



Schenectady City Schools Demographic Study

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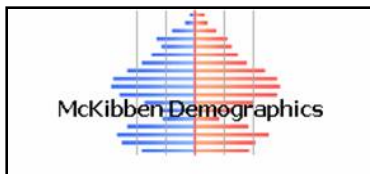




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Executive Summary

1. Schenectady's non-college fertility rates are below replacement levels over the duration of the forecasts (TFR=2.07 for the district vs. 2.1 for replacement level)
2. A large out-migration flow from the district occurs in the 25 to 34 year old age group.
3. A significant proportion of the locally born 18-to-24 year old population leaves the district, going to college or moving to other urbanized areas.
4. The primary factor causing the district's enrollment to stabilize over the next ten years is the presence of a large preschool age population in the district entering Kindergarten and 1st grade in conjunction with smaller graduating 12th classes.
5. Changes in year-to-year enrollment largely will be due to stable sized cohorts entering and moving through different grade levels while smaller cohorts will tend to be in the terminal grades.
6. As the current young families begin to age into their 40s and smaller grade cohorts enter into the school system, total enrollment will begin to decline. The district's elementary enrollment will see a slow decline after 2017.
7. As the district continues to have limited new home construction, the rate and magnitude of existing home sales along with the occupancy rate of the rental properties will be the dominant factor affecting the amount of population and enrollment change.
8. Total enrollment is forecasted to decline by 82 students, or -0.8%, between 2012-13 and 2017-18. Total enrollment will increase 32 students, or 0.3%, from 2017-18 to 2022-23.



INTRODUCTION

By demographic principle, distinctions are made between projections and forecasts. A projection extrapolates the past (and present) into the future with little or no attempt to take into account any factors that may impact the extrapolation (e.g., changes in fertility rates, housing patterns or migration patterns) while a forecast results when a projection is modified by reasoning to take into account the aforementioned factors.

To maximize the use of this study as a planning tool, the ultimate goal is not simply to project the past into the future, but rather to assess various factors' impact on the future. The future population and enrollment growth of each school district (and its individual attendance areas) is influenced by a variety of factors. Not all factors will influence the entire school district at the same level. Some may affect different areas at dissimilar magnitudes and rates causing changes at varying points of time within the same district. Forecaster's judgment based on a thorough and intimate study of the district has been used to modify the demographic trends and factors to more accurately predict likely changes. Therefore, strictly speaking, this study is a forecast, not a projection; and the amount of modification of the demographic trends varies between different areas of the district as well as within the timeframe of the forecast.

To calculate population forecasts of any type, particularly for smaller populations such as a school district or its attendance areas, realistic suppositions must be made as to what the future will bring in terms of the residents' general demographic behavior at certain points of the life course. The demographic history of the school district and its interplay with the social and economic history of the area is the starting point and basis of most of these suppositions particularly on key factors such as the age/sex distribution, local vital rates, housing characteristics and special populations of the area. The unique nature of each district's and sub-area's demographic composition and rate of change over time must be assessed and understood to be factors throughout the life of the forecast series. Moreover, no two populations, particularly at the school district and forecast zone area level, have exactly the same characteristics.

The manifest purpose of these forecasts is to ascertain the demographic factors that will ultimately influence the enrollment levels in the district's schools. There are of course, other non-demographic factors that

affect enrollment levels over time. These factors include, but are not limited to transfer policies within the district; student transfers to and from neighboring districts; placement of "special programs" within school facilities that may serve students from outside the forecast zone area; state or federal mandates that dictate the movement of students from one facility to another; the development of charter schools in the district; the prevalence of home schooling in the area; and the dynamics of local private schools.

Unless the district specifically requests the calculation of forecasts that reflect the effects of changes in these non-demographic factors, their influences are held constant for the life of the forecasts. Again, the main function of these forecasts is to determine what impact demographic changes will have on future enrollment. It is quite possible to calculate special "scenario" forecasts to measure the impact of school policy modifications as well as planned economic and financial changes. However in this case the results of these population and enrollment forecasts are meant to represent the most likely scenario for changes over the next 10 years in the district and its forecast zone areas.

The first part of the report will examine the assumptions made in calculating the population forecasts for the Schenectady City School District and its forecast zone areas. Since the results of the population forecasts drive the subsequent enrollment forecasts, the assumptions listed in this section are paramount to understanding the area's demographic dynamics. The remainder of the report is an explanation and analysis of the district's population forecasts and how they will shape the district's grade level enrollment forecasts.

DATA

The data used for the forecasts come from a variety of sources. Enrollments by grade and forecast zone center were provided by the Schenectady City School District for school years 2010-2011 to 2012-13. Birth and death data were obtained from the New York State Department of Health for the years 2000 through 2012. The net migration values were calculated using Internal Revenue Service migration reports for the years 2000 through 2010. The data used for the calculation of migration models came from the United States Bureau of the Census, 2005 to 2010, and the models were designed using demographic and economic factors. The base age-sex population counts used are from the results of the 2010 Census.



Recently the Census Bureau began releasing annual estimates of demographic variables at the block group and tract level from the American Community Survey (ACS). There has been wide scale reporting of these results in the national, state and local media. However, due to the methodological problems the Census Bureau is experiencing with their estimates derived from ACS data, particularly in areas with a population of less than 60,000, the results of the ACS are not used in these forecasts. For example, given the sampling framework used by the Census Bureau, each year only 800 of the over 26,000 current households in the district would have been included. For comparison 4,000 households in the district were included in the sample for the long form questionnaire in the 2000 Census. As a result of this small sample size, the ACS survey result from the last 5 years must be aggregated to produce the tract and block group estimates.

