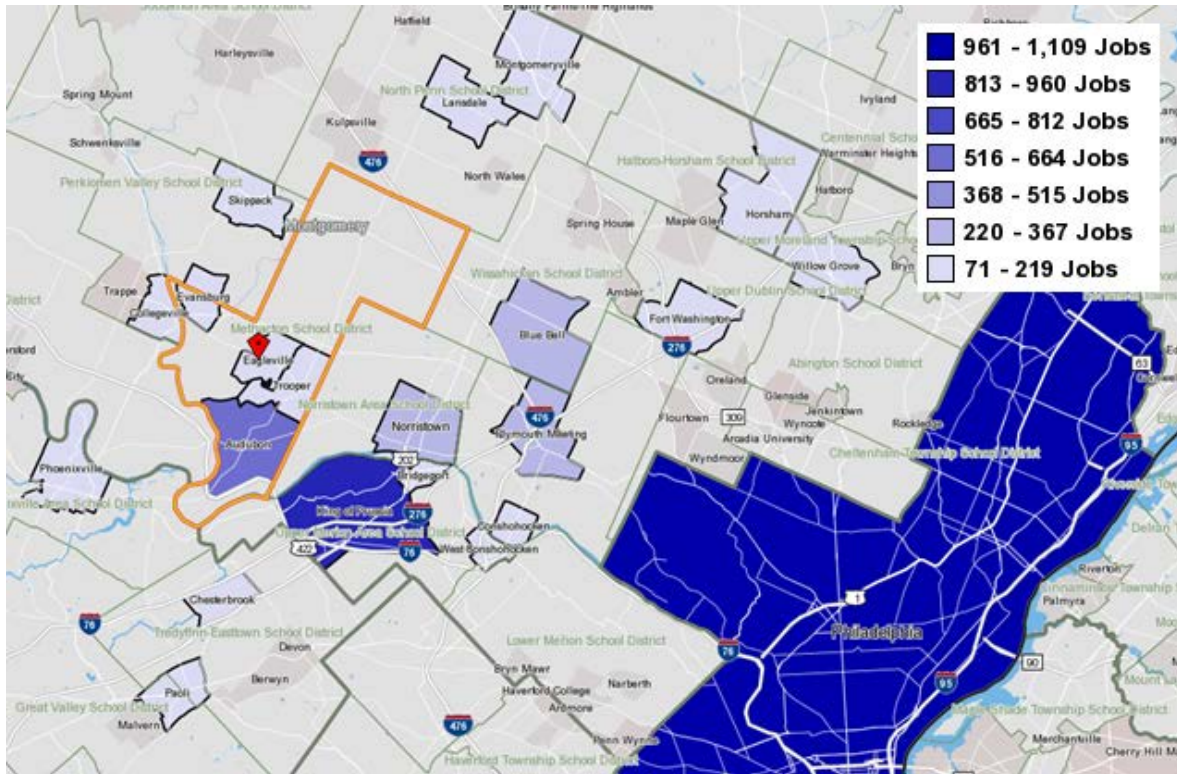


Figure 12: Lower Providence and Worcester Employment Destinations

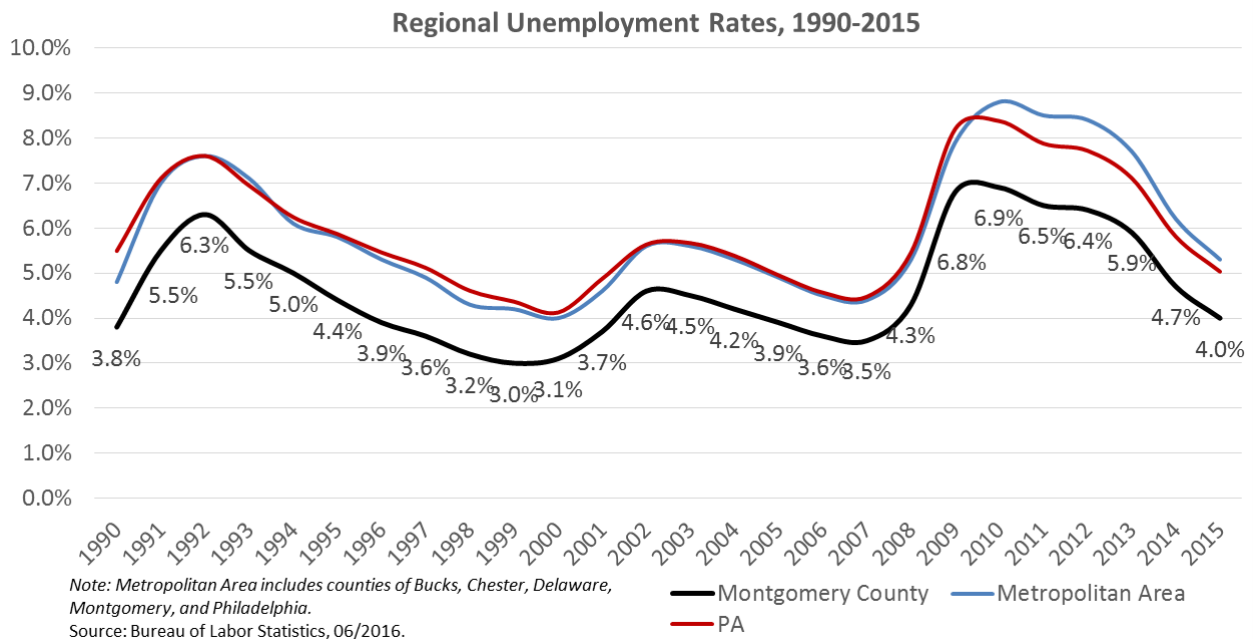


Figure 13: Regional Employment Trends

These estimates show that while unemployment rates for both townships remain consistently lower than the larger region, this advantage was magnified during the Great Recession, as local unemployment estimates remained at or below 5.5% through this period, indicating the relative resilience of the District’s resident workforce.



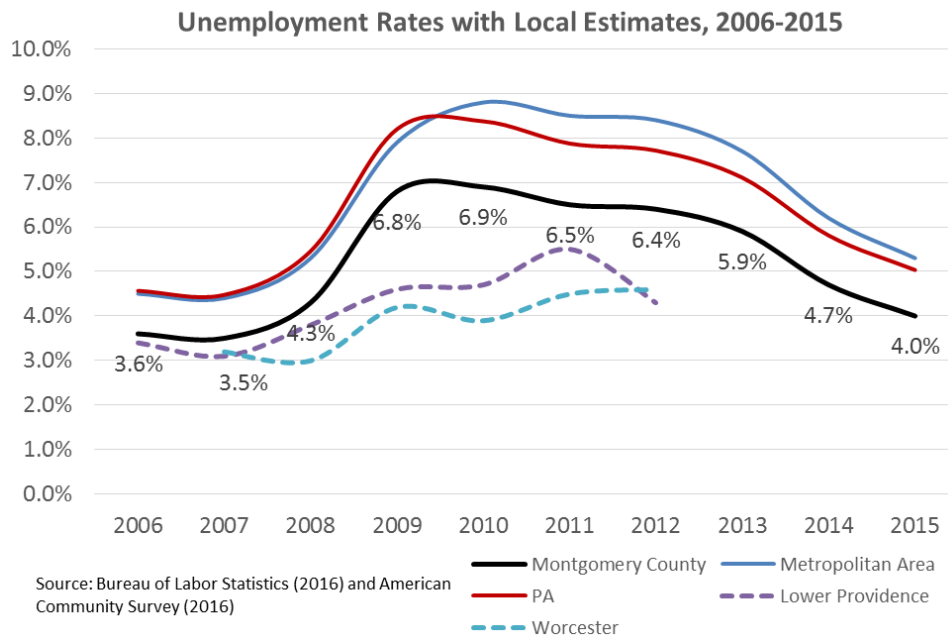
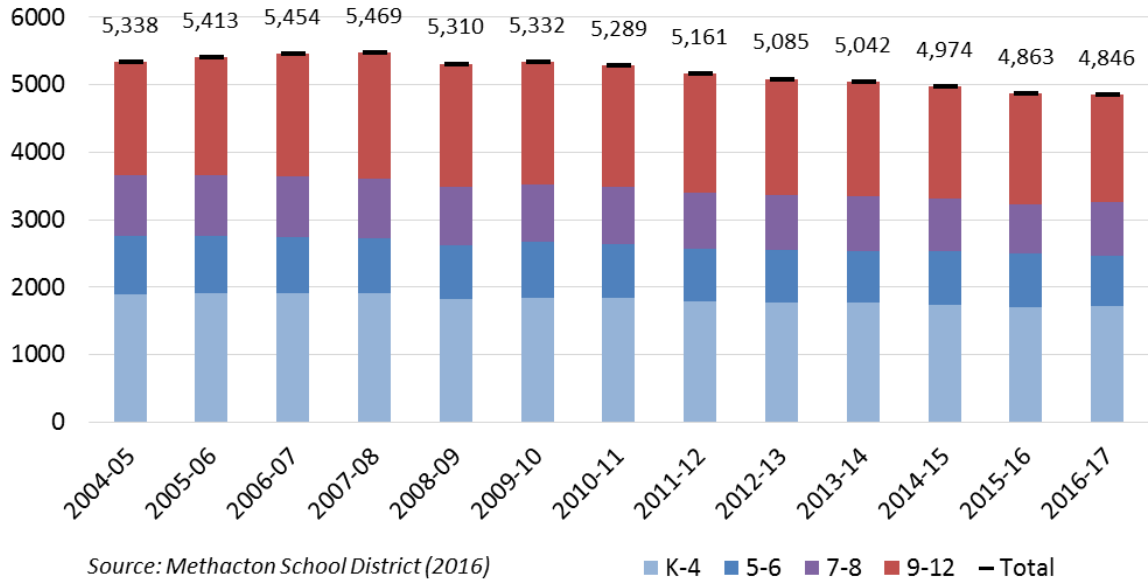


Figure 14: Local Estimates of Unemployment

### Historic Enrollment

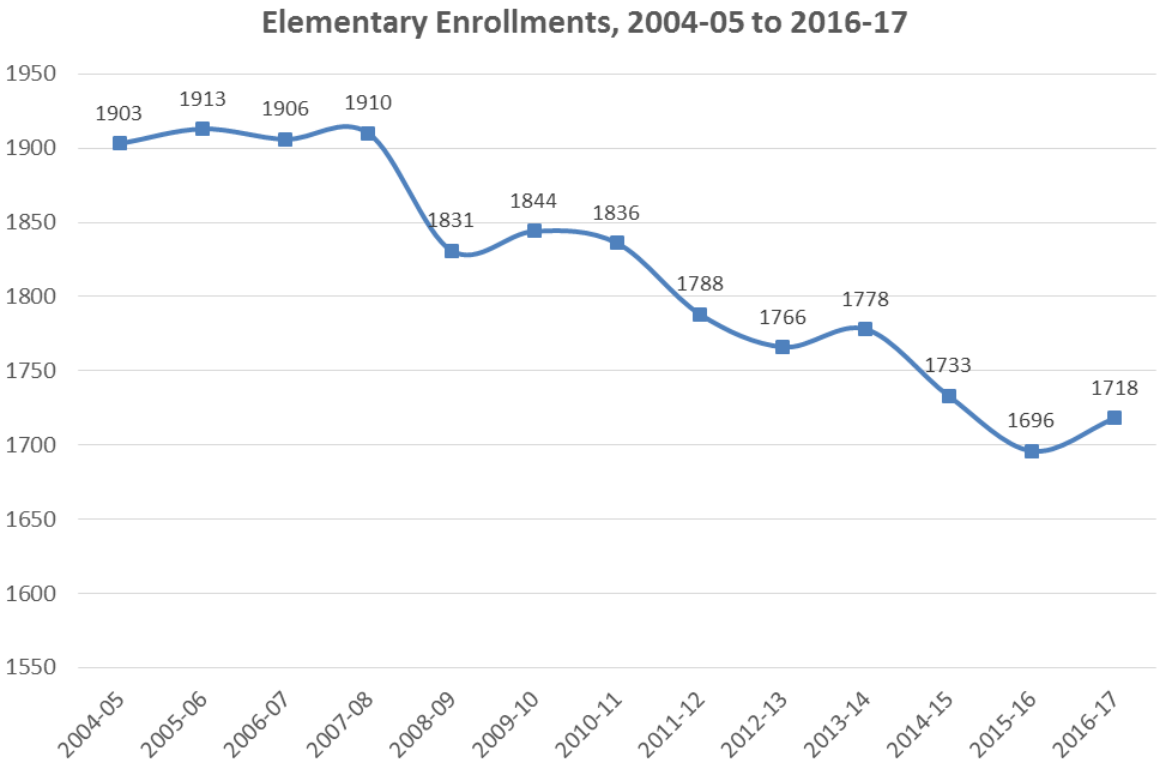
Methacton’s school enrollments have followed a pattern of declining districtwide enrollments after reaching a peak in the mid-to-late 2000s. The following series of figures show enrollment trends for grades K-12 across the Methacton School District, broken down by grade groupings. The declining trend has been seen most consistently at the high school level, but has been felt across the lower grades as well.

### Methacton K-12 Enrollment 2004-05 to 2016-17



Figure

15: Districtwide K-12 Enrollment



Source: Methacton School District (2016)

Figure 16: Districtwide K-4 Enrollments

K-4 enrollments have followed a clear downward trajectory following a period of stability in the mid-2000s. Following a large drop in 2008-09, the elementary grade levels have seen declines in most years. The current year’s slight increase is largely attributable to new students entering the system at the 1<sup>st</sup> and 3<sup>rd</sup> grade cohorts.

While elementary enrollments have declined overall, individual elementary schools have experienced varying trends over the past six years (see Figure 16). The dominant downward trend is seen clearly at Arrowhead, Eagleville, and Worcester schools, while Woodland has experienced relatively little change in enrollments and Audubon has experienced notable growth.

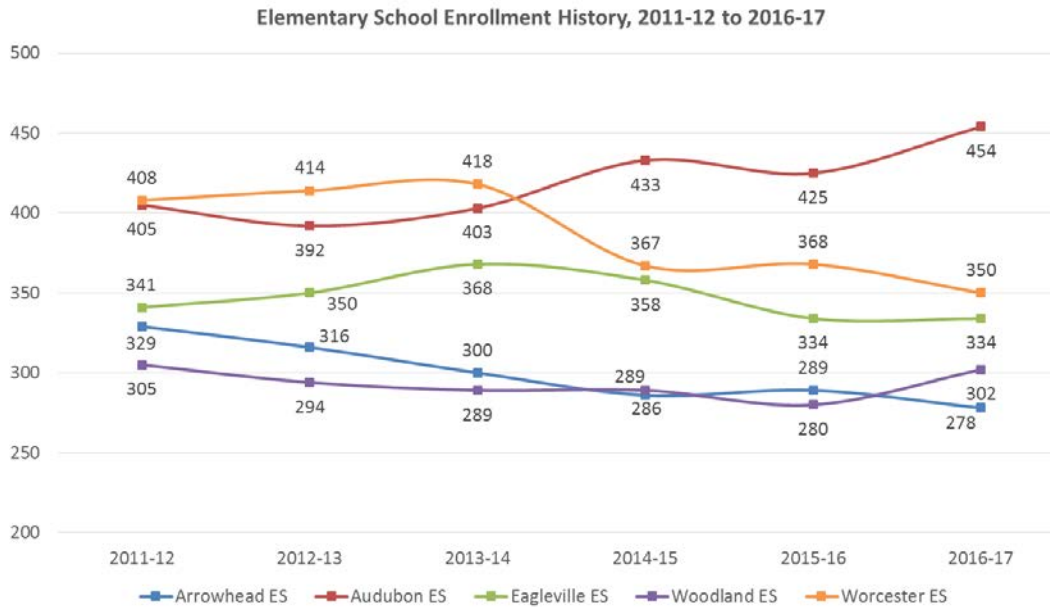


Figure 17: Individual School K-4 Enrollments

Methacton’s upper elementary (grades 5 and 6) program at Skyview has experienced sharper increases and decreases enrollment in recent years, as year-to-year variations in cohort size are magnified in a school with only two grade levels. An overall downward trend is evident, disrupted by a large bump in enrollment in 2014-15 and 2015-16 as an unusually large cohort of students (approximately 430 students, compared to around 370 in the cohorts above and below) entered and then left the school; this cohort will likely continue to have outsized effects as they matriculate through their remaining five years in the District.