To develop the population forecast models, past migration patterns, current age specific fertility patterns, the magnitude and dynamics of the gross migration, the age specific mortality trends, the distribution of the population by age and sex, the rate and type of existing housing unit sales, housing tenure and amount of future housing unit construction are considered to be primary variables. In addition, the change in household size relative to the age structure of the forecast area was addressed. While there was a drop in the average household size in Schenectady as well as most other areas of the state during the previous 20 years, the rate of this decline has been forecasted to slow over the next ten years.

ASSUMPTIONS

For these forecasts, the mortality probabilities are held constant at the levels calculated for the year 2010. While the number of deaths in an area are impacted by and will change given the proportion of the local population over age 60, in the absence of an extraordinary event such as a natural disaster or a breakthrough in the treatment of heart disease, death rates rarely move rapidly in any direction, particularly at the school district or forecast zone area level. Thus, significant changes are not foreseen in the district's mortality rates between now and the year 2022. Any increases forecasted in the number of deaths will be due primarily to the general aging of the district's population and specifically to the increase in the number of residents aged 65 and older.

Similarly, fertility rates are assumed to stay

fairly constant for the life of the forecasts. Like mortality rates, age specific fertility rates rarely change quickly or dramatically, particularly in small areas. Even with the recently reported rise and subsequent decline in the fertility rates of the United States, overall fertility rates have stayed within a 10% range (Total Fertility Rates of 1.8 to 2.0) for most of the last 40 years. In fact, the vast majority of year to year change in an area's number of births is due to changes in the number of women in child bearing ages (particularly ages 20-29) rather than any fluctuation in an area's fertility rate.

The total fertility rate (TFR), the average number of births a woman will have in her lifetime, is estimated to be 2.07 for the non-college population of the total district for the ten years of the population forecasts. A TFR of 2.1 births per woman is considered to be the theoretical "replacement level" of fertility necessary for a population to remain constant in the absence of immigration. Therefore, over the course of the forecast period, fertility will not be sufficient, in the absence of migration, to maintain the current level of population within the Schenectady City School District.

A close examination of data for the Schenectady City School District has shown the age specific pattern of net migration will be nearly constant throughout the life of the forecasts. While the number of in and out migrants has changed in past years for the Schenectady City School District (and will change again over the next 10 years), the basic age pattern of the migrants has stayed nearly the same over the last 30 years. Based on the analysis of data it is safe to assume this age specific migration trend will remain unchanged into the future. This pattern of migration shows a large part of the out-migration occurring in the 18-to-24 year old age group (those that grew up in the district) as young adults leave the area to go to college or move to other urbanized areas. A second group of out-migrants is those householders aged 25-34, moving to other parts of the metropolitan area. Most of the in-migration occurs in the 20-24 age groups (the bulk of which is from areas within 75 miles of Schenectady) primarily consisting of younger adults with a secondary in flow of people age 65 and over.

As the city of Schenectady is not currently contemplating any major expansions or contractions, the forecasts also assume the current economic, political, transportation and public works infrastructure (with a few notable exceptions), social, and environmental factors of the Schenectady City School District and its forecast zone areas will remain the same through the year 2022.



Below is a list of assumptions and issues that are specific to City of Schenectady. These issues have been used to modify the population forecast models to more accurately predict the impact of these factors on each forecast zone area's population change and composition. Specifically, the forecasts for the Schenectady City School District assume that throughout the study period:

- a. There will be no short term economic recovery in the next 18 months and the national, state or regional economy does not go into deep recession at anytime during the 10 years of the forecasts; (Deep recession is defined as four consecutive quarters where the GDP contracts greater than 1% per quarter)
- b. Interest rates have reached an historic low and will not fluctuate more than one percentage point in the short term; the interest rate for a 30 year fixed home mortgage stays below 5.5%;
- c. The rate of mortgage approval stays at 1999-2002 levels and lenders do not return to "sub-prime" mortgage practices;
- d. There are no additional restrictions placed on home mortgage lenders or additional bankruptcies of major credit providers;
- e. The rate of housing foreclosures does not exceed 125% of the 2005-2008 average of the Schenectady School District for any year in the forecasts;
- f. All currently planned, platted, and approved housing units are built and completed by 2020. All housing units constructed are occupied by 2022;
- g. The unemployment rates for the Schenectady Metropolitan Area will remain below 9.0% for the 10 years of the forecasts;
- h. The rate of students transferring into and out of the Schenectady City School District will remain at the 2008-09 to 2012-13 average;
- i. The inflation rate for gasoline will stay below 5% per year for the 10 years of the forecasts;
- j. There will be no building moratorium within the district;
- k. Businesses within the district and the Greater Schenectady Metropolitan Area will remain viable;
- l. There will no major layoffs at General Electric or MVP Heath Care;
- m. The number of existing home sales in the district that are a result of "distress sales" (homes worth less than the current mortgage value) will not

exceed 20% of total homes sales in the district for any given year;

- n. Housing turnover rates (sale of existing homes in the district) will remain at their current levels. The majority of existing home sales are made by home owners over the age of 55;
- o. The Schenectady City School District will not allow out of district students to transfer in to the district at any time over the next 10 years;
- p. Private school and home school attendance rates will remain constant;
- q. The recent decline existing home sales has ended and sales rates have stabilized;
- r. The rate of foreclosures for commercial property remains at the 2004-2008 average for the Schenectady Metropolitan area.

If a major employer in the district or in the Greater Schenectady Metropolitan Area closes, reduces or expands its operations, the population forecasts would need to be adjusted to reflect the changes brought about by the change in economic and employment conditions. The same holds true for any type of natural disaster, major change in the local infrastructure (e.g., highway construction, water and sewer expansion, changes in zoning regulations etc.), a further economic downturn, any additional weakness in the housing market or any instance or situation that causes rapid and dramatic population changes that could not be foreseen at the time the forecasts were calculated.

The sizeable proportion of high school graduates from the Schenectady City School District that attend college or move to urban areas outside of the district for employment is a significant demographic factor. Their departure is a major reason for the high out-migration in the 18-to-24 age group and was taken into account when calculating these forecasts. The out-migration of graduating high school seniors is expected to continue over the period of the forecasts and the rate of this migration has been forecasted to remain the same over the life of the forecast series.

Finally, all demographic trends (i.e., births, deaths, and migration) are assumed to be linear in nature and annualized over the forecast period. For example, if 1,000 births are forecasted for a 5-year period, an equal number, or proportion of the births are assumed to occur every year, 200 per year. Actual year-to-year variations do and will occur, but overall year to year trends are expected to be constant.



METHODOLOGY

The population forecasts presented in this report are the result of using the Cohort-Component Method of population forecasting (Siegel, and Swanson, 2004: 561-601) (Smith et. al. 2004). As stated in the INTRODUCTION, the difference between a projection and a forecast is in the use of explicit judgment based upon the unique features of the area under study. Strictly speaking, a cohort-component projection refers to the future population that would result if a mathematical extrapolation of historical trends were applied to the components of change (i.e., births, deaths, and migration). Conversely, a cohort-component forecast refers to the future population that is expected because of a studied and purposeful selection of the components of change believed to be critical factors of influence in each specific area.

Five sets of data are required to generate population and enrollment forecasts. These five data sets are:

- a. a base-year population (here, the 2010 Census population for the Schenectady City School District and their forecast zone areas);
- b. a set of age-specific fertility rates for each forecast zone area to be used over the forecast period;
- c. a set of age-specific survival (mortality) rates for each forecast zone area;
- d. a set of age-specific migration rates for each forecast zone area; and
- e. the historical enrollment figures by grade.

The most significant part of producing enrollment forecasts is the generation of the population forecasts in which the school age population (and enrollment) is embedded. In turn, the most difficult aspect of generating the population forecasts is found in deriving the rates of change in fertility, mortality, and migration as they relate to the age structure of the district and the forecast zone areas. From the standpoint of demographic analysis, the Schenectady City School District and its four elementary forecast zone center districts are classified as "small area" populations (as compared to the population of the state of New York or to that of the United States). Small area population forecasts are more difficult to calculate because local variations in fertility, mortality, and migration may be more irregular than those at the state or national scale. Especially challenging to project are migration rates for

local areas, because changes in the area's socioeconomic characteristics can quickly change from past and current patterns. (Peters and Larkin, 2002)

The population forecasts for Schenectady City School District and its forecast zone areas were calculated using a cohort-component method with the populations divided into male and female groups by five-year age cohorts that range from 0-to-4 years of age to 85 years of age and older (85+). Age- and sex-specific fertility, mortality, and migration models were constructed to specifically reflect the unique demographic characteristics of each of the Schenectady City School District forecast zone areas as well as the total school district.

The enrollment forecasts were calculated using a modified average survivorship method. Average survivor rates (i.e., the proportion of students who progress from one grade level to the next given the average amount of net migration for that grade level) over the previous five years of year-to-year enrollment data were calculated for grades two through twelve. This procedure is used to identify specific grades where there are large numbers of students changing facilities for non-demographic factors, such as private school transfers or enrollment in special programs.

The survivorship rates were modified or adjusted to reflect the average rate of forecasted in and out migration of 5-to-9, 10-to-14 and 15-to-17 year olds cohorts to each of the forecast zone centers in the Schenectady City School District for the period 2005 to 2010. These survivorship rates then were adjusted to reflect the forecasted changes in age-specific migration the district should experience over the next five years. These modified survivorship rates were used to project the enrollment of grades 2 through 12 for the period 2010 to 2015. The survivorship rates were adjusted again for the period 2015 to 2020 to reflect the predicted changes in the amount of age-specific migration in the district for the period.

The forecasted enrollments for kindergarten and first grade are derived from the 5-to-9 year old population of the age-sex population forecast at the elementary forecast zone center district level. This procedure allows the changes in the incoming grade sizes to be factors of forecasted population change and not an extrapolation of previous class sizes. Given the potentially large amount of variation in Kindergarten enrollment due to parental choice, changes in the state's minimum age requirement, and differing district policies on allowing children to start Kindergarten early, first grade enrollment is deemed to be a more accurate



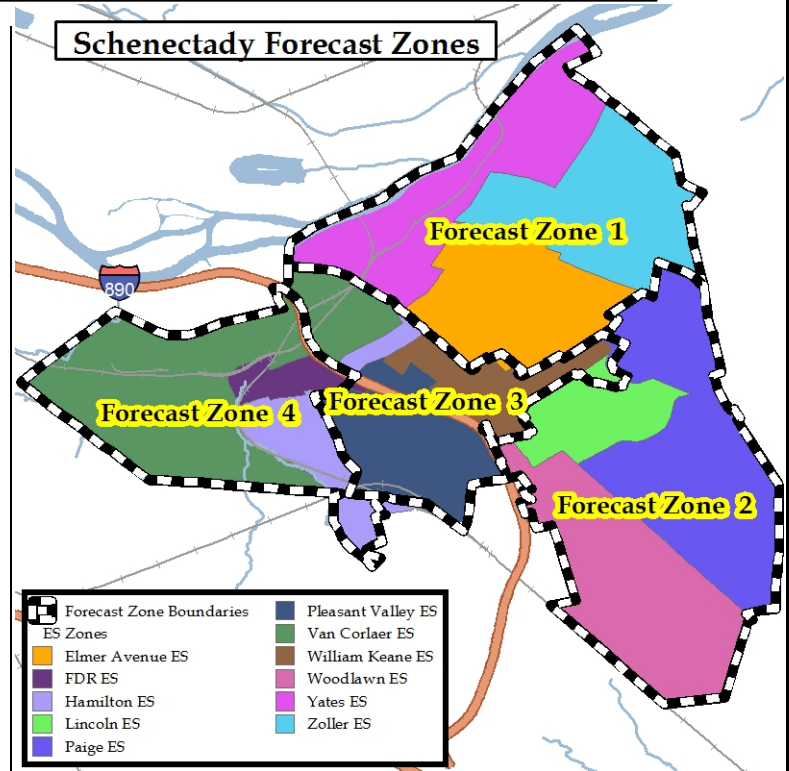
and reliable starting point for the forecasts. (McKibben, 1996) The level of the accuracy for both the population and enrollment forecasts at the school district level is estimated to be +2.0% for the life of the forecasts.