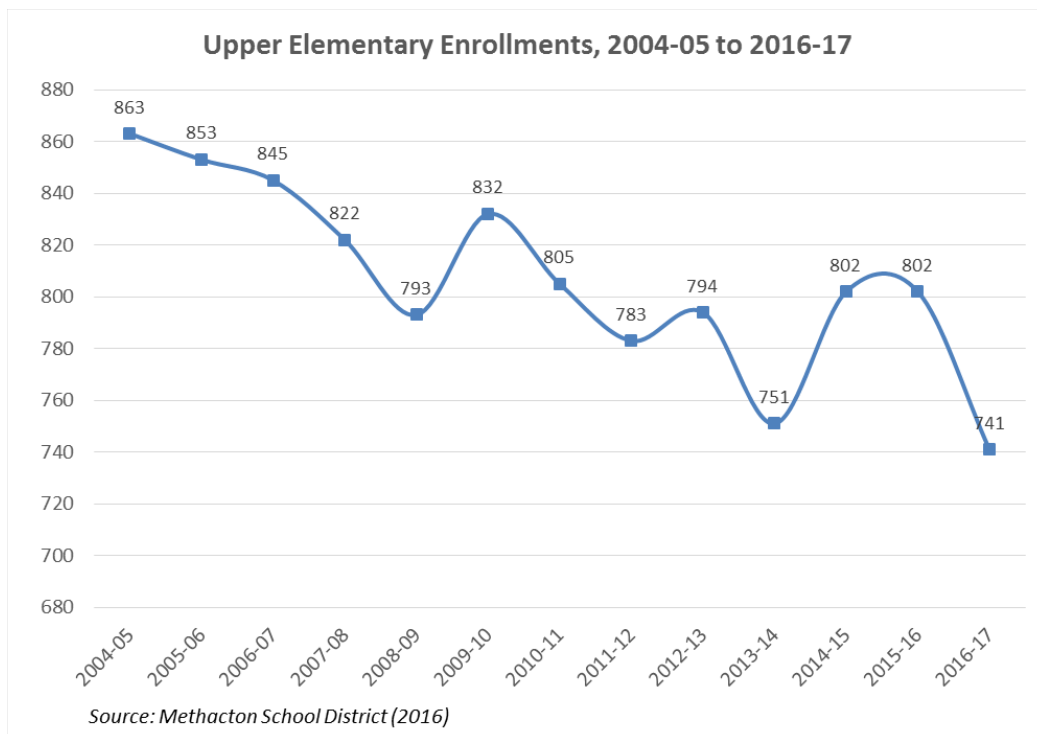


Figure 18: Districtwide Grades 5-6 Enrollments

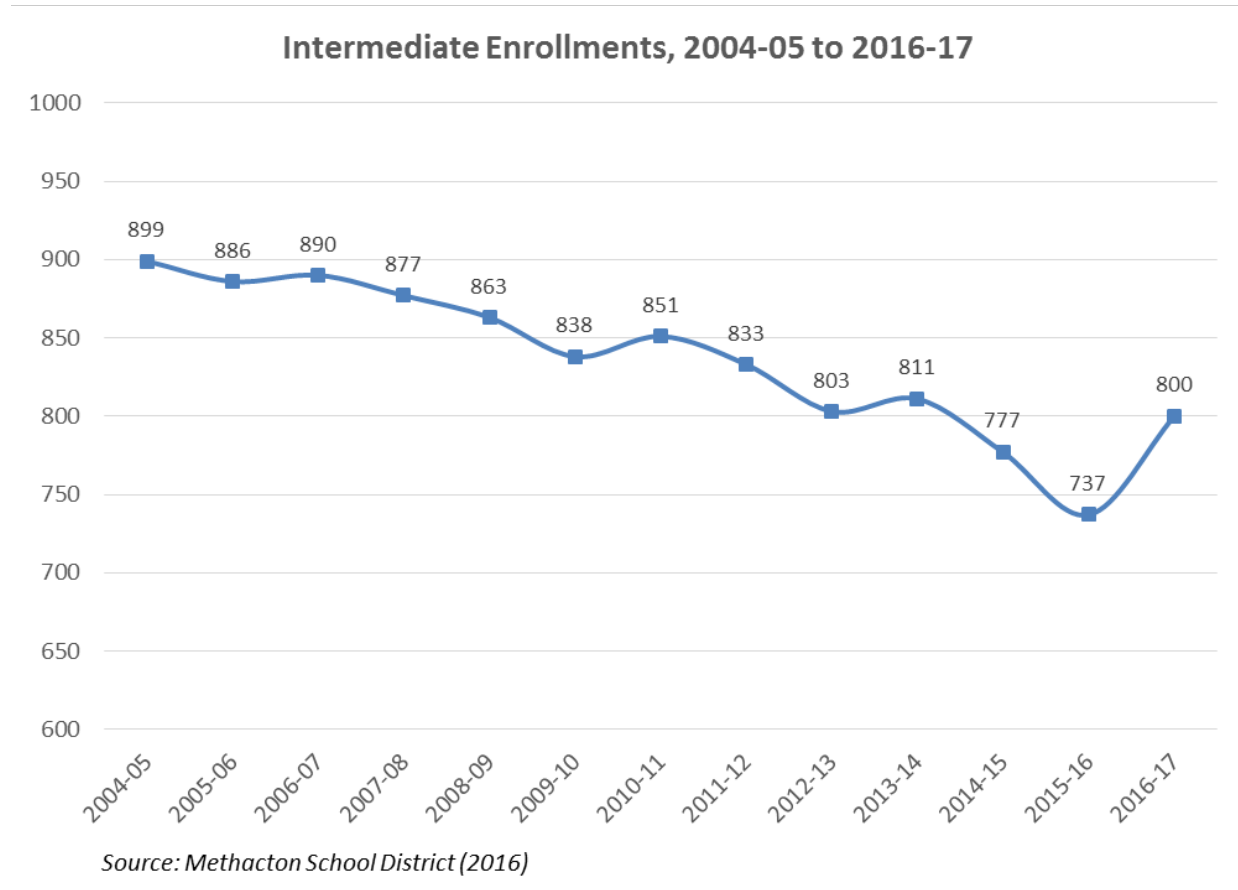


Figure 19: Districtwide Grades 7-8 Enrollments

Arcola Intermediate School (7<sup>th</sup> and 8<sup>th</sup> grades), in contrast to Skyview, experienced a more stable decline in enrollments over the past decade until the arrival of the large rising 7<sup>th</sup> grade cohort in the current 2016-17 school year. As with the bump in enrollment this cohort caused at Skyview in recent years, this cohort substantially boosted current enrollment and will likely do so in the 2017-18 school year as well.

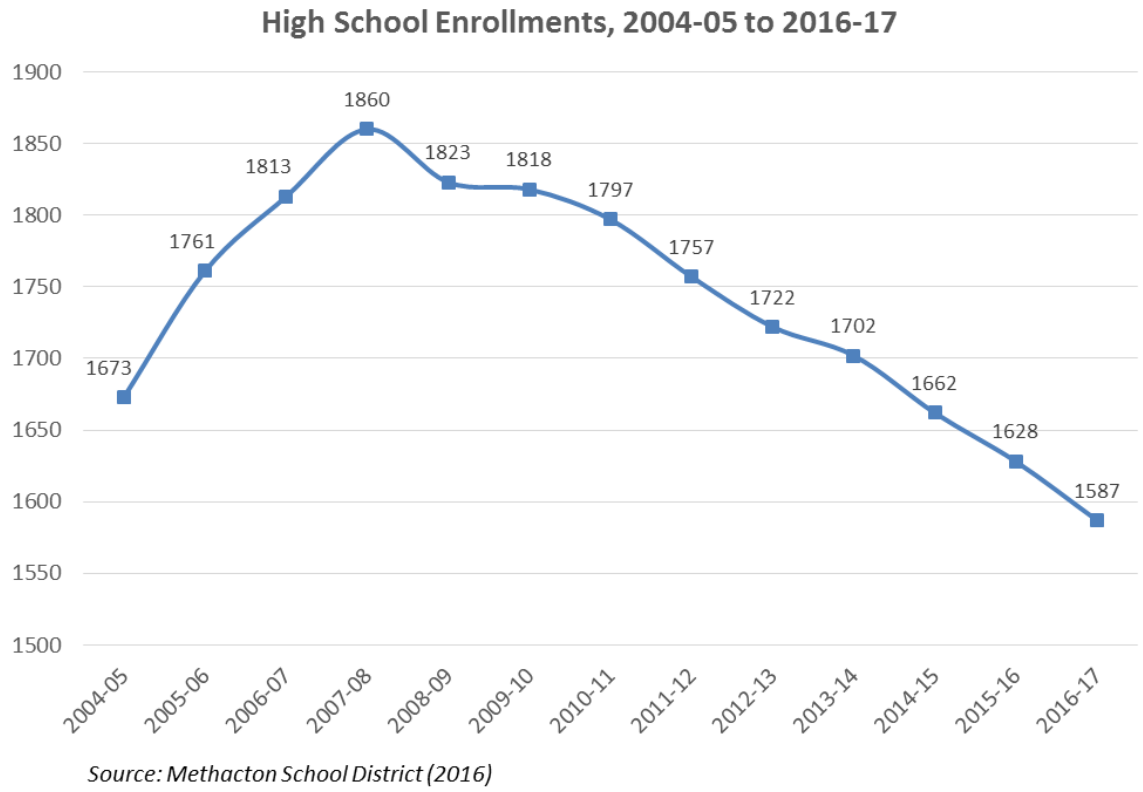


Figure 20: Districtwide Grades 9-12 Enrollments

Finally, high school enrollments saw rising enrollment through the mid-2000s before a series of steadily smaller entering 9<sup>th</sup> grade cohorts, including the smallest entering cohort on record in 2016-17, produced a steady decline in enrollments. The high school level has seen the greatest stability in the rate of its decline within the District, although the anticipated arrival of the aforementioned large cohort in 2018-19 will likely produce a temporary reversal of this trend.

Year	K	1	2	3	4	5	6	7	8	9	10	11	12
2004-05	314	416	371	398	404	421	442	440	459	454	438	390	391
2005-06	306	448	373	381	405	419	434	442	444	476	464	431	390
2006-07	314	437	392	380	383	425	420	439	451	470	463	448	432
2007-08	294	459	356	401	400	392	430	432	445	470	476	471	443
2008-09	268	412	385	364	402	398	395	433	430	445	457	463	458
2009-10	318	393	374	387	372	416	416	410	428	447	440	455	476
2010-11	267	441	342	385	401	385	420	425	426	441	446	447	463
2011-12	273	367	410	354	384	407	376	416	417	417	451	439	450
2012-13	274	356	364	424	348	385	409	387	416	417	418	449	438
2013-14	287	338	358	367	428	373	378	410	401	413	411	421	457
2014-15	317	340	349	356	371	432	370	370	407	404	422	404	432
2015-16	254	375	342	363	362	373	429	371	366	402	409	408	409
2016-17	270	326	375	369	378	365	376	433	367	362	402	411	412

Figure 21: Cohort Progression

Examining the progression of individual cohorts through the system over time highlights several important dynamics within the Methacton School District. Figure 21 illustrates this by showing the observed cohort sizes over time; greens indicate historically large cohorts while oranges and reds indicate historically small ones. First, incoming kindergarten cohorts have declined in size, with the average declining from 302 incoming kindergarteners in the mid-late 2000s to 275 in the 2010s. At the other end of the grade progression, the large high school cohorts of 450 students or more common between 2005-06 and 2009-10 have matriculated out of the system, replaced by cohorts with average sizes below 410 students.

Finally, while grade cohorts have had a historical tendency to grow at a modest rate over time as net in-migration adds students at upper grade levels, this rate of growth has declined and the tendency of grade cohorts to remain stable in size over time has increased. Recent years have seen the absolute change in grade cohort size drop by more than half, from 250-325 students per year to less than 150. The implication of this change is that, to the extent this trend continues to hold, existing cohort sizes will remain stable as they matriculate through the system. A key example of this trend is the large ‘bubble’ that entered kindergarten in 2009-10, which has remained around 60 to 80 students larger than the cohorts above and below it through to the current school year.

### Other School Enrollment

Limited data is available on the prevalence of non-public and other public school enrollment among school-age children within the Methacton School District’s boundaries. Enrollment in other programs, including home schools, cyber/charter schools, and private/parochial schools (with transportation provided by the Methacton School District), has declined from levels seen in the mid-2000s towards a running average of around 1,000 students since the onset of the Great Recession. The trend in these enrollments, which do not include students enrolled in Intermediate Unit full-time or Brandywine Virtual Academy, is depicted in Figure 22 below through 2014-15, the last year of data available due to ongoing adjustments in out-of-district student reporting.

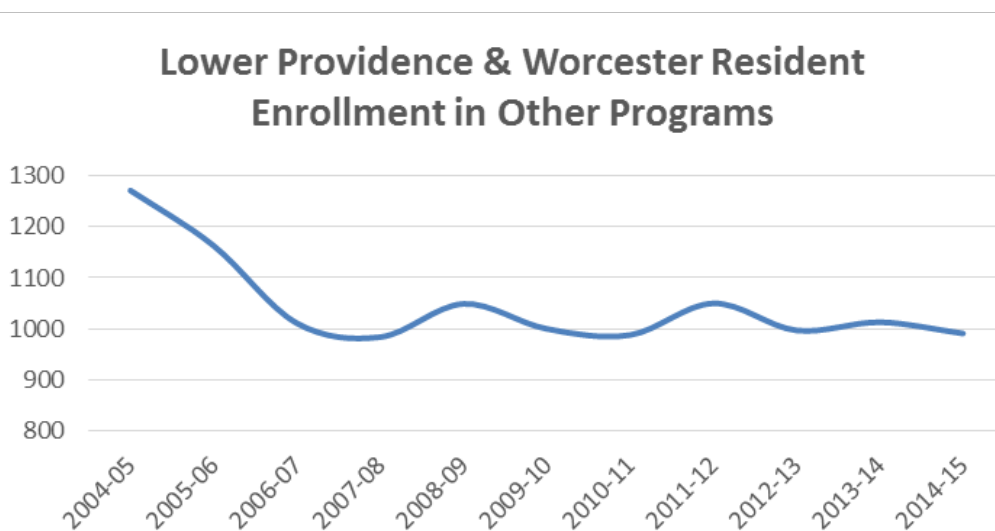


Figure 22: Non-MSD Resident Enrollment

## Enrollment Projections

### Methodology

School enrollment projections for the Methacton School District have been prepared using the cohort-survival method with some modifications. This is a standard methodology for projecting populations and student enrollments and relies on the recent past as a predictor of the future. It works well for stable populations, including those that are growing or declining at a steady rate.

Persistency ratios expressing the growth or decline in the size of a grade cohort as it progresses through the school system were calculated from historic and current enrollments. A persistency ratio of 1.00 indicates that the cohort remains the same as it advances from one grade to the next. A persistency ratio of 1.05 means the cohort increased by 5% or a class of 100 gained five additional students the next year. Enrollment data from 2004-05 through 2016-17 and birth data from 1999 to 2011 were used to calculate the Birth-K and grade-to-grade persistency ratios shown in Figure 23.

**Districtwide Historic and Averaged Persistency Ratios**

Year	B-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
2005-06	0.832	1.427	0.897	1.027	1.018	1.037	1.031	1.000	1.009	1.037	0.973	0.966	1.002
2006-07	0.826	1.428	0.875	1.019	1.005	1.049	1.002	1.012	1.020	1.059	0.973	0.966	1.002
2007-08	0.916	1.462	0.815	1.023	1.053	1.023	1.012	1.029	1.014	1.042	1.013	1.017	0.989
2008-09	0.732	1.401	0.839	1.022	1.002	0.995	1.008	1.007	0.995	1.000	0.972	0.973	0.972
2009-10	0.930	1.466	0.908	1.005	1.022	1.035	1.045	1.038	0.988	1.040	0.989	0.996	1.028
2010-11	0.837	1.387	0.870	1.029	1.036	1.035	1.010	1.022	1.039	1.030	0.998	1.016	1.018
2011-12	0.835	1.375	0.930	1.035	0.997	1.015	0.977	0.990	0.981	0.979	1.023	0.984	1.007
2012-13	0.806	1.304	0.992	1.034	0.983	1.003	1.005	1.029	1.000	1.000	1.002	0.996	0.998
2013-14	0.878	1.234	1.006	1.008	1.009	1.072	0.982	1.002	1.036	0.993	0.986	1.007	1.018
2014-15	0.966	1.185	1.033	0.994	1.011	1.009	0.992	0.979	0.993	1.007	1.022	0.983	1.026
2015-16	0.827	1.183	1.006	1.040	1.017	1.005	0.993	1.003	0.989	0.988	1.012	0.967	1.012
2016-17	0.839	1.283	1.000	1.079	1.041	1.008	1.008	1.009	0.989	0.989	1.000	1.005	1.010
LOW	0.833	1.233	1.003	1.060	1.029	1.007	1.001	1.006	0.989	0.988	1.006	0.986	1.011
MID	0.855	1.279	0.977	1.031	1.014	1.021	0.995	1.005	1.004	0.998	1.006	0.994	1.013
HIGH	0.877	1.217	1.013	1.038	1.023	1.008	0.998	0.997	0.990	0.995	1.011	0.985	1.016

Figure 23: Districtwide Persistency Ratios

Because persistency ratios vary between different neighborhoods and communities, an examination of persistency ratios across Methacton's five elementary schools formed the basis for projected individual school enrollments. The average persistency ratios observed over the last five years is shown in Figure 24 below. While upper grade persistency ratios are fairly consistent across schools, a clear divide is evident between the Birth-K ratios of Arrowhead and Woodland, which see net immigration of children between birth and entering the school system, and Audubon, Eagleville, and Worcester, where the net effect of migration is an approximately 12-18% loss of children born in the district before entering the system at Kindergarten. Also notable is the large gap between the K-1 ratios of Woodland, which sees a relatively low rate of new registrations at 1<sup>st</sup> grade, and Worcester, which has seen nearly 40% growth in enrollments from K to 1 in recent years.

**Individual School Averaged Persistency Ratios**

	B-K	K-1	1-2	2-3	3-4
Arrowhead	1.038	1.278	1.006	1.011	1.056
Audubon	0.821	1.245	1.019	0.986	1.000
Eagleville	0.880	1.193	0.978	1.072	1.000
Woodland	1.073	1.127	1.012	1.054	0.979
Worcester	0.825	1.389	1.017	1.049	1.027
<b>Districtwide Average</b>	<b>0.863</b>	<b>1.238</b>	<b>1.007</b>	<b>1.031</b>	<b>1.012</b>

Figure 24: Individual Persistency Ratios



Persistency ratios account for the various factors affecting enrollments, including housing development and sales, economic conditions, student transfers, and mobility into and out of a school district; however, they function best in a system that has stable trends – whether steadily increasing, decreasing, or remaining flat. In general, Methacton’s persistency ratios are relatively stable past 1<sup>st</sup> grade, but the Birth-K and K-1 persistency ratios have varied to a greater extent. Figure 25 illustrates two key relationships. The first is the relationship between births (solid blue) and kindergarten enrollments (dashed red) five years later, which is consistently less than 1.0 but varies substantially. The second is the relationship between kindergarten enrollments and the subsequent year’s 1<sup>st</sup> grade population (dotted green); this ratio is consistently greater than 1.0, but has narrowed substantially since the late 2000s. The combined effect of these persistency ratios has been to decrease the impact of a given number of births on enrollment in the upper grade levels.