FORECAST ZONE AREAS

Before the demographic study was performed, Schenectady schools' administration, Educational Legacy Planning Group, and Cropper GIS met to discuss the best approach to providing forecasts for the district. It was determined that the district would be analyzed in 4 regions to assess population dynamics and differences within these areas. Most of the forecast zones were created through grouping together current school attendance zones, although there were a few exceptions. Van Corlaer and Hamilton both have parts of the attendance zone that are separate from their main zone (satellite areas), and these satellite areas are divided by a major road (Interstate 890). The satellites were not analyzed together because they are not located in the immediate proximity of the primary zone. The forecast forecast zones were defined as:

- Forecast Zone 1: A combination of Zoller, Yates, and Elmer Elementary school zones
- Forecast Zone 2: A combination of Paige, Woodlawn, and Lincoln Elementary school zones
- Forecast Zone 3: A combination of Keane, Pleasant Valley, Van Corlaer and Hamilton parts east of I-890
- Forecast Zone 4: A combination of Van Corlaer (west of 890) / Hamilton (west of 890), and FDR Elementary school zones.

The map inset to the right depicts the forecast forecast zones. Background colors are the current elementary zones, and the dashed outlines reflect the forecast zones which are the basis for the population/enrollment forecasts. There is also a full page map included in the appendix of the report.



RESULTS AND ANALYSIS OF THE POPULATION FORECASTS

From 2010 to 2020, the populations of the Schenectady City School District, Schenectady County; the state of New York, and the United States are forecasted to change as follows; the Schenectady City School District will increase by 3.9%, Schenectady County will grow by 4.0% New York will increase by 2.6%; and the United States increase by 8.4% (see Table 1).

Table 1: Forecasted Population Change, 2010 to 2020

	2010	2015	2020	10-Year Change
U.S. (in millions)	308	322	334	8.4%
New York	19,465,102	19,740,000	19,980,000	2.6%
Schenectady County	154,727	158,100	160,900	4.0%
Schedectady	66,550	68,010	69,130	3.9%

A number of general demographic factors will influence the growth rate of the Schenectady City School District during this period, and include the following:

- a. The Baby Boom generation will have passed through prime childbearing ages by 2003, thereby reducing the overall proportion of the population at risk of having children;



- b. The remaining population in childbearing ages (women ages 15-45) will have fewer children;
- c. The local non-college 18-to-24 year old population, will continue to leave the area to go to college or to other urban areas, with the magnitude of this out-migration flow staying constant; and,
- d. The district will experience very little increase in housing stock. The vast majority of in-migrating families will move into existing housing units.

The Schenectady City School District will continue to experience in-migration (the movement of single person households and young families into the district) over the next 10 years. However, the size and age structure of the pool of potential in-migrants will change and the effects of the in-migration of families on population growth will be greatly offset by the continued steady growing out-migration of young adults as graduating seniors continue to leave the district and a continued out-migration of households to nearby suburban areas.

From 2010 to 2015, the district's population is forecasted to increase by 1,460 or 2.2%, to 68,010. From 2015 to 2020, the population is forecasted to continue to increase by an additional 1,120 persons or 1.6%. During the ten years of the forecasts, three of the four forecast zone areas are forecasted to increase in population with the growth rates ranging from 6.7% in the Forecast zone 4 to 4.7% in the Forecast zone 1 area (See Table 2 for population forecast results of each elementary forecast zone area).

While all Forecast zones will see some amount of gross in-migration, (primarily in the 0-to-9 and 30-to-44 age groups,) all areas also will continue to see gross out-migration. This out-migration primarily will be young adults, 18-to-24 years old, as graduating seniors continue to leave the district to go to college or seek employment in larger urbanized areas. There will also be an important secondary out migration flow, which is householders, primarily ages 25-34, moving to suburban areas around the city.

Table 2: Forecasted Elementary Area Population Change, 2010 to 2020

	2010	2015	2010-2015 Change	2020	2015-2020 Change	2010-2020 Change
Forecast Zone 1	22,473	23,070	2.6%	23,520	2.0%	4.7%
Forecast Zone 2	17,161	17,120	-0.2%	17,060	-0.4%	-0.6%
Forecast Zone 3	15,796	16,320	3.2%	16,680	2.2%	5.6%
Forecast Zone 4	11,120	11,500	3.3%	11,870	3.2%	6.7%
District Total	66,550	68,010	2.1%	69,130	1.6%	3.9%

As stated in the ASSUMPTIONS and emphasized above, the impact of the high proportion of high school graduates that leave the district to continue on to college or to seek employment in large urban areas is significant to the size and structure of the future population of the district. Up to 65% of all births occur to women between the ages of 20 and 29. (This is still true even with the recent rise in fertility rates for women age 30 and over) As the graduating seniors continue to leave the district, the number of women at risk of childbirth during the next decade declines. Consequently, even though the district's fertility rate is just 0.3 points below the replacement level, the smaller number of women in the district in prime child bearing ages will keep the number of births low despite the district having an increasing population (see the population pyramids in the appendix of this report for a graphic representation of the age distributions of the district and all of the forecast zone areas). This will require the district to become dependent on the in-migration of children just to maintain current grade cohort sizes.