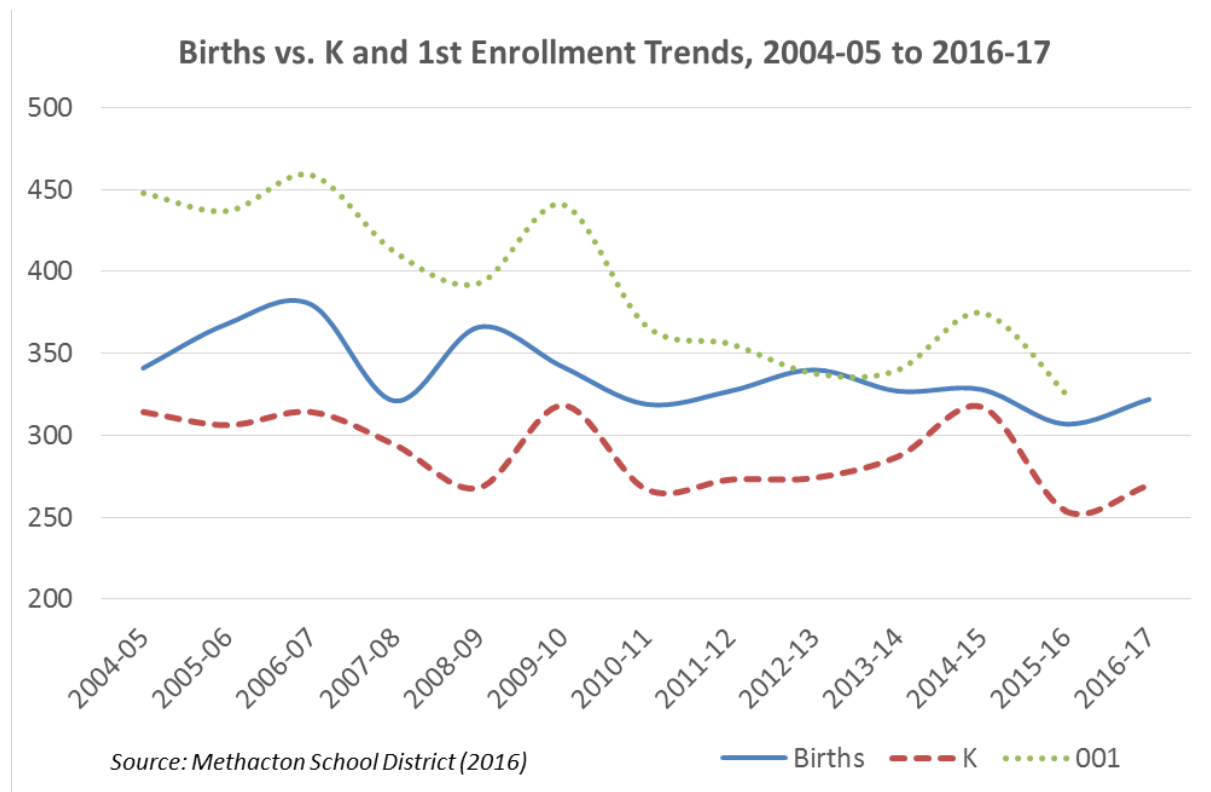


Figure 25: Birth, K, and 1st Grade Trends

While persistency ratios provide a basis for understanding the dynamics of the community based on its recent conditions, additions to the model may be necessary to capture anticipated future growth. In addition to using persistency ratios to model year-to-year change in enrollments at each grade level, students were added on an ad-hoc basis to reflect the total projected impact of new, large-scale residential development projects. The number of new units was adjusted for each projection scenario, but in all cases these totals excluded small-scale developments (under ten units), which are already accounted for in the persistency ratios, which are inclusive of the impacts of past development.

### Districtwide Projections

The enrollment projections prepared for the Methacton School District reflect the modified cohort-survival methodology described above. In addition to using persistency ratios to model year-to-year change in enrollments at each grade level, students were added on an ad-hoc basis to reflect the total projected impact of anticipated residential development. Low, medium, and high ranges of student generation estimates were applied to the low, medium, and high projection assumptions regarding persistency, births, and economic conditions. The three sets of projected enrollments demonstrate the range of likely future enrollments the Methacton School District. Specific assumptions embedded in these three models are depicted in Figure 26 below.

<b>Model Assumption</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
<b>Annual Births</b>	303-340	299-319	301-304
<b>Annual Avg. Unemployment Rate</b>	3.0-3.8%	4.1-4.75%	*
<b>Annual Housing Sales</b>	450-545	370-400	*
<b>New Non-Age-Restricted Housing Units</b>	405	225	0
<b>Birth Rate per 1,000 Women (15-50 Years)</b>	*	*	44.6
<b>Women 15-50 Years of Age</b>	*	*	6,745 - 7,292

*\* High and Medium models employ regression-based birth model, while the Low model relies on recent historic birthrates and projected females of child-bearing age population and does not explicitly assume rates of home sales or unemployment.*

*Figure 26: Model Assumptions*

In our judgment, the steady economic conditions in effect and the District’s favorable location and reputation, the low-growth model is unlikely to obtain over the coming decade, as this model is based on very little change in existing trends and the derailment of currently anticipated housing development. The medium-growth model, by contrast, anticipates a modest recovery in births, greater levels of in-migration, and the addition of approximately 120 students to the district resulting from new residential development. The high-growth model presents substantially more aggressive projections of a sustained increase in birthrates, is more optimistic with regard to migration, and assumes additional housing development driving an influx of an additional 270 students. We believe that the scenario most likely to reflect future trends, including a stable economy, a slow recovery in births, and modest in-migration across the grade levels, is the medium-growth scenario. This scenario depicts a net change in enrollment of -6.9% over the course of the coming decade.

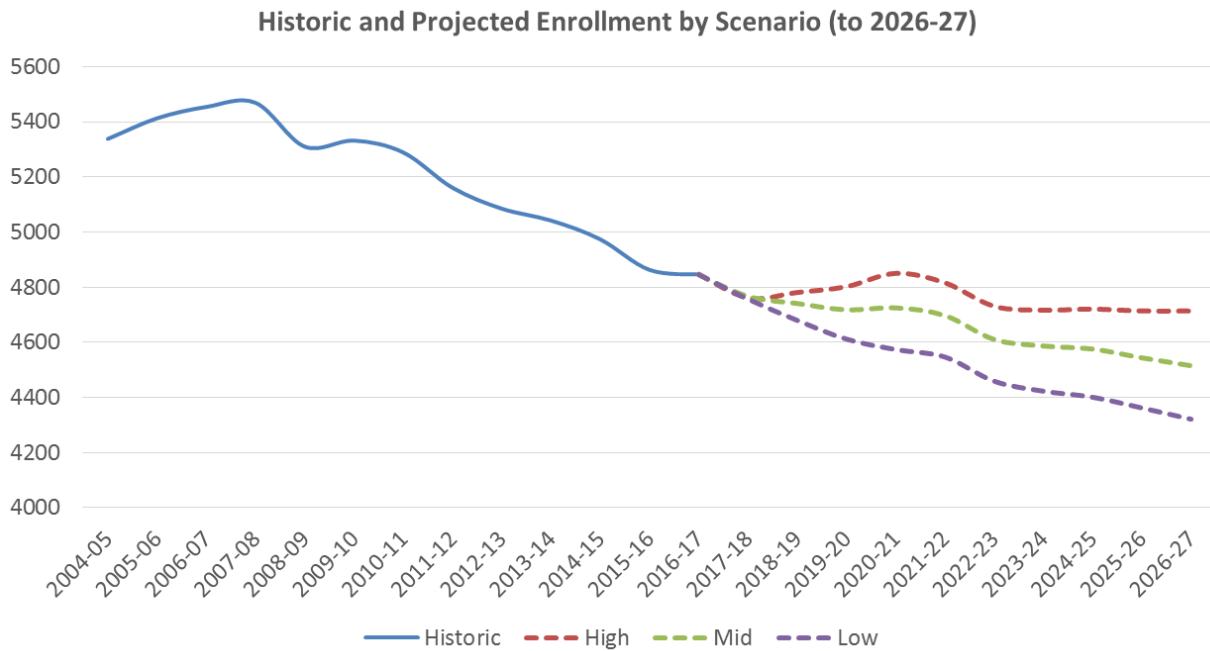


Figure 27: K-12 Projections by Scenario

The three projection scenarios (Figure 27) show enrollments in decline relative to current levels at both the five year and ten year horizons, the effects of which are summarized in Figure 28 below. The low and medium-growth scenarios show steady declines in K-12 enrollment throughout the projection horizon, with particularly steep decreases approaching the 2022-23 school year, as larger cohorts currently in the system graduate out. The high-growth scenario dips briefly before recovering back towards present levels as anticipated new development brings new students to the district; however, the same decreases anticipated in the other scenarios in the early 2020s reverses this trend before stabilizing in the last four years of the projection horizon.

Projected Change in Enrollment from 2016-17 (Cumulative Change at 5/10 Years)										
Scenario	K-12 Enrollment		K-4 Enrollment		5-6 Enrollment		7-8 Enrollment		9-12 Enrollment	
	2021-22	2026-27	2021-22	2026-27	2021-22	2026-27	2021-22	2026-27	2021-22	2026-27
<b>Low</b>	-6.2%	-10.8%	-12.7%	-10.1%	-2.3%	-8.8%	-0.6%	-15.4%	-3.7%	-10.3%
<b>Medium</b>	-3.1%	-6.9%	-8.7%	-2.7%	-3.2%	-8.0%	0.3%	-12.5%	1.4%	-8.0%
<b>High</b>	-0.6%	-2.7%	-5.0%	4.1%	1.3%	-4.3%	1.9%	-9.5%	1.9%	-6.0%

Figure 28: Projected Enrollment Change by Projection Horizon

Elementary school enrollment is the segment of Methacton’s enrollment of greatest interest to this study and is shown across all three scenarios in Figure 29. Each of these scenarios follows a downward trajectory into the early 2020s, followed by different courses of stabilization and/or recovery. The low-growth scenario depicts the sharpest decrease, bottoming out at 1,500 students and recovering only slightly in following years. Overall K-4 enrollment declines by 10.1% by the 2026-27 school year. The medium-growth scenario shows a moderate recovery, with a low of 1,560 K-4 students enrolled and a 2.7% decline by the close of the projection horizon. The high-growth scenario follows a course of modest decline followed by a strong recovery based on an increase in future births, with enrollments rising 4.1% to 1,788 students (or the approximate level of enrollment experienced in the 2011-12 school year).

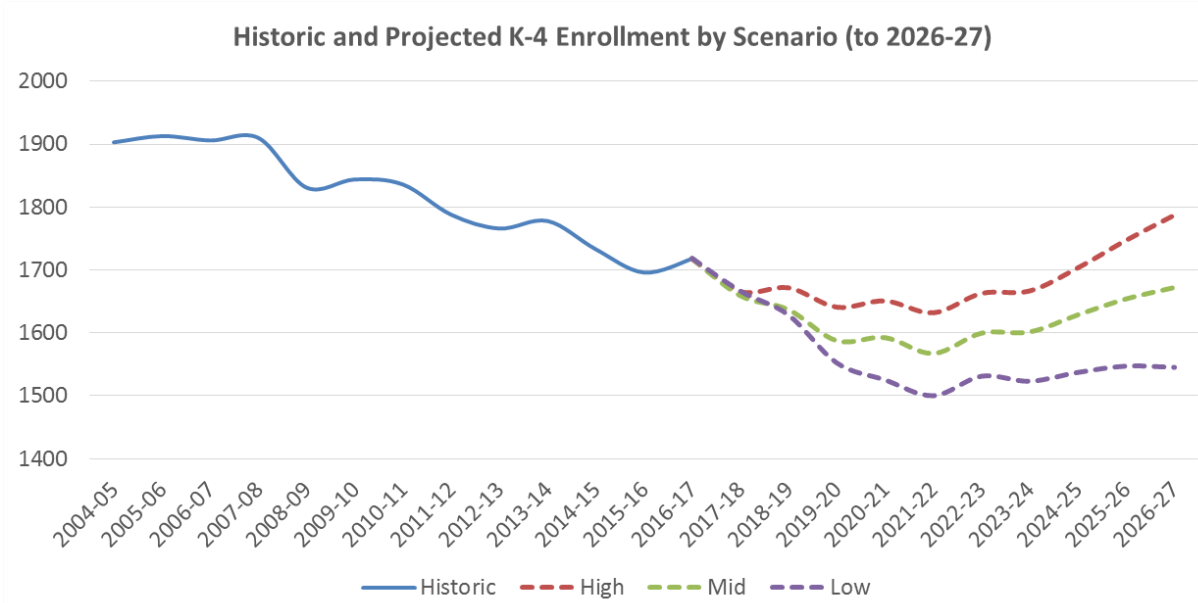


Figure 29: Projected K-4 Enrollment Change by Scenario

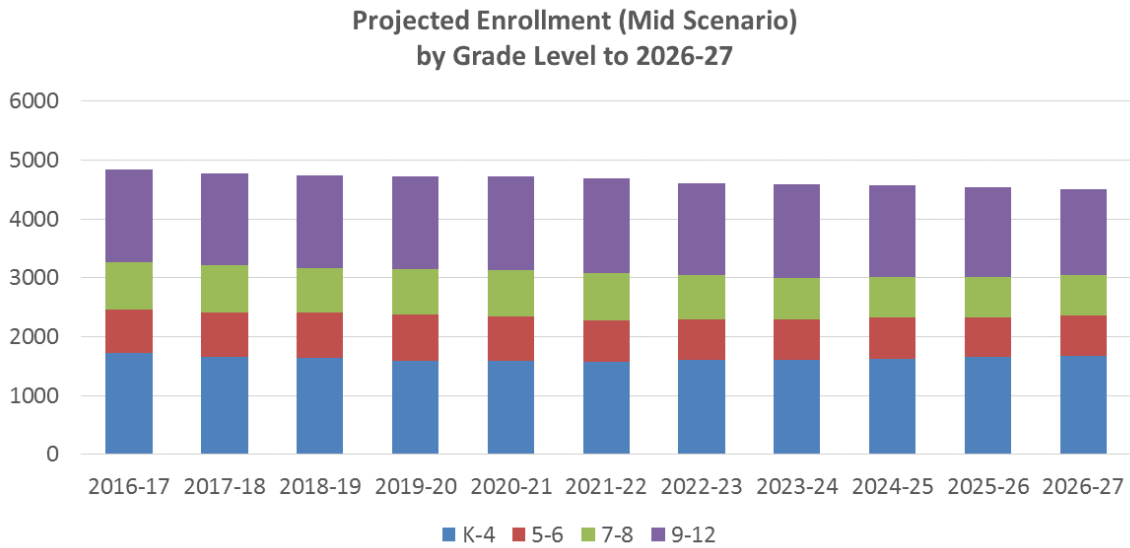


Figure 30: Projected Future Enrollment by Grade Level

Disaggregated by grade level (as in Figure 30), the medium-growth scenario anticipates declining K-4 enrollment until 2021-22, followed by a modest recovery that stands slightly below current levels by 2026-27. Upper elementary enrollments initially rise with the passage of known cohorts before declining sharply in the second half of the projection horizon. Intermediate enrollments decline initially before repeating the same pattern of a temporary rise and decline as the upper elementary grade level; at the close of the projection horizon, intermediate enrollments are projected to have declined from current levels by nearly 13%. High school enrollments remain relatively stable for much of this scenario, rising slightly above current levels in 2021-22. However, the last few years

show known, smaller cohorts rising into grades 9-12 as larger cohorts exit, prompting a sharp drop at the close of the projection horizon. Full details of all projection scenarios are provided in Appendix B.

### Individual School Projections

In addition to districtwide projections of student enrollments by grade, individual-school projections were prepared for the Methacton School District’s five elementary schools. These projections are informed by localized variations in the same data that informed the districtwide projections: housing sales, births, and enrollment trends. Sometimes, districtwide data mask variations at the neighborhood and attendance zone level.

Creating enrollment projections for individual schools can prove challenging due to smaller data sets leading to a greater percentage of error than for the larger area projections. For this reason, the individual school-by-school projections have been normalized against the districtwide projections so that the individual schools projections collectively equal the districtwide projections. Individual projections were prepared for the low, medium, and high-growth scenarios. The medium-growth scenario’s individual projections are shown in Figure 32 (below), while full details of all three individual scenarios are provided in Appendix B.

In order for projected births to be applied to individual school projections, we assumed that the historic proportion of births occurring in each district over the past five years would be a reasonably accurate guide to the approximate distribution of births in the coming years. Projected future births for each enrollment scenario were allocated between the five schools on this basis. While actual births in each attendance zone vary significantly from year to year, the distribution of projected future births aligns well with the rank ordering of recent district births, as illustrated in Figure 31. Projected births in 2021 range from a high of 89 in the Audubon attendance zone to a low of 45 in the Arrowhead district area.

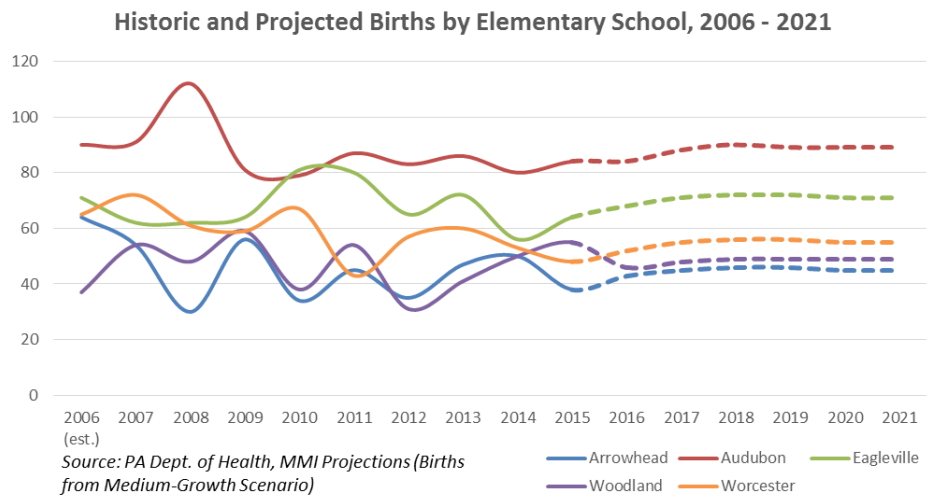


Figure 31: Birth Projections by District (Medium-Growth Scenario)

In addition to the above assumptions, we also assumed that attendance zone boundaries will not change during the projection horizon, that recent private school and out-of-district enrollment trends will remain stable, and that no changes will be made to existing program deployments. Additionally, K-4 students generated from anticipated development are assumed to attend the

school corresponding to where known developments have been proposed; however, this effect is attenuated by the normalization procedure, which appropriately reflects inherent uncertainty regarding where new housing units may ultimately be built.

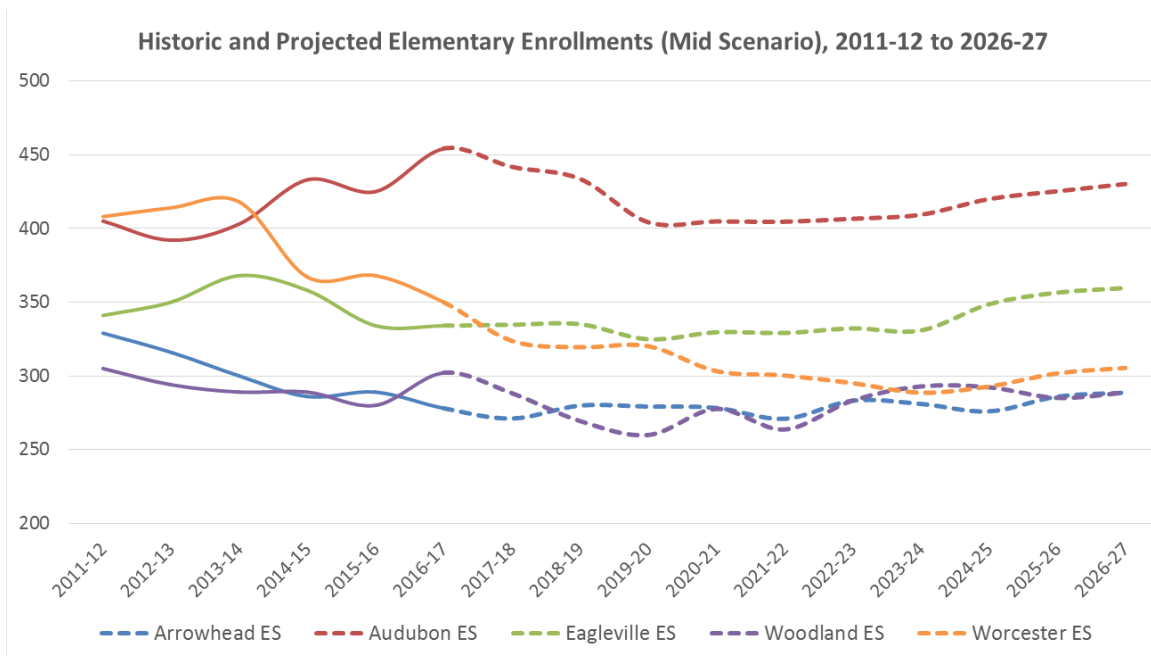


Figure 32: Individual Elementary Projections

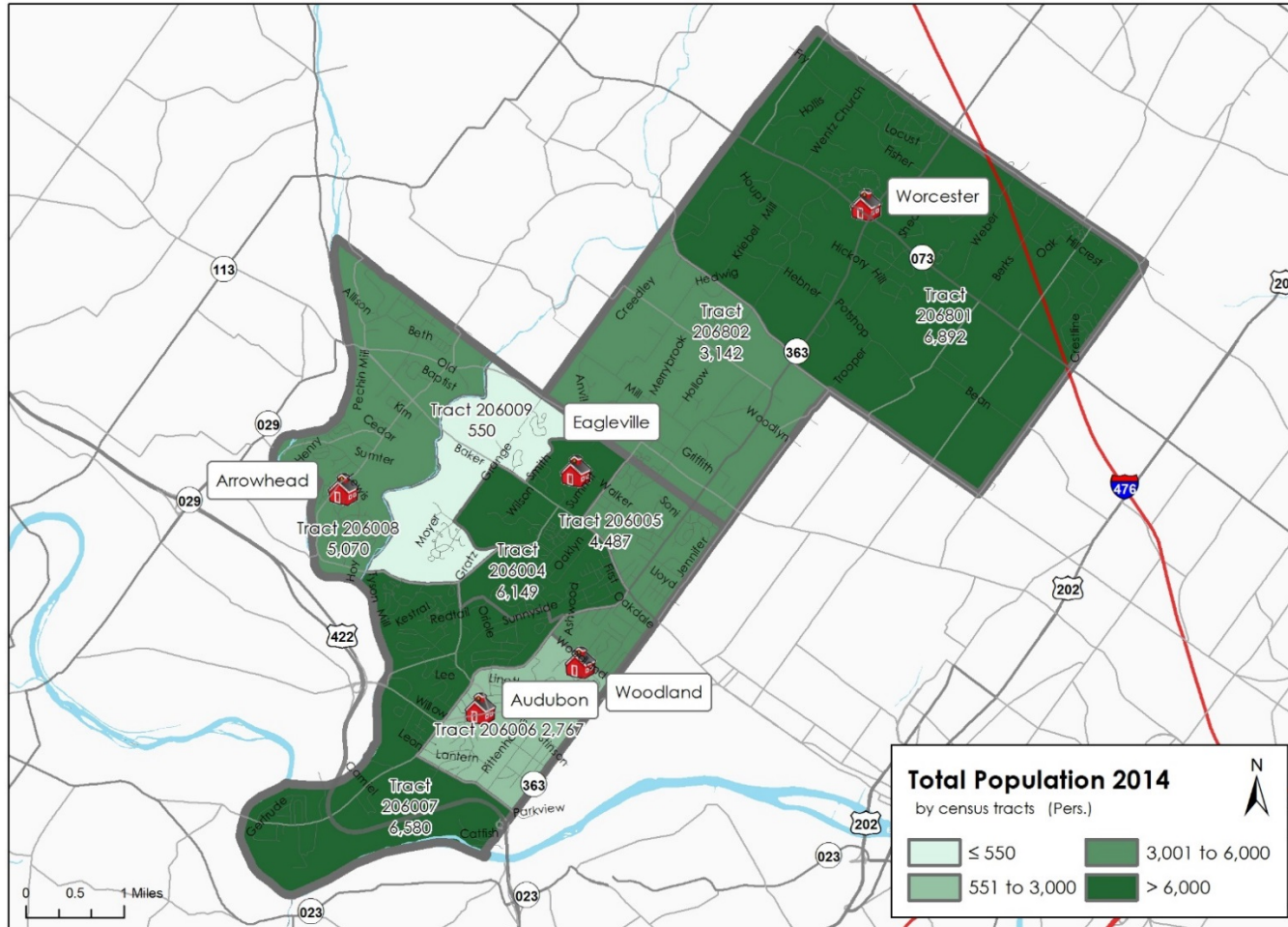
The above chart (Figure 32) shows recent and projected future enrollments for the duration of the projection horizon. Audubon, Woodland, and Worcester schools are projected to see gradual declines from their current enrollment levels in the near term; all three are projected to see enrollment declines of 11-14% over the first five years. Eagleville and Arrowhead schools are likely to experience relative stability in the near term, with smaller declines projected. All of these schools are projected to see small increases in enrollment in the last several years as projected births rise and smaller cohorts graduate to higher grade levels. By the close of the projection horizon, Arrowhead and Eagleville are projected to serve slightly larger student populations than present levels, while Audubon and Woodland experience small declines and Worcester sustains a 14% decline.

The first four years of individual enrollment projections can be assessed with greater confidence than the following six years, as these projections are based on known births and existing cohorts; beyond this point, additional assumptions of both birth rates and the distribution of births within the community create additional uncertainty. Figure 33 shows detailed projections through 2020-21.

School	Historic						Projected			
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Arrowhead ES	329	316	300	286	289	278	271	280	279	278
Audubon ES	405	392	403	433	425	454	442	433	404	405
Eagleville ES	341	350	368	358	334	334	335	335	325	330
Woodland ES	305	294	289	289	280	302	288	269	260	278
Worcester ES	408	414	418	367	368	350	324	319	320	303
<b>Grand Total</b>	<b>1,788</b>	<b>1,766</b>	<b>1,778</b>	<b>1,733</b>	<b>1,696</b>	<b>1,718</b>	<b>1,659</b>	<b>1,637</b>	<b>1,588</b>	<b>1,593</b>

Figure 33: Historic and Projected Enrollments by Elementary School

## Appendix A: Maps

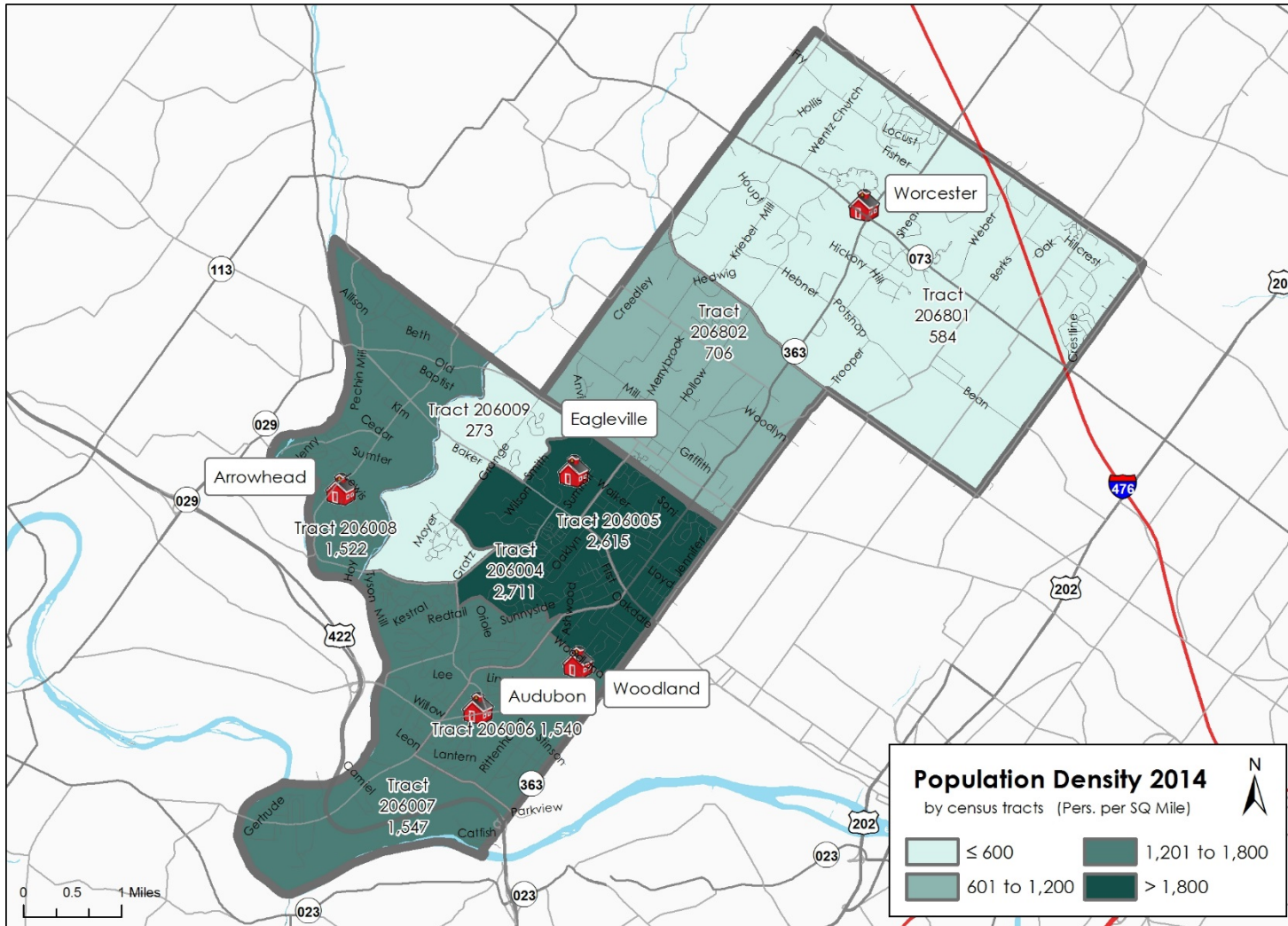


MILONE & MACBROOM for Methacton School District | 2016

This map is intended for planning purposes only. Delineations may not be exact.

About this map: Roads, Boundaries: PA DOT (2014)  
Demographics: US Census Bureau (2000-2015)  
Attendance Zones, Enrollment Data: MSD (2016)

Map 1: Total Population by Census Tract



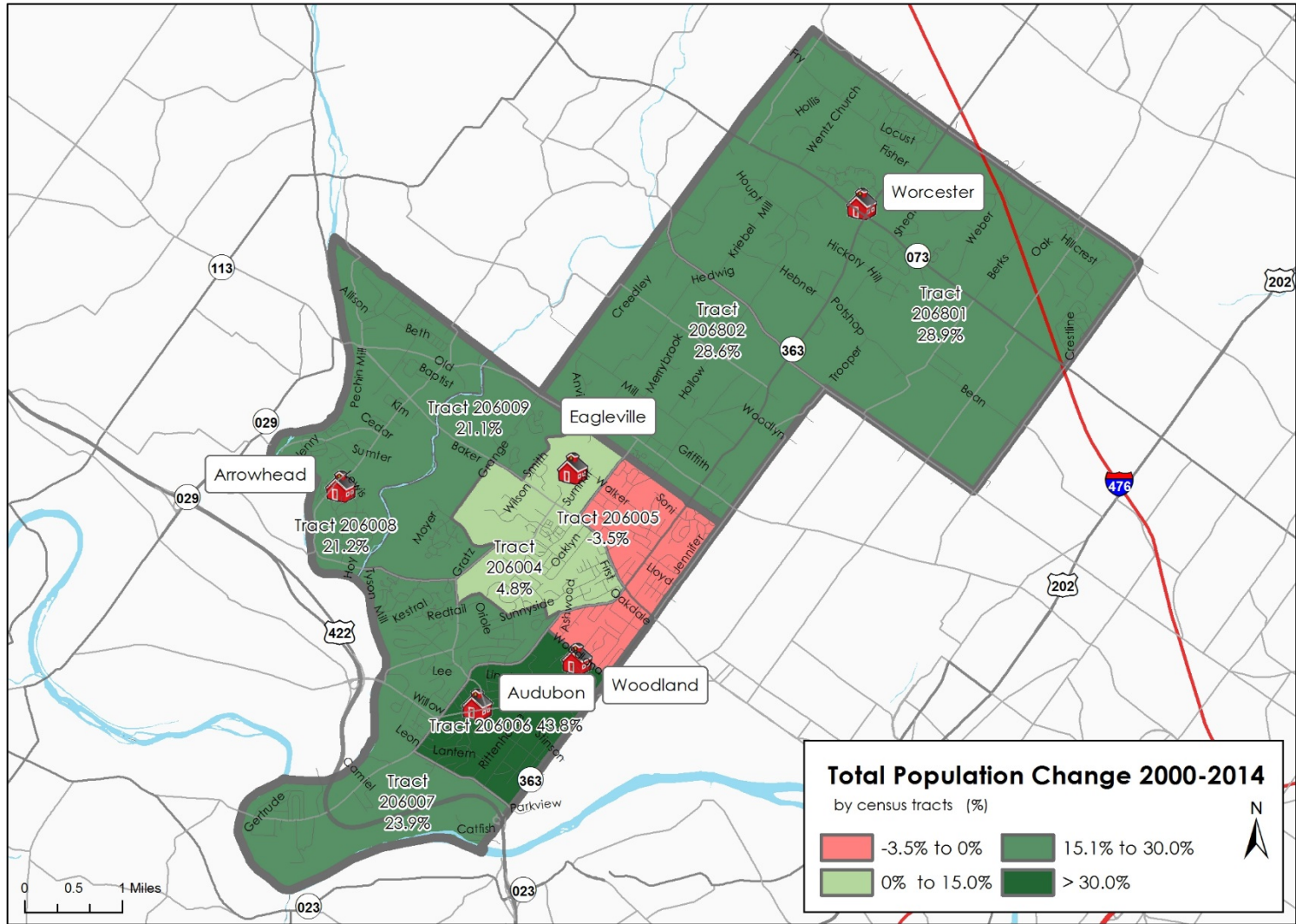
MILONE & MACBROOM for Methacton School District | 2016

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About this map: Roads, Boundaries: PA DOT (2016)  
 Demographics: US Census Bureau (2000-2015)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 2: Population Density by Census Tract



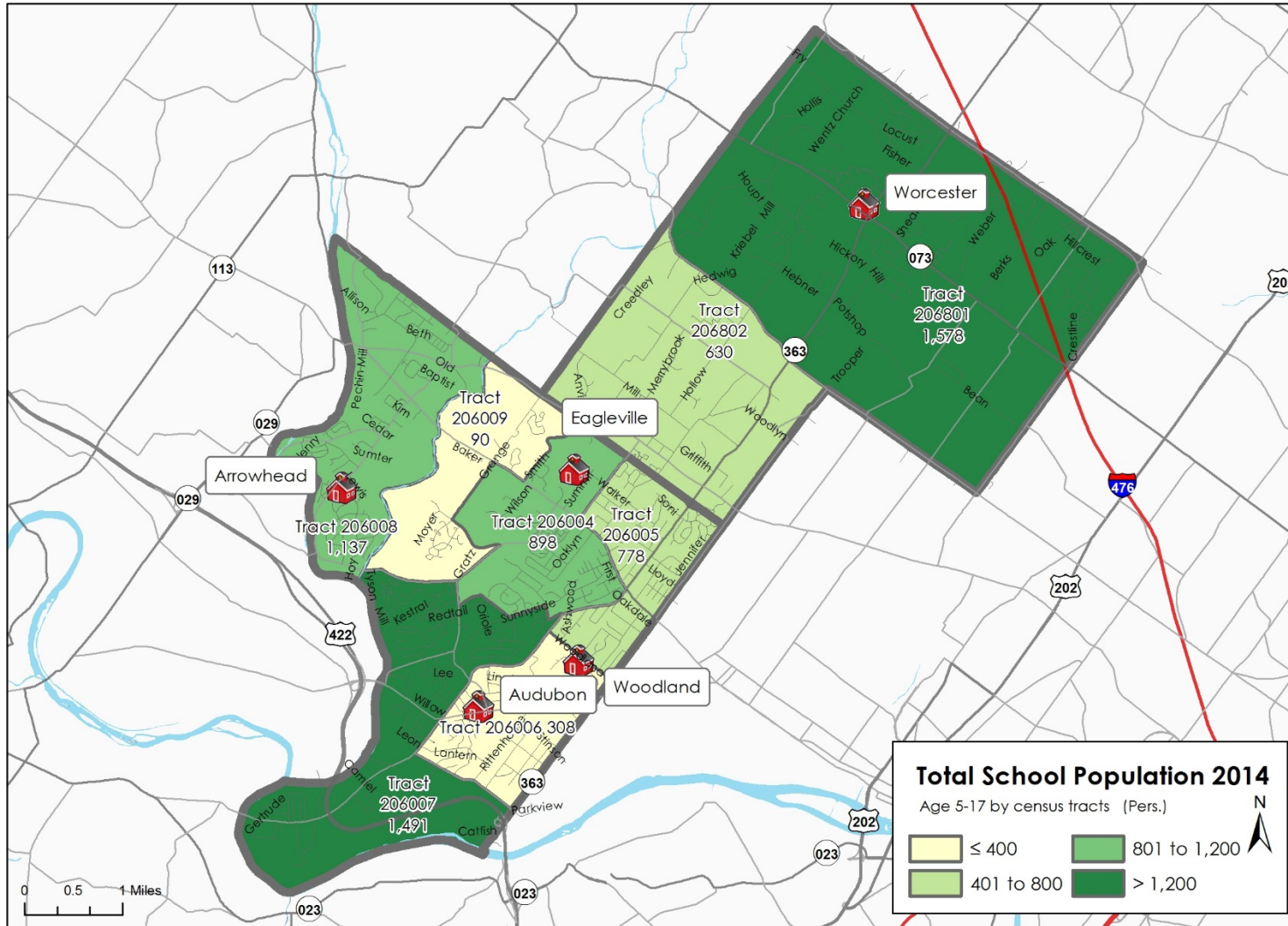


MILONE & MACBROOM for Methacton School District | 2016

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About this map: Roads, Boundaries: PA DOT (2016)  
Demographics: US Census Bureau (2000-2015)  
Attendance Zones, Enrollment Data: MSD (2016)