Another factor that needs to be considered is the birth dynamics of the last twenty years. An examination of national birth trends shows there was a large "Baby Boomlet" born between 1980 and 1995. This Boomlet was nearly as large as the Baby Boom of the 1950s and 1960s. However, unlike the Baby Boom, the Boomlet was a regional and not a national phenomenon (McKibben, et. al. 1999). Because New York did not experience a Baby Boomlet, most of the expected enrollment growth will have to result from in-migration and not from an increase in the grade cohort size.

Table 3: Household Characteristics by Elementary Districts, 2010 Census

	HH w/ Pop Under 18	% HH w/ Pop Under 18	Total Households	Household Population	Persons Per Household
Forecast Zone 1	2520	27.4%	9196	20447	2.22
Forecast Zone 2	2057	28.1%	7320	16855	2.30
Forecast Zone 3	2162	37.7%	5730	14613	2.55
Forecast Zone 4	1538	33.9%	4541	11087	2.44
District Total	8277	30.9%	26788	63001	2.35

Clearly, the dominant factor that has affected the population growth rates of the Schenectady City School District over the last 20 years has been the number and pace of existing homes sales. However, the dynamics of this in migration flow are more complex than many realize. There is a common misconception that any changes in the economy, housing market or transportation system will have an immediate impact on



the size of an area's population and the total impact of that change will be experienced immediately.

This "delayed demographic reaction" is a key issue when attempting to ascertain the impact and duration of a trend. While it is true that the households moving into these new housing units bring many school age (particularly elementary) children into the district, they also bring many preschool age children as well. Consequently, the full impact of the growth in existing home sales is not seen immediately in elementary enrollment as it takes three to seven years for all of the children of a given household to age into the schools. This is a key issue since the number of births in the Schenectady City School District is insufficient to maintain current enrollment levels over the next 10 years. The number of non-college women living in the district ages 20-29 (prime child bearing ages) is too small to produce birth cohorts that are the same size as those currently in the elementary grades.

Of additional concern are the issues of the district's aging population and the growing number of "empty nest" households, particularly in the Forecast zone 2 area. For example, after the last school age child leaves high school, the household becomes an "empty nest" and most likely will not send any more children to the school system. In most cases, it takes 20 to 30 years before all original (or first time) occupants of a housing area move out and are replaced by new, young families with children. This principle also applies to children leaving elementary school and moving on to middle school. Households can still have school age children in the district's school, but also in effect be "empty nest" of elementary age children.

Table 4: Householder Characteristics by Elementary Districts, 2010 Census

	Percentage of Householders aged 35-54	Percentage of Householders aged 65+	Percentage of Householders Who Own Homes
Forecast Zone 1	37.2%	17.0%	36.5%
Forecast Zone 2	36.9%	25.1%	57.5%
Forecast Zone 3	42.7%	17.8%	35.9%
Forecast Zone 4	39.0%	19.2%	47.4%
District Total	38.6%	19.8%	44.0%

Note as well the steady increase in the median age of the population in the Schenectady City School District and all of its forecast zone areas (see population forecasts in the appendix for the median age for each forecast year). The district as a whole will see the

median age of its population increase from 33.5 in 2010 to 34.6 in 2020. (A 1.1 year increase over the course of a decade is a large increase for a district of this size with a college located within its boundaries) This rise in median age is due to three factors, 18-24 year-olds leaving the district, a high proportion of their parents staying in their existing households and the decline in the number of births. (See Table 4)

As a result of the "empty nest" syndrome, the forecast zone areas in the Schenectady City School District will see a steady rise in the median age of their populations, even while the district as a whole continues to attract some new young families. It should be noted that many of these "childless" households are single persons and/or elderly (See Table 5). Consequently, even if many of these housing units "turnover" and attract households of similar characteristics, they will add little to the number of school age children in the district. Furthermore, several of the empty nest households will "down size" to smaller households within the district. In these cases new housing units may be developed in an area, yet there is no corresponding increase in school enrollment.

Table 5: Single Person Households and Single Person Households over age 65 by Elementary Districts, 2010 Census

	Percentage of Single Person Households	Percentage of Households single person and 65+
Forecast Zone 1	39.8%	10.0%
Forecast Zone 2	34.8%	14.3%
Forecast Zone 3	34.4%	11.0%
Forecast Zone 4	31.9%	10.8%
District Total	36.0%	11.5%

RESULTS AND ANALYSIS OF ENROLLMENT FORECASTS

Elementary Enrollment

The total elementary enrollment of the district is forecasted to grow from 6,087 in 2012-13 to 6,180 in 2017-18, an increase of 93 students or 1.5%. From 2017-18 to 2022-23, elementary enrollment is expected to drop by 116 students to 6,064. This will represent a -1.9% decrease over the five-year period. Two of the four



forecast areas will experience a net decline in elementary enrollment over the next ten years (see Table 6).

The reason for this stabilization in elementary enrollment pattern over the next five years is due to the effects of two factors. These factors are the reduction in the number of young families out-migrating to the outer suburban areas and a "bubble" population in the preschool ages. Both of these factors will contribute in part to the stabilization in elementary enrollment until at least 2017-18.