Map 3: Total Population Change (2000 - 2014) by Census Tract

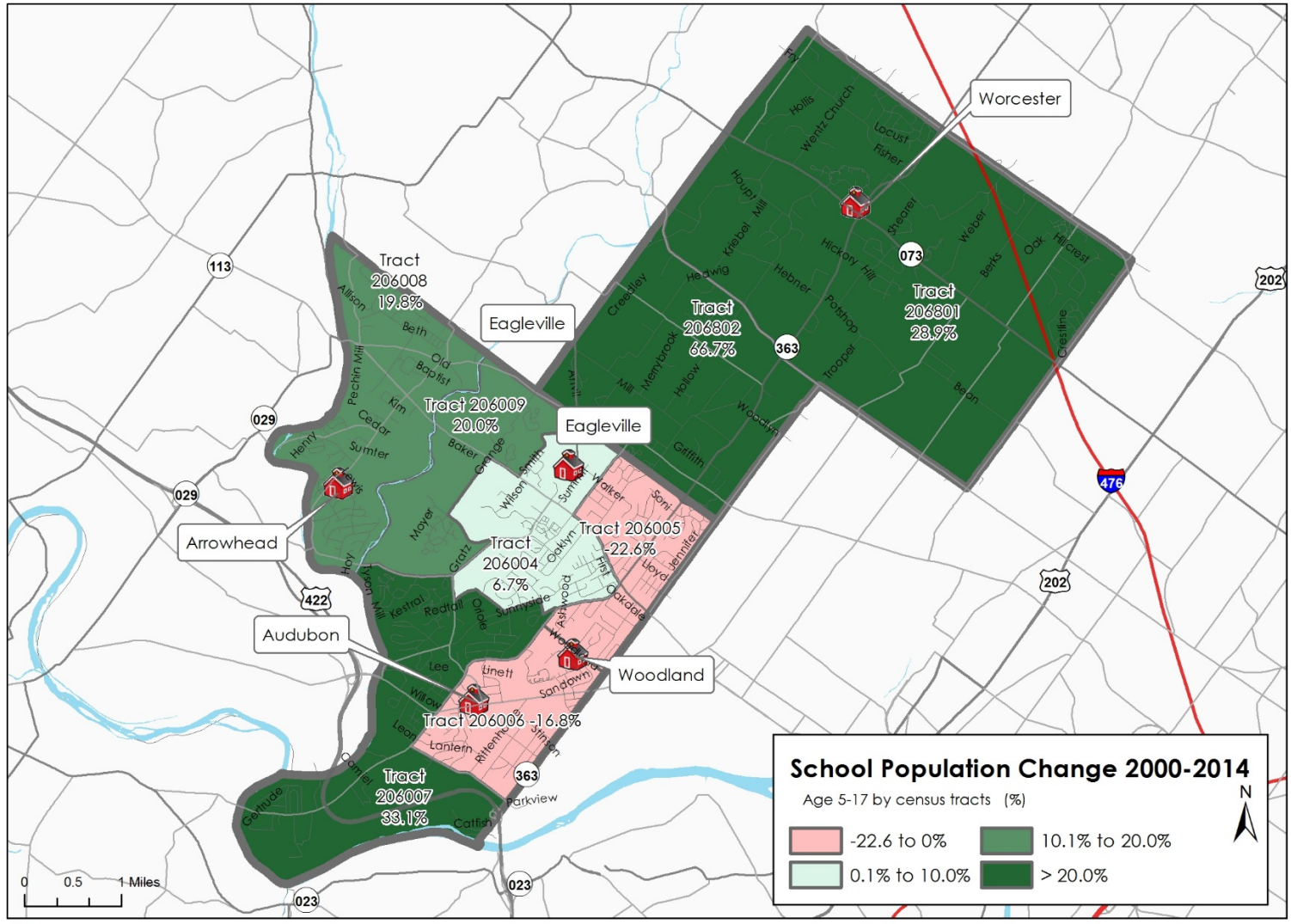


MILONE & MACBROOM for Methacton School District | 2016

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**About this map:** Roads, Boundaries: PA DOT (2016)  
 Demographics: US Census Bureau (2000-2015)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 4: School-Age Population by Census Tract

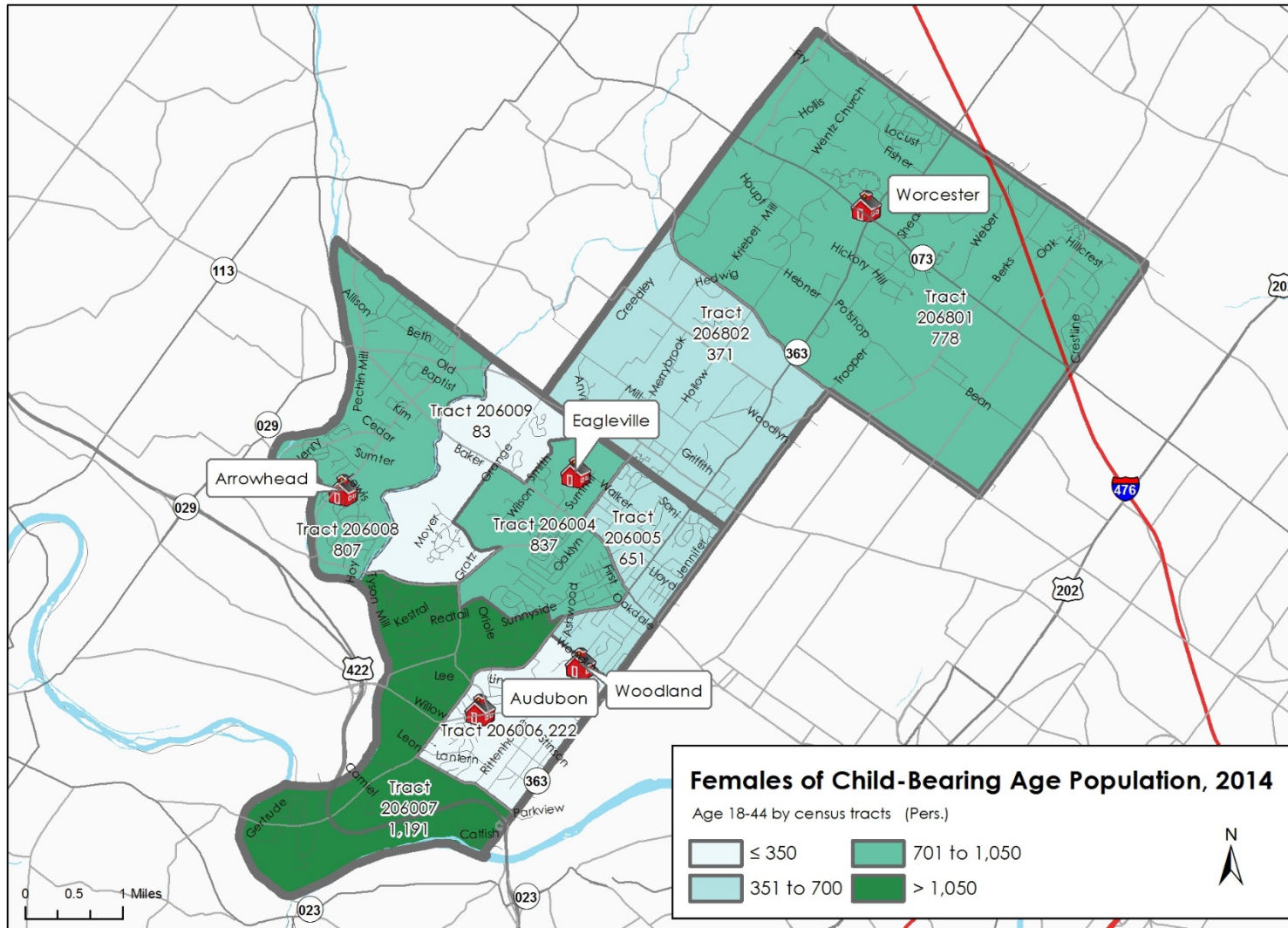


MILONE & MACBROOM for Methacton School District | 2016

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About this map: Roads, Boundaries: PA DOT (2016)  
 Demographics: US Census Bureau (2000-2015)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 5: School-Age Population Change (2000 - 2014) by Census Tract

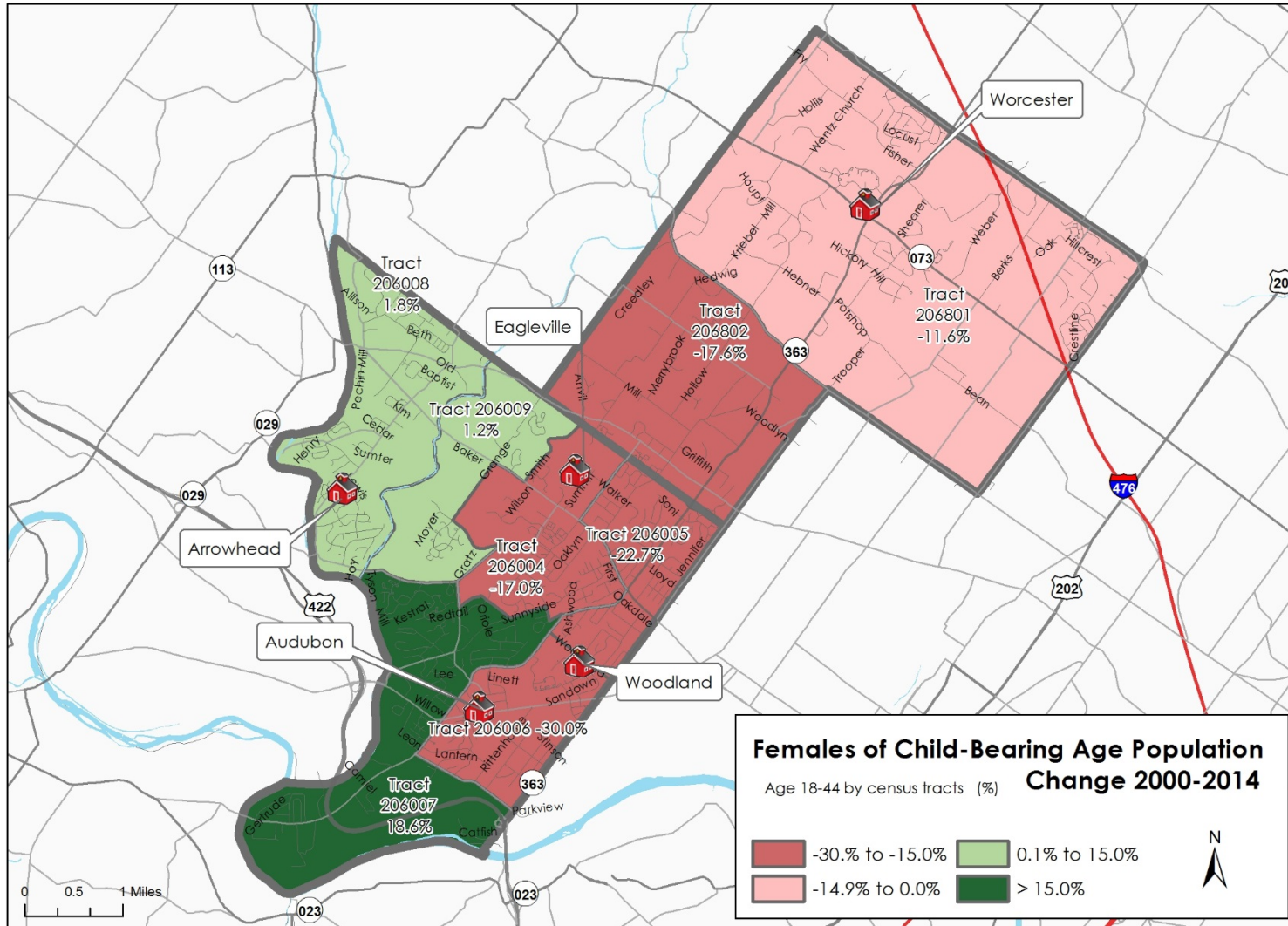


MILONE & MACBROOM for Methacton School District | 2016

This map is intended for planning purposes only. Delineations may not be exact.

About this map: Roads, Boundaries: PA DOT (2016)  
 Demographics: US Census Bureau (2000-2015)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 6: Females of Child-Bearing Age (18-44) by Census Tract

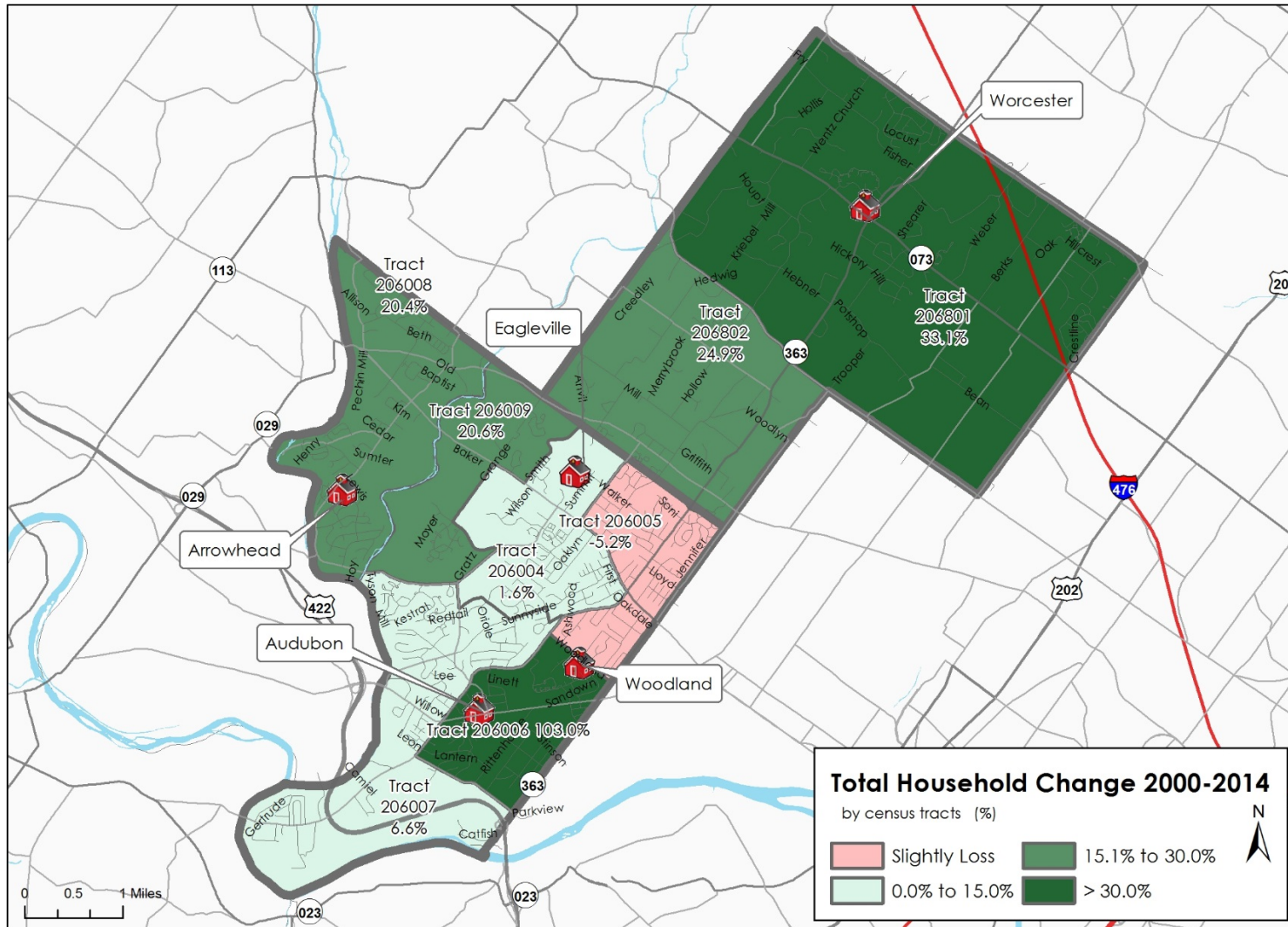


MILONE & MACBROOM for Methacton School District | 2016

This map is intended for planning purposes only. Delineations may not be exact.

About this map: Roads, Boundaries: PA DOT (2016)  
 Demographics: US Census Bureau (2000-2015)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 7: Change (2000 – 2014) in Females of Child-Bearing Age (18-44) by Census Tract

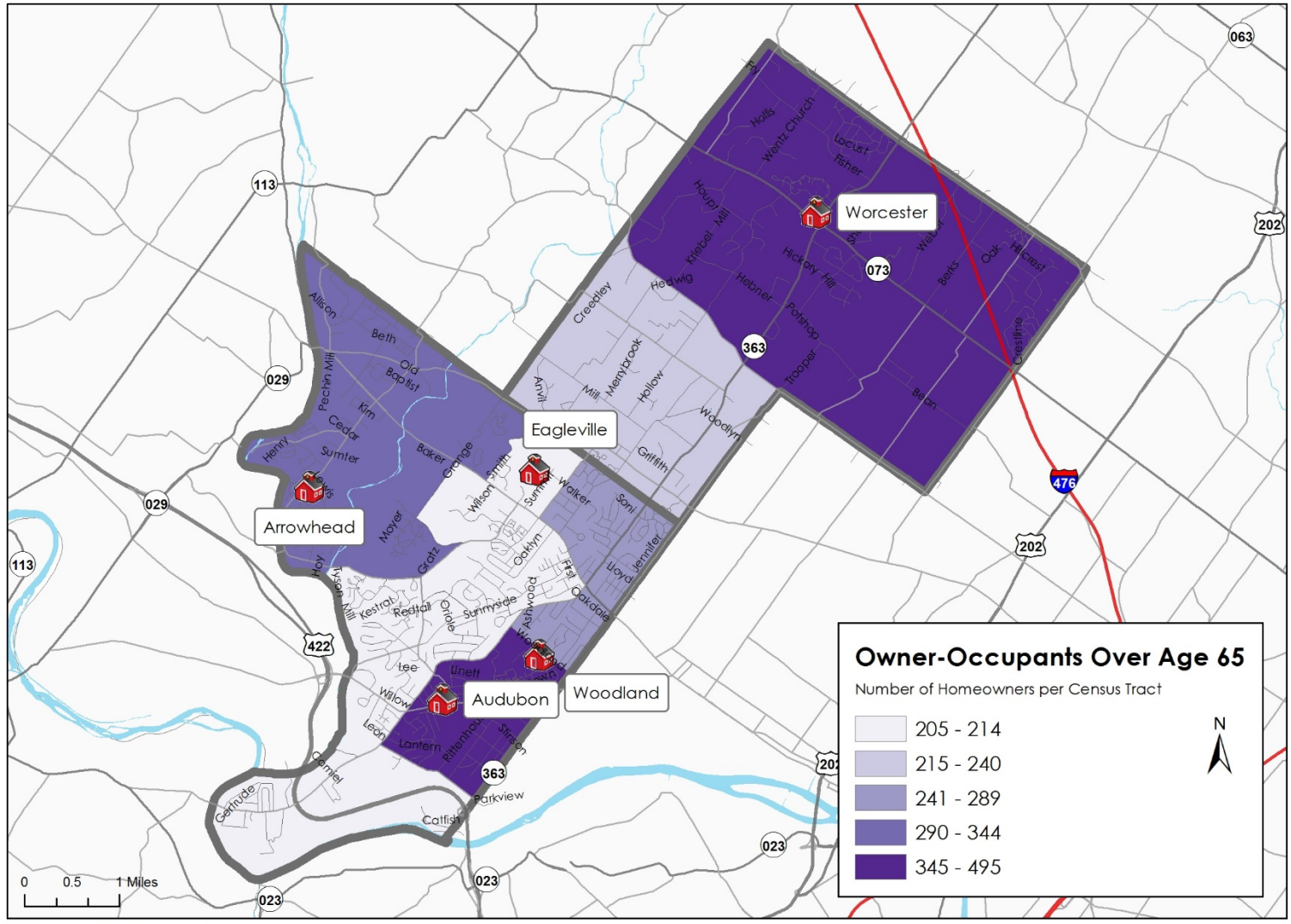


MILONE & MACBROOM for Methacton School District | 2016

This map is intended for planning purposes only. Delineations may not be exact.

About this map: Roads, Boundaries: PA DOT (2016)  
Demographics: US Census Bureau (2000-2015)  
Attendance Zones, Enrollment Data: MSD (2016)

Map 8: Change (2000 - 2014) in Households by Census Tract

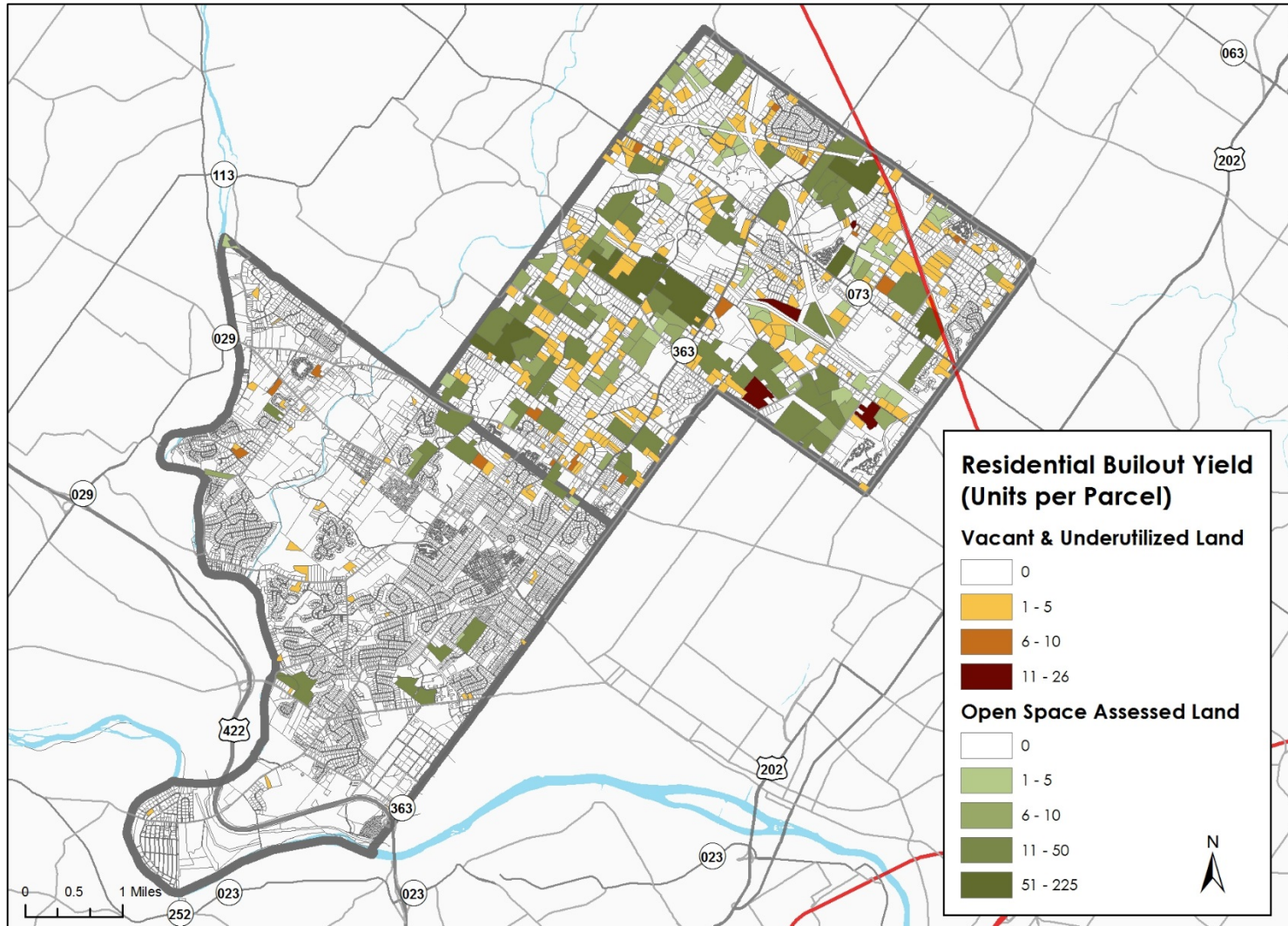


MILONE & MACBROOM for Methacton School District | 2016

This map is intended for planning purposes only. Delineations may not be exact.

About this map: Roads, Boundaries: PA DOT (2016)  
 Demographics: US Census Bureau (2000-2015)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 9: Owner-Occupied Homes with Householder Age 65 or Older by Census Tract



MILONE & MACBROOM for Methacton School District | 2016

This map is intended for planning purposes only. Delineations may not be exact.

**About this map:** Roads, Boundaries: PA DOT (2016)  
 Parcels, Land Use, Zoning: MCPC (2016)  
 Attendance Zones, Enrollment Data: MSD (2016)

Map 10: Residential Buildout

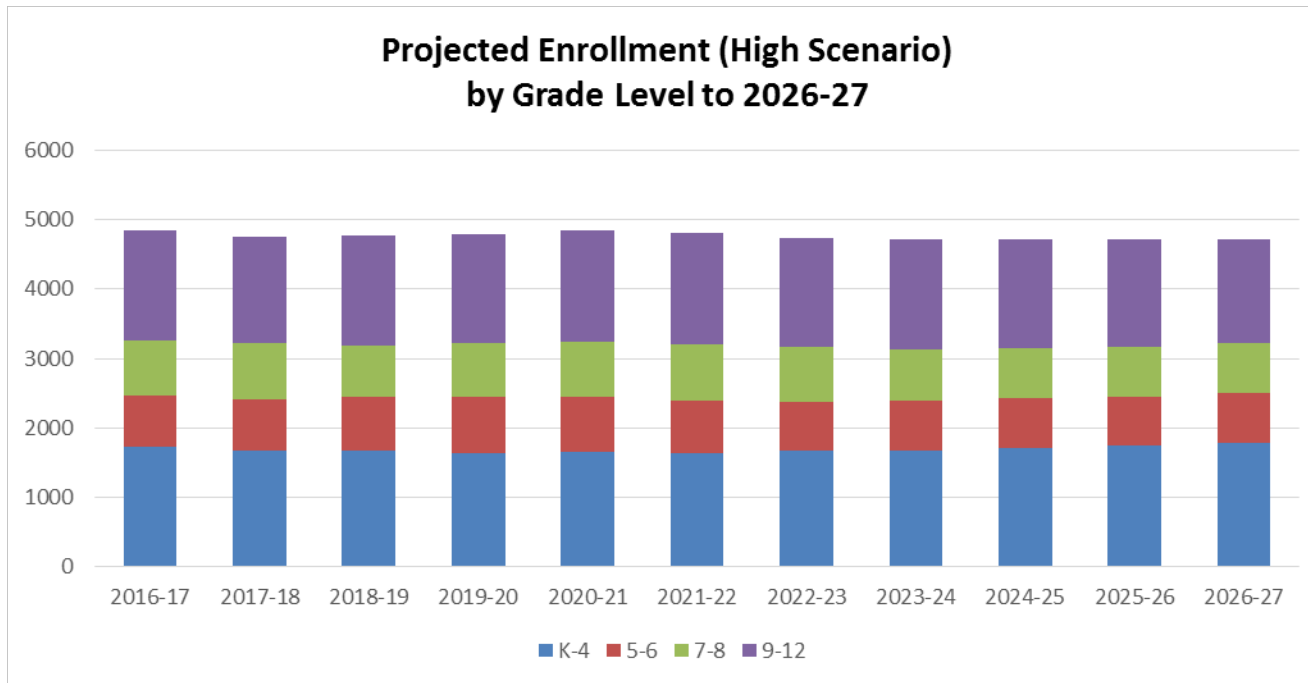




## Appendix B: Detailed Enrollment Projections

### Districtwide Projection: High Scenario

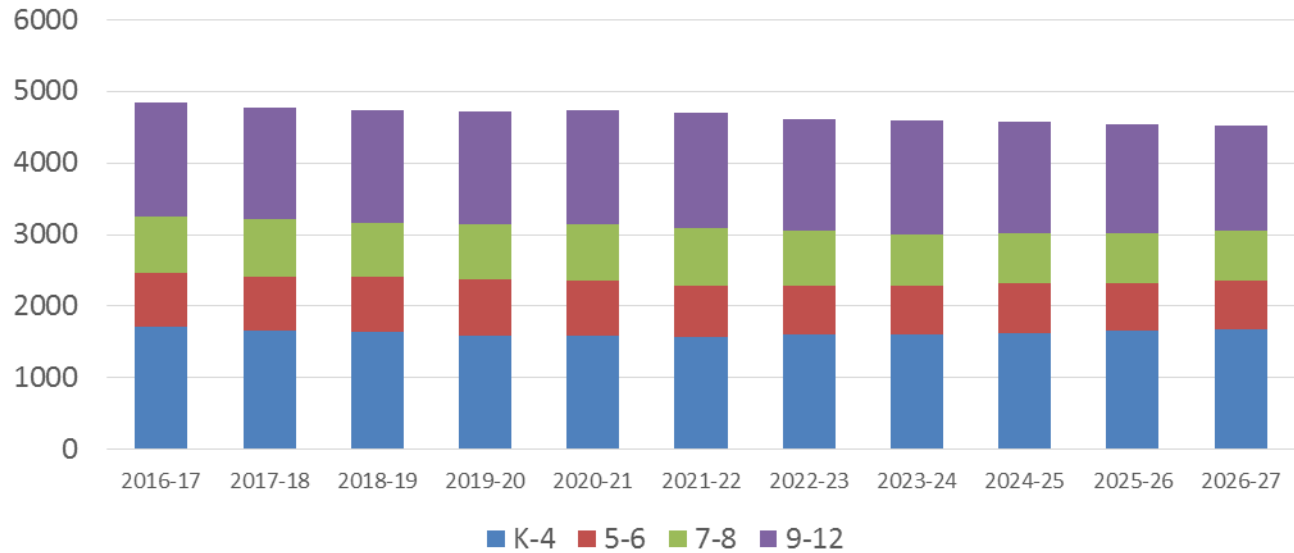
Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	K-4	5-6	7-8	9-12
2016-17	322	270	326	375	369	378	365	376	433	367	362	402	411	412	4846	1718	741	800	1587
2017-18	275	241	329	330	389	377	381	364	375	429	365	366	396	418	4760	1666	745	804	1545
2018-19	309	278	300	340	349	405	387	387	370	378	434	376	367	409	4780	1672	774	748	1586
2019-20	290	261	345	311	360	364	415	393	393	373	383	446	377	380	4801	1641	808	766	1586
2020-21	294	265	325	356	330	375	374	421	399	396	378	394	446	390	4849	1651	795	795	1608
2021-22	303	273	323	329	369	338	378	373	420	395	394	382	388	453	4815	1632	751	815	1617
2022-23	318	286	332	327	341	377	341	377	372	416	393	398	376	394	4730	1663	718	788	1561
2023-24	328	295	348	336	339	349	380	340	376	368	414	397	392	382	4716	1667	720	744	1585
2024-25	331	297	359	352	349	347	352	379	339	372	366	419	391	398	4720	1704	731	711	1574
2025-26	335	301	361	364	365	357	350	351	378	336	370	370	413	397	4713	1748	701	714	1550
2026-27	340	305	366	366	378	373	360	349	350	374	334	374	364	420	4713	1788	709	724	1492



### Districtwide Projection: Medium Scenario

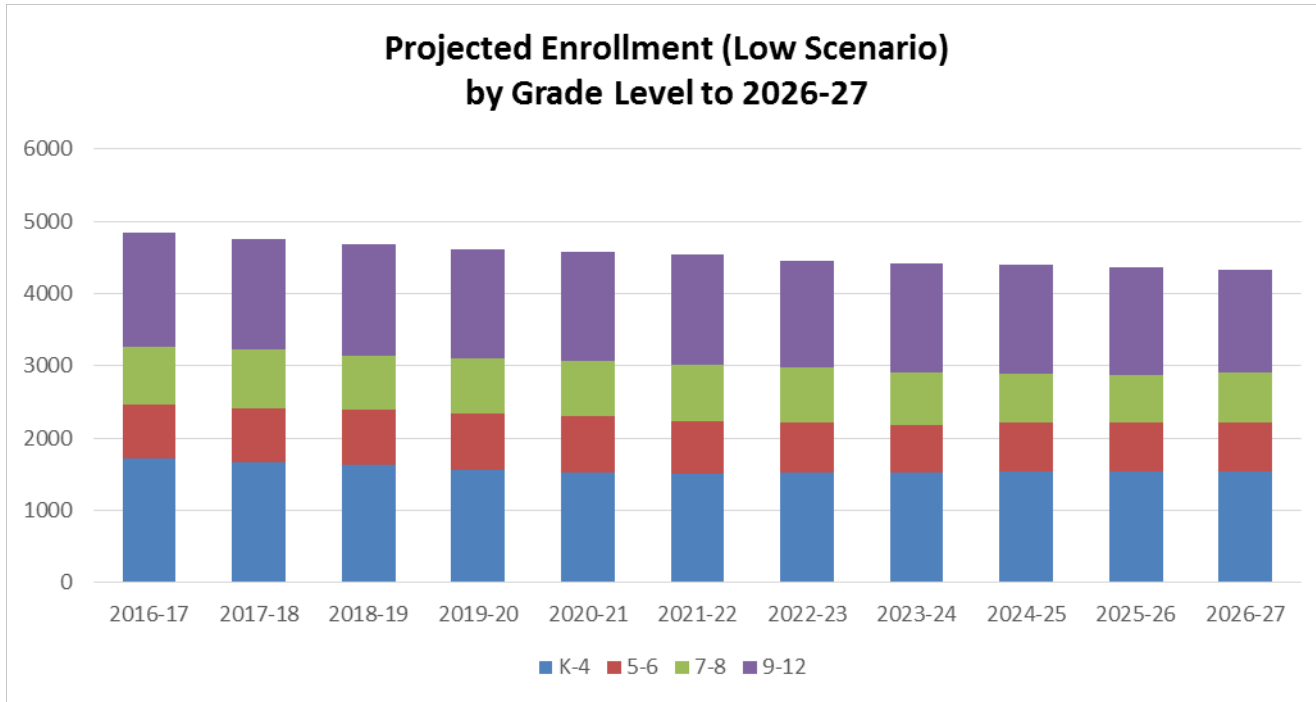
Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	K-4	5-6	7-8	9-12
2016-17	322	270	326	375	369	378	365	376	433	367	362	402	411	412	4846	1718	741	800	1587
2017-18	275	235	345	318	387	374	386	363	378	435	366	364	400	416	4767	1659	749	813	1546
2018-19	309	267	304	340	331	395	385	387	368	383	437	371	365	408	4741	1637	772	751	1581
2019-20	290	251	344	300	354	339	406	386	392	373	385	443	372	373	4718	1588	792	765	1573
2020-21	294	255	324	339	313	362	349	407	391	397	375	390	443	380	4725	1593	756	788	1588
2021-22	299	259	326	316	350	317	370	347	409	393	396	377	388	449	4697	1568	717	802	1610
2022-23	312	270	331	318	326	355	324	368	349	411	392	398	375	393	4610	1600	692	760	1558
2023-24	319	276	345	323	328	330	362	322	370	350	410	394	396	380	4586	1602	684	720	1580
2024-25	317	274	353	337	333	332	337	360	324	371	349	412	392	401	4575	1629	697	695	1554
2025-26	315	273	350	345	348	338	339	335	362	325	370	351	410	397	4543	1654	674	687	1528
2026-27	314	272	349	342	356	353	345	337	337	363	324	372	349	415	4514	1672	682	700	1460