**Table 6: Total Elementary Enrollment by Forecast zone:
2012, 2017, 2022**

	<u>2012</u>	<u>2017</u>	<u>2012-2017</u> <u>Change</u>	<u>2022</u>	<u>2017-2022</u> <u>Change</u>	<u>2012-2022</u> <u>Change</u>
Forecast Zone 1	1,695	1,843	8.7%	1,847	0.2%	9.0%
Forecast Zone 2	1,534	1,423	-7.2%	1,364	-4.1%	-11.1%
Forecast Zone 3	1,658	1,636	-1.3%	1,608	-1.7%	-3.0%
Forecast Zone 4	1,200	1,278	6.5%	1,245	-2.6%	3.8%
District Total	6,087	6,180	1.5%	6,064	-1.9%	-0.4%

The first factor is related to the slowdown in the housing construction industry. While it is true that the Greater Schenectady housing market has performed somewhat better than the national trends the last three years, it is not immune to the effects of a tightening of the mortgage market and increasingly restrictive lending practices. The suburban areas surrounding Schenectady, like most areas of the county, saw the number of new home sales jump significantly between 2001 and 2008 as the expansion of sub-prime mortgage practices allowed many people to purchase new homes. Since there was a high availability of cheap and easy to acquire home mortgages, the out-migration flow of young families from the district was accelerated, particularly out of the rental housing units.

After 2008, during the subsequent collapse of this "lending boom", the district's out-migration rate of young families has dropped back below the pre-2000 levels. Consequently, a higher proportion of the children born in the school district are still living in the district five years later. Given the turmoil the collapse of the subprime market has caused, it can be assumed that there will not be a return to these lending practices anytime in the near future.

The second factor is that there is currently a significantly larger bubble of population in the district's pre-school population. An excellent example of this impact of the trend is shown in the single year of age counts of the district from the 2010 Census (See Table 7).

The population at age six is closely related to the combined 1st grade enrollment of the public and private students in the district (as it is for all ages and elementary grades). However, note the relatively higher number of residents from under one to age five, particularly when compared to the cohort sizes of the age 6 through 10 population. This trend is an indication of the proportion of households in each area that will produce elementary age students over the next five years. Even without a substantial in-migration of young families with children under the age of five, this "pre-school cohort" will result in larger age cohorts moving into the elementary grades over the next five years.

**Table 7: Age Under One to Age Ten Population
Counts, by Year of Age, by Forecast zone Area: 2010
Census**

	Age in Years										
	Under 1	1	2	3	4	5	6	7	8	9	10
Forecast Zone 1	376	282	317	290	322	281	265	232	221	288	253
Forecast Zone 2	217	227	227	224	190	219	199	214	202	202	223
Forecast Zone 3	268	267	271	266	273	245	279	237	220	231	241
Forecast Zone 4	201	187	194	204	181	179	184	179	153	156	148
District Total	1062	963	1009	984	966	924	927	862	796	876	865

The demographic factors that will become the most influential over the next ten years are the growth rate of empty nest household in the forecast zone areas, the number of sales of existing homes, the rate and magnitude of existing housing unit "turn over," the relative size of the elementary and pre-school age cohorts and each area's fertility rate. Each of these factors will vary in the scale of their influence and timing of impact on the enrollment trends of any particular area.

Forecast zone areas that are currently experiencing a rise in empty nest households tend to be the same areas that are not the recipients of any large sustained new housing construction. Thus, areas like Forecast zone 2 will see net declines in elementary enrollment. While these areas will continue to see net in migration of families, it will not be at a sufficient rate to maintain current attendance levels.

As more elementary forecast zone areas become completely dependent upon existing home sales to attract new families, the overall elementary enrollment (after 2018) of the district will decline. Areas such as Forecast zone 1 will see their elementary enrollments peak by the end of the decade and then slowly decline. Thus, the best primary short- and long-term indicator for enrollment change in most of the forecast zone area



will be the year-to-year rate of housing turnover. If the Total Fertility Rates of all the forecast zone areas remain at their current low levels (and they are forecasted to do so) they will ensure that enrollments will continue to see slowing growth (or outright declines) even if the level of net out-migration is greatly reduced.

Additionally, areas that are characterized by the relatively high percentage of rental housing units and large concentrations of young adults tend to have more stable population distribution and enrollment trends. In these cases, young adults or the newly married move to these areas and establish households. Because the population is in prime child bearing ages, these areas also have both a high absolute number of births and a higher than the district average birth rate. Later, as family size increases, these families often move to single family homes—usually moderately priced single family homes in other parts of the school district.

Consequently, the Forecast zone 3 and other sub-forecast zone areas with similar characteristics, serve as feeder areas for outlying areas in the district. This internal migration flow is far more important in determining future enrollment trends than the construction of new single family homes as an average of over 30 existing homes are sold for every new home built. Indeed, a close examination of the year to year trends in the family formation areas will serve as an excellent bellwether for short and medium term changes in areas that depend on in-migration for enrollment growth.

Middle School Enrollment

The total middle school enrollment for the district is forecasted to grow from 1,517 in 2012-13 to 1,521 in 2017-18, a 4 student or 0.3% increase. Between 2017-18 and 2022-23 middle school enrollment is forecasted to grow to 1,593, an increase of 72 students or 4.7%. The difference in the size of the individual grade cohorts and the aging of students through the school system are the primary reasons why the middle school enrollment trends are more moderate than those of the elementary grades.

Table 8: Total Middle School Enrollment by Forecast zone: 2012, 2017, 2022

	2012	2017	2012-2017 Change	2022	2017-2022 Change	2012-2022 Change
Forecast Zone 1	469	469	0.0%	492	4.9%	4.9%
Forecast Zone 2	342	323	-5.6%	328	1.5%	-4.1%
Forecast Zone 3	431	421	-2.3%	420	-0.2%	-2.6%
Forecast Zone 4	275	308	12.0%	353	14.6%	28.4%
District Total	1,517	1,521	0.3%	1,593	4.7%	5.0%

There are currently large grade cohorts enrolled in the elementary school grades compared to those in the middle schools' grade cohorts. As these elementary school cohorts "age" into middle school and smaller middle school cohorts age into high school, they increase the overall middle school enrollment level. Note how the size of the incoming 7th grade class is usually larger than the previous year's 8th grade class, which has now moved on to high school. As long as this "bubble" in the enrollment pattern exists, there will be to some degree, an increase in middle school enrollment at least until the 2015-2016 school year.

By 2020 the bulk of the impact of the current bubble of population should be seen in the middle school grades. It is also at this point that the district should start seeing the effects of the aging of the current households on the overall demographic trends of the district. Without substantial in migration of young families, it will become increasingly difficult for the district to maintain this level of middle school enrollment.

After the 2022-2023 school year, the middle school cohort trend will reverse. There will then be smaller grade cohorts entering the middle school grades compared to those leaving. The result is a modest level of decreased middle school enrollment. This trend will most likely continue beyond the end of the forecast series ending sometime after 2025.

High School Enrollment

Enrollment at the high school level is forecasted to decline from 2,929 in 2012-13 to 2,750 in 2017-18, a decrease of 179 students or -6.1%. After 2018-19, the high school enrollment will begin to grow. The net result for the five-year period 2017-18 to 2021-22 will be an increase of 76 students to 2,826 or 2.8%.

The aforementioned effects of changes in cohort size on middle school enrollment are also affecting the



growth patterns of the high school population. The difference here is that the impact begins five years later. After 2018, the larger grade cohorts that will affect the middle school enrollment begin to enter high school. Until that bubble of students (now in the elementary grades) passes through the high school grades, there will be continued decline at the district's high school.

It is important to note that the vast majority of this future high school enrollment growth will be a result of students aging into those grades. Specifically, students who already live in the district (and not immigration of students ages 14 to 18) will be the primary cause of the forecasted increase in high school enrollment. Additionally, as was mentioned earlier, these forecasts represent the demographic changes that will affect high school enrollment. Any changes in the district's student transfer policy and/or changes in special high school level programs will need to be added or subtracted from the forecast result.

Table 9: Total High School Enrollment by Forecast zone: 2012, 2017, 2022

	<u>2012</u>	<u>2017</u>	<u>2012-2017 Change</u>	<u>2022</u>	<u>2017-2022 Change</u>	<u>2012- 2022 Change</u>
Forecast Zone 1	848	821	-3.2%	895	9.0%	5.5%
Forecast Zone 2	751	662	-11.9%	594	-10.3%	-20.9%
Forecast Zone 3	854	741	-13.2%	746	0.7%	-12.6%
Forecast Zone 4	476	526	10.5%	591	12.4%	24.2%
District Total	2,929	2,750	-6.1%	2,826	2.8%	-3.5%

High school enrollment is the most difficult of all the grade levels to project. The reason for this is the varying and constantly changing dropout rates, particularly in grades 10 and 11. For these forecasts the dropout rates at the high school were calculated for each grade over the last five years. These five-year averages were then held constant for the life of the forecast. The effects of any policy changes dealing with any school's dropout rates, program placement or reassignment of former students to new grade levels will need to be added or subtracted from the forecast results.

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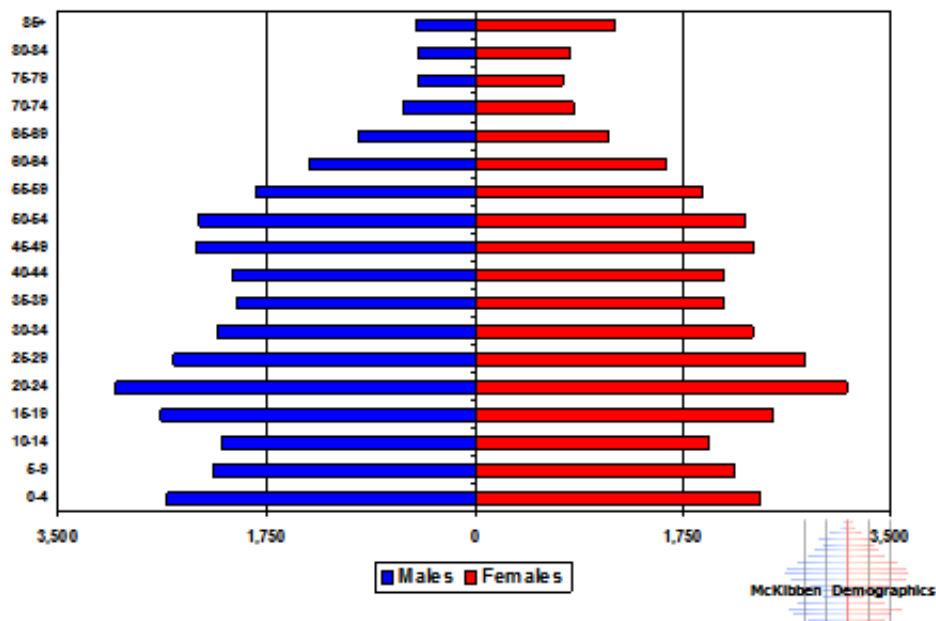
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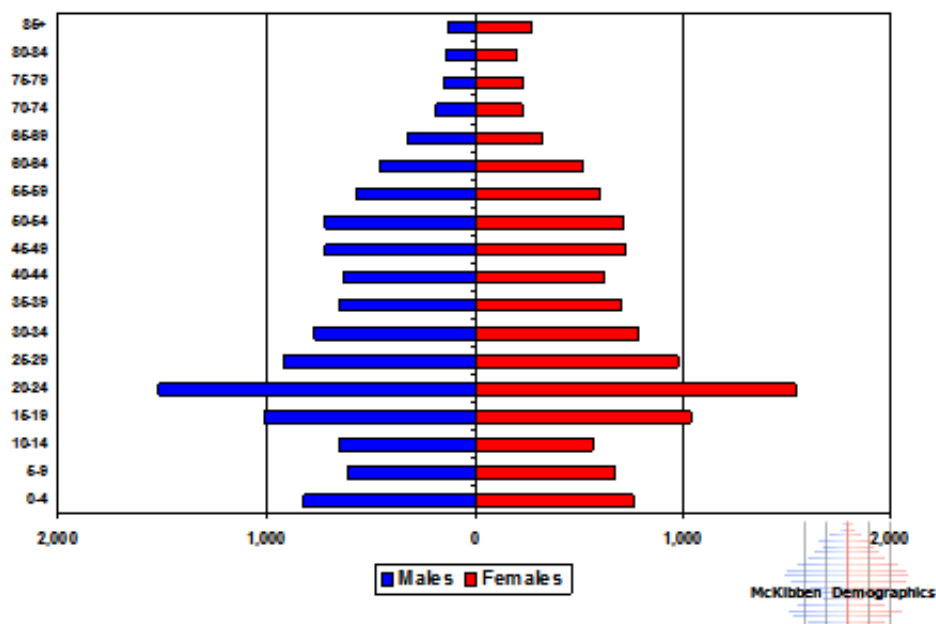
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Appendix A: Population Pyramids by Attendance Zone (Age/Sex)