Projected Enrollment (Mid Scenario)  
by Grade Level to 2026-27



**Districtwide Projection: Low Scenario**

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	K-4	5-6	7-8	9-12
2016-17	322	270	326	375	369	378	365	376	433	367	362	402	411	412	4846	1718	741	800	1587
2017-18	275	229	333	327	397	380	381	365	378	428	363	364	396	416	4757	1666	746	806	1539
2018-19	309	257	282	334	346	409	383	381	367	374	423	365	359	400	4680	1628	764	741	1547
2019-20	290	242	317	283	354	356	412	383	383	363	370	426	360	363	4612	1552	795	746	1519
2020-21	294	245	298	318	300	364	358	412	385	379	359	372	420	364	4574	1525	770	764	1515
2021-22	304	253	302	299	337	309	366	358	414	381	375	361	367	425	4547	1500	724	795	1528
2022-23	303	252	312	303	317	347	311	366	360	410	377	377	356	371	4459	1531	677	770	1481
2023-24	302	252	311	313	321	326	349	311	368	356	405	379	372	360	4423	1523	660	724	1516
2024-25	302	252	311	312	332	330	328	349	313	364	352	408	374	376	4401	1537	677	677	1510
2025-26	301	251	311	312	331	342	332	328	351	310	360	354	402	378	4362	1547	660	661	1494
2026-27	301	251	310	312	331	341	344	332	330	347	306	362	349	406	4321	1545	676	677	1423



### Individual Elementary Projections: High Scenario

Methacton School District Elementary School Projected Enrollments, 2016-17						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	56	64	56	59	278
Audubon ES	67	86	112	93	96	454
Eagleville ES	59	62	69	73	71	334
Woodland ES	61	48	68	67	58	302
Worcester ES	40	74	62	80	94	350
<b>TOTAL</b>	<b>270</b>	<b>326</b>	<b>375</b>	<b>369</b>	<b>378</b>	<b>1,718</b>

Methacton School District Elementary School Projected Enrollments, 2019-20						
School	K	1	2	3	4	K-4th
Arrowhead ES	52	63	49	59	65	288
Audubon ES	64	88	88	87	91	418
Eagleville ES	48	75	68	76	68	335
Woodland ES	52	49	38	76	53	268
Worcester ES	44	70	69	62	87	331
<b>TOTAL</b>	<b>261</b>	<b>345</b>	<b>311</b>	<b>360</b>	<b>364</b>	<b>1,641</b>

Methacton School District Elementary School Projected Enrollments, 2017-18						
School	K	1	2	3	4	K-4th
Arrowhead ES	36	54	57	65	60	272
Audubon ES	68	82	88	111	94	444
Eagleville ES	57	70	61	75	74	336
Woodland ES	33	68	49	72	66	288
Worcester ES	47	55	76	66	83	326
<b>TOTAL</b>	<b>241</b>	<b>329</b>	<b>330</b>	<b>389</b>	<b>377</b>	<b>1,666</b>

Methacton School District Elementary School Projected Enrollments, 2020-21						
School	K	1	2	3	4	K-4th
Arrowhead ES	41	67	65	51	64	288
Audubon ES	69	81	92	89	90	420
Eagleville ES	56	58	75	75	79	342
Woodland ES	59	59	51	42	76	287
Worcester ES	41	61	73	74	66	314
<b>TOTAL</b>	<b>265</b>	<b>325</b>	<b>356</b>	<b>330</b>	<b>375</b>	<b>1,651</b>

Methacton School District Elementary School Projected Enrollments, 2018-19						
School	K	1	2	3	4	K-4th
Arrowhead ES	50	47	57	60	72	286
Audubon ES	71	84	86	89	114	443
Eagleville ES	63	67	69	66	76	342
Woodland ES	44	37	70	52	72	275
Worcester ES	51	65	58	82	70	326
<b>TOTAL</b>	<b>278</b>	<b>300</b>	<b>340</b>	<b>349</b>	<b>405</b>	<b>1,672</b>

Methacton School District Elementary School Projected Enrollments, 2021-22						
School	K	1	2	3	4	K-4th
Arrowhead ES	47	50	66	66	53	282
Audubon ES	70	85	83	91	91	421
Eagleville ES	61	67	57	82	76	343
Woodland ES	50	66	61	55	42	274
Worcester ES	45	55	61	76	76	313
<b>TOTAL</b>	<b>273</b>	<b>323</b>	<b>329</b>	<b>369</b>	<b>338</b>	<b>1,632</b>

<b>Methacton School District Elementary School Projected Enrollments, 2022-23</b>						
<b>School</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>K-4th</b>
Arrowhead ES	49	58	51	68	70	<b>295</b>
Audubon ES	74	86	88	82	92	<b>422</b>
Eagleville ES	63	72	66	62	83	<b>345</b>
Woodland ES	52	56	67	65	54	<b>295</b>
Worcester ES	47	60	56	65	78	<b>307</b>
<b>TOTAL</b>	<b>286</b>	<b>332</b>	<b>327</b>	<b>341</b>	<b>377</b>	<b>1,663</b>

<b>Methacton School District Elementary School Projected Enrollments, 2025-26</b>						
<b>School</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>K-4th</b>
Arrowhead ES	51	63	63	62	64	<b>302</b>
Audubon ES	77	94	97	92	89	<b>449</b>
Eagleville ES	67	78	76	79	77	<b>376</b>
Woodland ES	56	61	62	63	60	<b>302</b>
Worcester ES	50	66	66	68	67	<b>318</b>
<b>TOTAL</b>	<b>301</b>	<b>361</b>	<b>364</b>	<b>365</b>	<b>357</b>	<b>1,748</b>

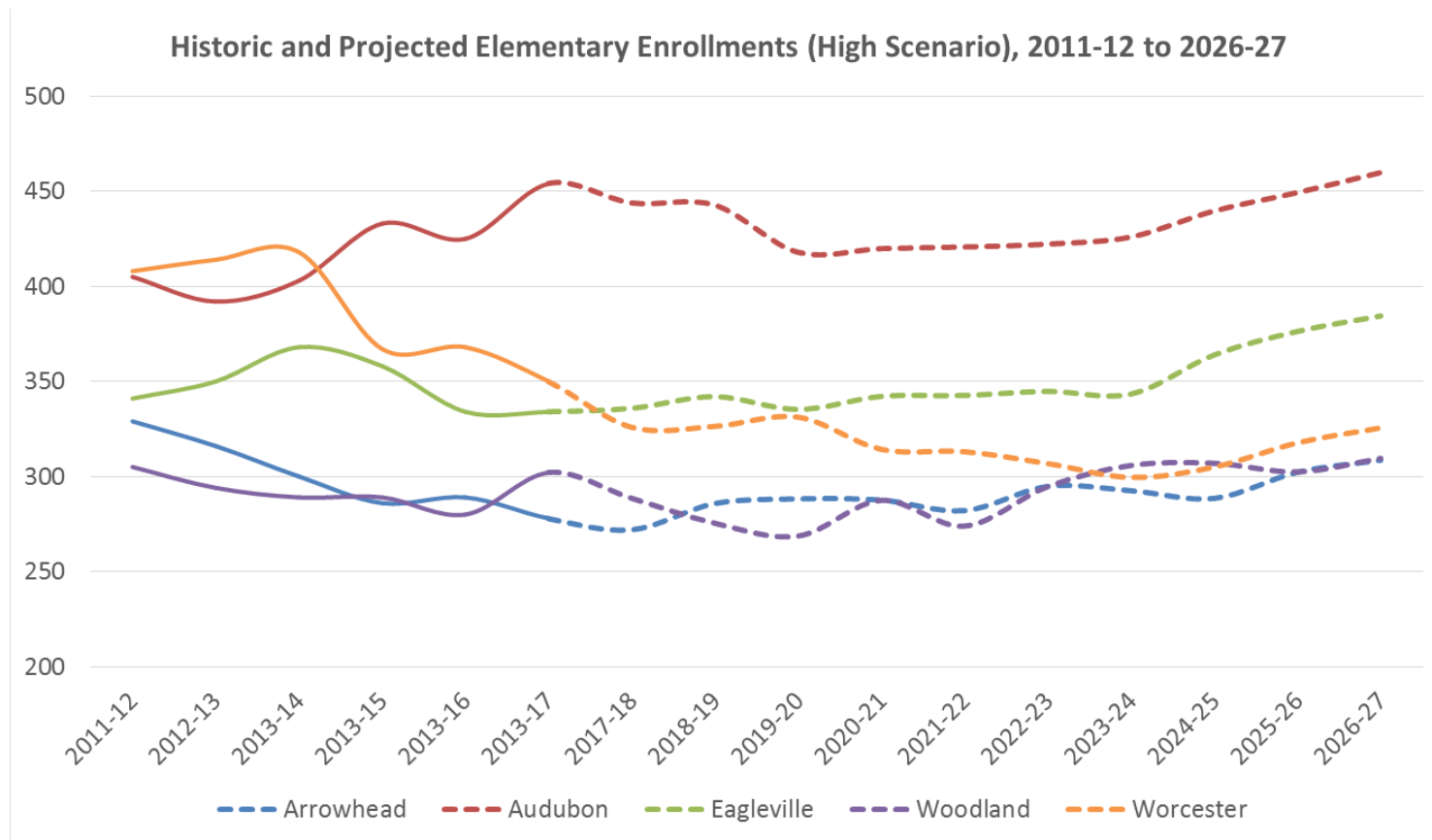
<b>Methacton School District Elementary School Projected Enrollments, 2023-24</b>						
<b>School</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>K-4th</b>
Arrowhead ES	50	60	58	51	72	<b>293</b>
Audubon ES	77	91	88	87	83	<b>426</b>
Eagleville ES	65	75	71	71	62	<b>343</b>
Woodland ES	55	59	57	71	64	<b>306</b>
Worcester ES	48	63	61	59	67	<b>299</b>
<b>TOTAL</b>	<b>295</b>	<b>348</b>	<b>336</b>	<b>339</b>	<b>349</b>	<b>1,667</b>

<b>Methacton School District Elementary School Projected Enrollments, 2026-27</b>						
<b>School</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>K-4th</b>
Arrowhead ES	52	63	64	64	66	<b>309</b>
Audubon ES	79	95	96	96	93	<b>460</b>
Eagleville ES	67	79	77	82	80	<b>385</b>
Woodland ES	57	62	62	66	62	<b>309</b>
Worcester ES	51	67	67	70	71	<b>326</b>
<b>TOTAL</b>	<b>305</b>	<b>366</b>	<b>366</b>	<b>378</b>	<b>373</b>	<b>1,788</b>

<b>Methacton School District Elementary School Projected Enrollments, 2024-25</b>						
<b>School</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>K-4th</b>
Arrowhead ES	51	62	61	60	55	<b>289</b>
Audubon ES	76	94	93	88	88	<b>440</b>
Eagleville ES	66	77	73	76	72	<b>364</b>
Woodland ES	55	61	60	61	71	<b>307</b>
Worcester ES	49	65	65	65	61	<b>305</b>
<b>TOTAL</b>	<b>297</b>	<b>359</b>	<b>352</b>	<b>349</b>	<b>347</b>	<b>1,704</b>

### Summary of Historic and Projected Individual Elementary School Enrollments: High Scenario

School	Historic						Projected									
	2011-12	2012-13	2013-14	2013-15	2013-16	2013-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Arrowhead	329	316	300	286	289	278	272	286	288	288	282	295	293	289	302	309
Audubon	405	392	403	433	425	454	444	443	418	420	421	422	426	440	449	460
Eagleville	341	350	368	358	334	334	336	342	335	342	343	345	343	364	376	385
Woodland	305	294	289	289	280	302	288	275	268	287	274	295	306	307	302	309
Worcester	408	414	418	367	368	350	326	326	331	314	313	307	299	305	318	326
Grand Total	1,788	1,766	1,778	1,733	1,696	1,718	1,666	1,672	1,641	1,651	1,632	1,663	1,667	1,704	1,748	1,788



### Individual Elementary Projections: Medium Scenario

Methacton School District Elementary School Projected Enrollments, 2016-17						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	56	64	56	59	278
Audubon ES	67	86	112	93	96	454
Eagleville ES	59	62	69	73	71	334
Woodland ES	61	48	68	67	58	302
Worcester ES	40	74	62	80	94	350
<b>TOTAL</b>	<b>270</b>	<b>326</b>	<b>375</b>	<b>369</b>	<b>378</b>	<b>1,718</b>

Methacton School District Elementary School Projected Enrollments, 2019-20						
School	K	1	2	3	4	K-4th
Arrowhead ES	50	63	47	58	60	279
Audubon ES	62	87	85	85	85	404
Eagleville ES	46	75	65	75	64	325
Woodland ES	50	49	37	74	49	260
Worcester ES	42	69	66	61	81	320
<b>TOTAL</b>	<b>251</b>	<b>344</b>	<b>300</b>	<b>354</b>	<b>339</b>	<b>1,588</b>

Methacton School District Elementary School Projected Enrollments, 2017-18						
School	K	1	2	3	4	K-4th
Arrowhead ES	35	57	55	65	59	271
Audubon ES	66	86	85	111	93	442
Eagleville ES	56	73	59	74	73	335
Woodland ES	32	71	47	72	66	288
Worcester ES	46	58	73	65	82	324
<b>TOTAL</b>	<b>235</b>	<b>345</b>	<b>318</b>	<b>387</b>	<b>374</b>	<b>1,659</b>

Methacton School District Elementary School Projected Enrollments, 2020-21						
School	K	1	2	3	4	K-4th
Arrowhead ES	39	66	62	48	62	278
Audubon ES	66	80	87	85	86	405
Eagleville ES	54	57	72	71	76	330
Woodland ES	56	59	49	39	74	278
Worcester ES	39	61	69	70	64	303
<b>TOTAL</b>	<b>255</b>	<b>324</b>	<b>339</b>	<b>313</b>	<b>362</b>	<b>1,593</b>

Methacton School District Elementary School Projected Enrollments, 2018-19						
School	K	1	2	3	4	K-4th
Arrowhead ES	48	48	57	57	70	280
Audubon ES	68	85	86	84	111	433
Eagleville ES	61	68	69	63	74	335
Woodland ES	42	37	70	50	71	269
Worcester ES	49	66	58	78	68	319
<b>TOTAL</b>	<b>267</b>	<b>304</b>	<b>340</b>	<b>331</b>	<b>395</b>	<b>1,637</b>

Methacton School District Elementary School Projected Enrollments, 2021-22						
School	K	1	2	3	4	K-4th
Arrowhead ES	44	51	64	62	50	271
Audubon ES	67	86	80	87	85	404
Eagleville ES	58	67	55	78	71	329
Woodland ES	48	67	59	52	39	264
Worcester ES	43	55	59	72	71	300
<b>TOTAL</b>	<b>259</b>	<b>326</b>	<b>316</b>	<b>350</b>	<b>317</b>	<b>1,568</b>



Methacton School District Elementary School Projected Enrollments, 2022-23						
School	K	1	2	3	4	K-4th
Arrowhead ES	46	57	49	65	66	<b>283</b>
Audubon ES	70	86	85	79	87	<b>407</b>
Eagleville ES	60	72	64	59	78	<b>332</b>
Woodland ES	49	56	65	62	51	<b>283</b>
Worcester ES	45	60	54	62	74	<b>295</b>
<b>TOTAL</b>	<b>270</b>	<b>331</b>	<b>318</b>	<b>326</b>	<b>355</b>	<b>1,600</b>

Methacton School District Elementary School Projected Enrollments, 2025-26						
School	K	1	2	3	4	K-4th
Arrowhead ES	46	61	60	59	60	<b>286</b>
Audubon ES	71	91	91	88	84	<b>425</b>
Eagleville ES	60	75	72	76	73	<b>356</b>
Woodland ES	51	59	58	60	57	<b>285</b>
Worcester ES	45	64	64	65	64	<b>302</b>
<b>TOTAL</b>	<b>273</b>	<b>350</b>	<b>345</b>	<b>348</b>	<b>338</b>	<b>1,654</b>

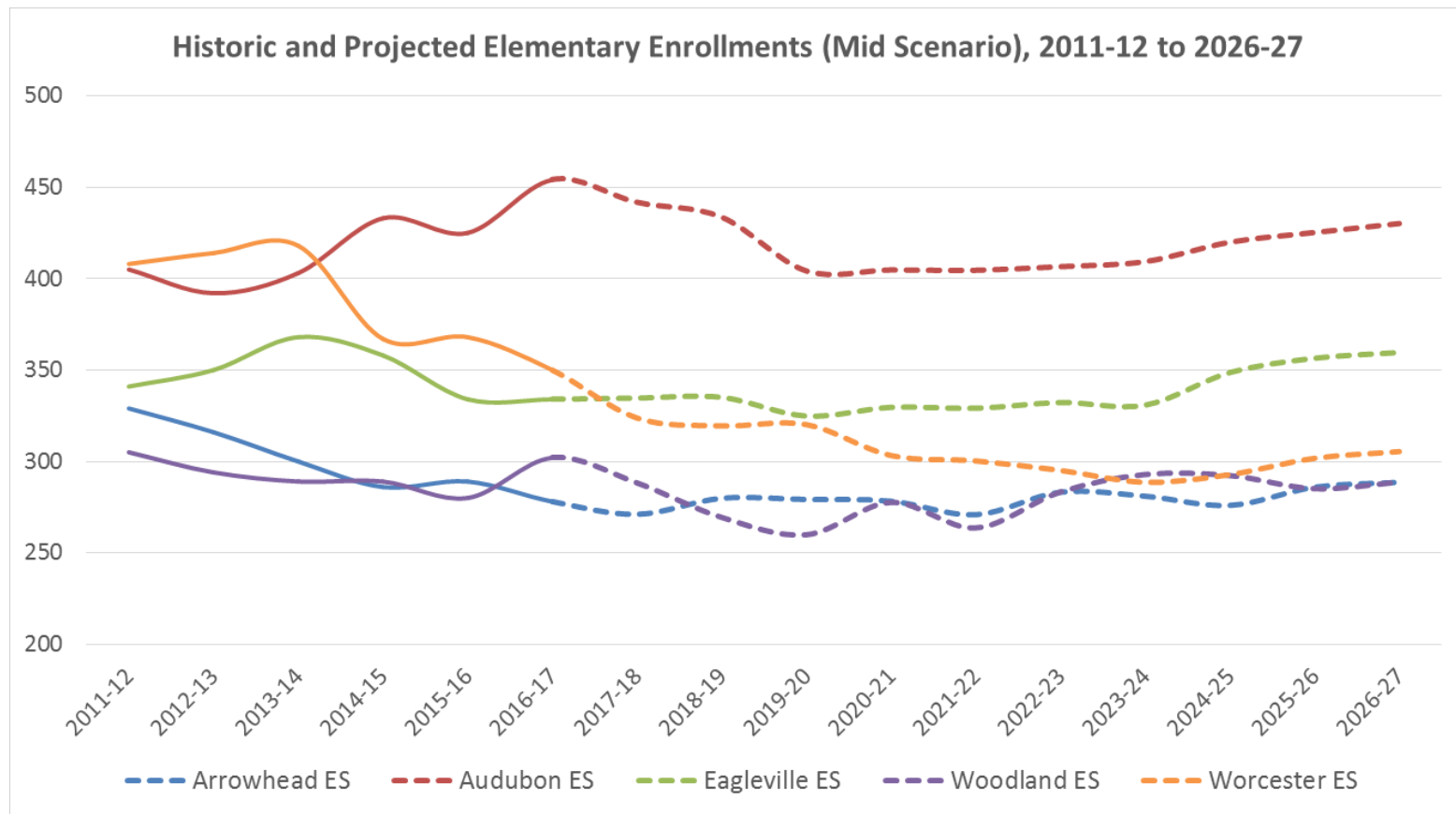
Methacton School District Elementary School Projected Enrollments, 2023-24						
School	K	1	2	3	4	K-4th
Arrowhead ES	47	60	56	50	68	<b>281</b>
Audubon ES	71	90	85	84	79	<b>409</b>
Eagleville ES	61	74	68	68	59	<b>331</b>
Woodland ES	51	58	55	69	60	<b>293</b>
Worcester ES	46	63	59	57	64	<b>288</b>
<b>TOTAL</b>	<b>276</b>	<b>345</b>	<b>323</b>	<b>328</b>	<b>330</b>	<b>1,602</b>

Methacton School District Elementary School Projected Enrollments, 2026-27						
School	K	1	2	3	4	K-4th
Arrowhead ES	46	60	59	60	62	<b>289</b>
Audubon ES	70	91	90	90	88	<b>430</b>
Eagleville ES	60	75	72	77	76	<b>360</b>
Woodland ES	50	60	58	62	59	<b>289</b>
Worcester ES	45	63	63	67	67	<b>305</b>
<b>TOTAL</b>	<b>272</b>	<b>349</b>	<b>342</b>	<b>356</b>	<b>353</b>	<b>1,672</b>

Methacton School District Elementary School Projected Enrollments, 2024-25						
School	K	1	2	3	4	K-4th
Arrowhead ES	47	61	58	56	53	<b>276</b>
Audubon ES	70	92	89	84	84	<b>420</b>
Eagleville ES	61	76	71	73	69	<b>349</b>
Woodland ES	50	59	57	58	68	<b>292</b>
Worcester ES	46	64	62	62	59	<b>293</b>
<b>TOTAL</b>	<b>274</b>	<b>353</b>	<b>337</b>	<b>333</b>	<b>332</b>	<b>1,629</b>

### Summary of Historic and Projected Individual Elementary School Enrollments: Medium Scenario

School	Historic						Projected									
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Arrowhead ES	329	316	300	286	289	278	271	280	279	278	271	283	281	276	286	289
Audubon ES	405	392	403	433	425	454	442	433	404	405	404	407	409	420	425	430
Eagleville ES	341	350	368	358	334	334	335	335	325	330	329	332	331	349	356	360
Woodland ES	305	294	289	289	280	302	288	269	260	278	264	283	293	292	285	289
Worcester ES	408	414	418	367	368	350	324	319	320	303	300	295	288	293	302	305
Grand Total	1,788	1,766	1,778	1,733	1,696	1,718	1,659	1,637	1,588	1,593	1,568	1,600	1,602	1,629	1,654	1,672



### Individual Elementary Projections: Low Scenario

Methacton School District Elementary School Projected Enrollments, 2016-17						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	56	64	56	59	278
Audubon ES	67	86	112	93	96	454
Eagleville ES	59	62	69	73	71	334
Woodland ES	61	48	68	67	58	302
Worcester ES	40	74	62	80	94	350
<b>TOTAL</b>	<b>270</b>	<b>326</b>	<b>375</b>	<b>369</b>	<b>378</b>	<b>1,718</b>

Methacton School District Elementary School Projected Enrollments, 2019-20						
School	K	1	2	3	4	K-4th
Arrowhead ES	48	57	43	57	63	268
Audubon ES	60	81	80	86	90	397
Eagleville ES	45	70	62	75	68	320
Woodland ES	49	46	35	75	52	257
Worcester ES	40	63	62	61	84	310
<b>TOTAL</b>	<b>242</b>	<b>317</b>	<b>283</b>	<b>354</b>	<b>356</b>	<b>1,552</b>

Methacton School District Elementary School Projected Enrollments, 2017-18						
School	K	1	2	3	4	K-4th
Arrowhead ES	34	55	56	67	60	272
Audubon ES	65	83	87	114	95	444
Eagleville ES	54	70	60	76	74	335
Woodland ES	31	69	48	74	67	289
Worcester ES	45	56	75	67	84	326
<b>TOTAL</b>	<b>229</b>	<b>333</b>	<b>327</b>	<b>397</b>	<b>380</b>	<b>1,666</b>

Methacton School District Elementary School Projected Enrollments, 2020-21						
School	K	1	2	3	4	K-4th
Arrowhead ES	37	60	58	45	62	261
Audubon ES	64	74	82	82	87	390
Eagleville ES	52	53	68	68	77	319
Woodland ES	55	55	46	38	75	269
Worcester ES	37	55	64	67	63	286
<b>TOTAL</b>	<b>245</b>	<b>298</b>	<b>318</b>	<b>300</b>	<b>364</b>	<b>1,525</b>

Methacton School District Elementary School Projected Enrollments, 2018-19						
School	K	1	2	3	4	K-4th
Arrowhead ES	45	43	55	58	72	274
Audubon ES	66	79	85	88	116	434
Eagleville ES	59	64	69	66	78	335
Woodland ES	41	35	69	52	74	271
Worcester ES	46	61	56	81	70	314
<b>TOTAL</b>	<b>257</b>	<b>282</b>	<b>334</b>	<b>346</b>	<b>409</b>	<b>1,628</b>

Methacton School District Elementary School Projected Enrollments, 2021-22						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	47	60	60	49	258
Audubon ES	66	80	75	83	83	388
Eagleville ES	57	62	52	75	70	315
Woodland ES	47	62	55	50	38	252
Worcester ES	41	51	56	69	70	287
<b>TOTAL</b>	<b>253</b>	<b>302</b>	<b>299</b>	<b>337</b>	<b>309</b>	<b>1,500</b>

Methacton School District Elementary School Projected Enrollments, 2022-23						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	54	47	63	64	271
Audubon ES	65	82	81	77	85	389
Eagleville ES	57	67	61	57	76	318
Woodland ES	47	53	62	60	50	272
Worcester ES	41	56	52	60	72	281
<b>TOTAL</b>	<b>252</b>	<b>312</b>	<b>303</b>	<b>317</b>	<b>347</b>	<b>1,531</b>

Methacton School District Elementary School Projected Enrollments, 2025-26						
School	K	1	2	3	4	K-4th
Arrowhead ES	42	54	54	56	61	268
Audubon ES	65	81	82	83	86	397
Eagleville ES	56	66	65	72	74	333
Woodland ES	47	53	53	58	58	269
Worcester ES	41	57	57	62	64	281
<b>TOTAL</b>	<b>251</b>	<b>311</b>	<b>312</b>	<b>331</b>	<b>342</b>	<b>1,547</b>

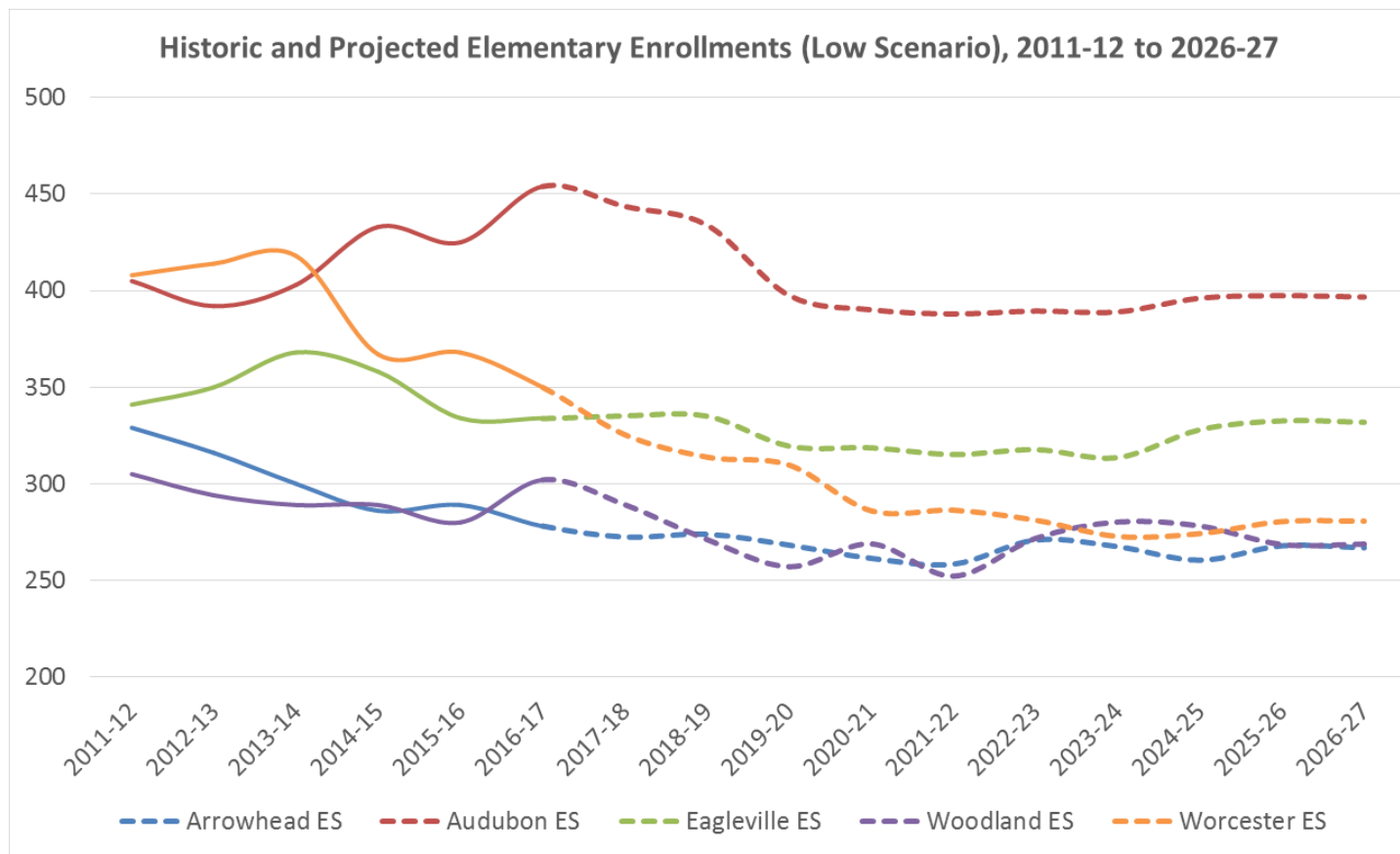
Methacton School District Elementary School Projected Enrollments, 2023-24						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	54	54	49	67	267
Audubon ES	65	81	83	82	78	389
Eagleville ES	56	67	65	67	58	314
Woodland ES	47	53	53	67	60	280
Worcester ES	41	56	57	56	63	273
<b>TOTAL</b>	<b>252</b>	<b>311</b>	<b>313</b>	<b>321</b>	<b>326</b>	<b>1,523</b>

Methacton School District Elementary School Projected Enrollments, 2026-27						
School	K	1	2	3	4	K-4th
Arrowhead ES	42	53	54	57	61	267
Audubon ES	65	81	82	83	85	397
Eagleville ES	56	66	65	71	74	332
Woodland ES	47	53	53	58	58	269
Worcester ES	41	57	57	62	64	281
<b>TOTAL</b>	<b>251</b>	<b>310</b>	<b>312</b>	<b>331</b>	<b>341</b>	<b>1,545</b>

Methacton School District Elementary School Projected Enrollments, 2024-25						
School	K	1	2	3	4	K-4th
Arrowhead ES	43	54	54	56	52	260
Audubon ES	65	81	82	84	84	396
Eagleville ES	56	66	65	72	68	328
Woodland ES	47	53	53	58	67	278
Worcester ES	41	57	57	62	58	274
<b>TOTAL</b>	<b>252</b>	<b>311</b>	<b>312</b>	<b>332</b>	<b>330</b>	<b>1,537</b>

### Summary of Historic and Projected Individual Elementary School Enrollments: Low Scenario

School	Historic						Projected									
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Arrowhead ES	329	316	300	286	289	278	272	274	268	261	258	271	267	260	268	267
Audubon ES	405	392	403	433	425	454	444	434	397	390	388	389	389	396	397	397
Eagleville ES	341	350	368	358	334	334	335	335	320	319	315	318	314	328	333	332
Woodland ES	305	294	289	289	280	302	289	271	257	269	252	272	280	278	269	269
Worcester ES	408	414	418	367	368	350	326	314	310	286	287	281	273	274	281	281
Grand Total	1,788	1,766	1,778	1,733	1,696	1,718	1,666	1,628	1,552	1,525	1,500	1,531	1,523	1,537	1,547	1,545



# Methacton Public Schools

Appendix 3

Elementary (K-4) Capacity Review

# Introduction

A thorough understanding of each elementary school operated by the Methacton School District is a key prerequisite for understanding how enrollment changes may affect the District's facilities needs.

Our review of Methacton's elementary school capacity provides an up-to-date inventory of how space is being used across all five elementary schools and reviews and makes current the previously conducted Thompson Capacity Study.

The information within provides a base to support decision-making regarding district facilities and conducting scenarios exploring various redistricting/realignment options.

# Process

- The Thompson Capacity Study formed the starting point to our evaluation and our understanding of available space at each elementary school
- Conversations with each building principal and review of floorplans provided an update on current use of space, including:
  - Grade-level instructional spaces
  - Use of spaces for reading/math, special education, Challenge, ELL, and related services
  - Unused/underutilized space



# Process

- Space inventory is aggregated based on prior reports and data from school principals to form the basis for alternative deployment models

## Current Room Usage

School	Rooms by Grade - 2016-17 from Admin					Total K-4 Classrooms
	K	1	2	3	4	
Arrowhead	1	3	3	3	3	13
Audubon	2	4	5	4	4	19
Eagleville	2	3	3	3	3	14
Woodland	2	3	3	3	3	14
Worcester	1	4	3	4	4	16

School	Art	Music	Comp.	Other * Classrooms	Total Classrooms
Arrowhead	1	1	1	13	29
Audubon	1	1	1	4	26
Eagleville	1	1	1	10	27
Woodland	1	1	1	11	28
Worcester	1	1	1	9	28

\* Includes reading/math support, special education, ESL, Challenge, and related services, as well as vacant classrooms

# Loading Levels and Utilization

- Applying loading factors and effective utilization buffer provides a consistent basis for evaluating different facilities options
- Per district admin, elementary class size policy is 25 students per classroom, however, the administrative target for K-2 class sizes is 22 students

# Loading Factors and Utilization

- Application of a *utilization factor* discounts the total theoretical capacity of school buildings by a built-in safety margin
- This utilization factor creates a buffer for natural fluctuations in the size of cohorts relative to class size guidelines that may require additional sections
  - Builds in a buffer for typical inefficiencies in use of classroom space, relative to classrooms operating at exactly 25 students
- Based on our experience with schools/districts of this size and the current utilization rate of Methacton's space deployment, we assume a 90% utilization factor or 10% buffer going forward

# Planning Capacity

- Planning Capacity based on deployment of four sections per grade across all schools, as proposed in Thompson report
  - Additionally, two flex rooms are included in each school capacity calculation to account for temporary bubbles as needed
- Most schools would be required to reorganize their use of other homeroom-eligible classrooms to operate at this capacity

# Planning Capacity

- Planning capacity calculated with and without two flex rooms in each school to meet year-to-year changes in needs, including bubble cohorts and other future needs
- Planning capacity includes 10% buffer from absolute maximum

School	Total Classrooms	Total Capacity					Homeroom-Eligible Spaces	K-4 Enroll. (2016-17)	Planning Capacity @ 4S/G*	Planning Capacity @ 4S/G with 2 Flex Rooms*
		K-4 Homeroom Spaces (4S/G)	Flex	Art	Music	Comp.				
Arrowhead	29†	18	2	1	1	1	6	278	450	495
Audubon	26‡	18	2	1	1	1	3	454	450	495
Eagleville	27	18	2	1	1	1	4	334	450	495
Woodland	28	18	2	1	1	1	5	302	450	495
Worcester	28	18	2	1	1	1	5	350	450	495
<b>Total</b>	<b>138</b>	<b>90</b>	<b>10</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>23</b>	<b>1,718</b>	<b>2,250</b>	<b>2,475</b>

\* Planning Capacity is based on a loading factor of 25 students for grades K-4. Schools are assumed to operate at an average of 90% efficiency with a 10% buffer built into this capacity.

† Classroom count includes four portable classrooms

‡ Classroom count includes two portable classrooms