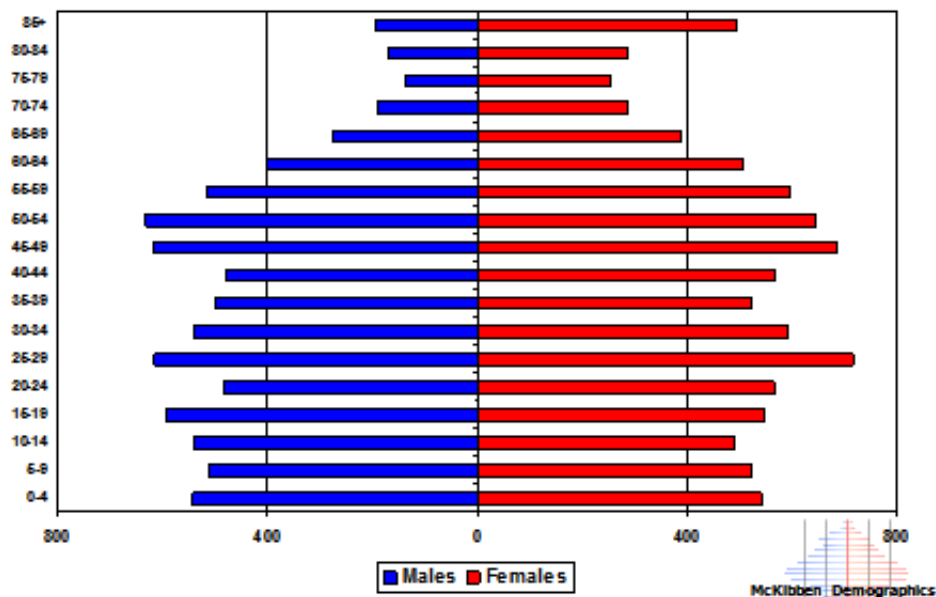
Schenectady City Schools Total Population Census 2010



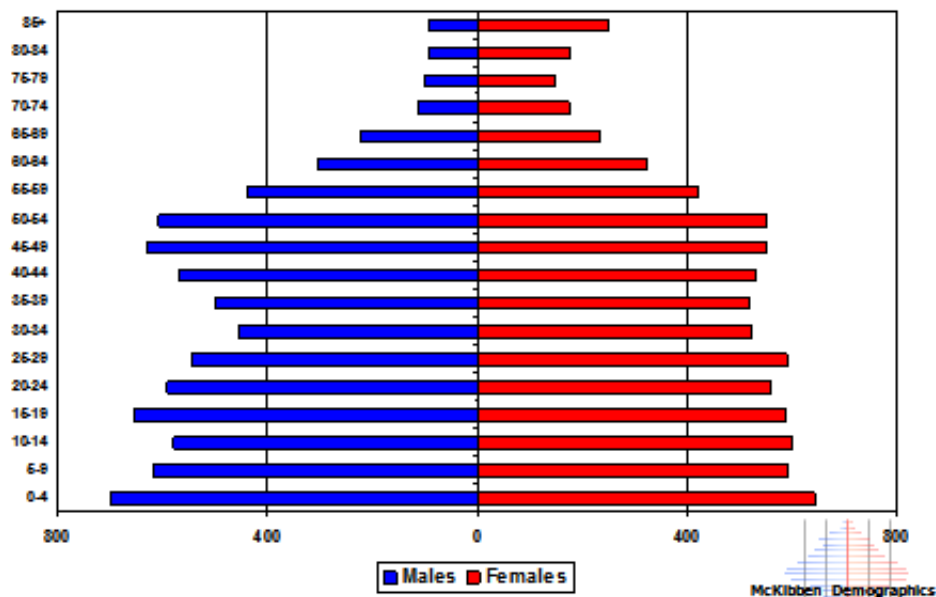
Schenectady City Schools Zone 1 Total Population Census 2010



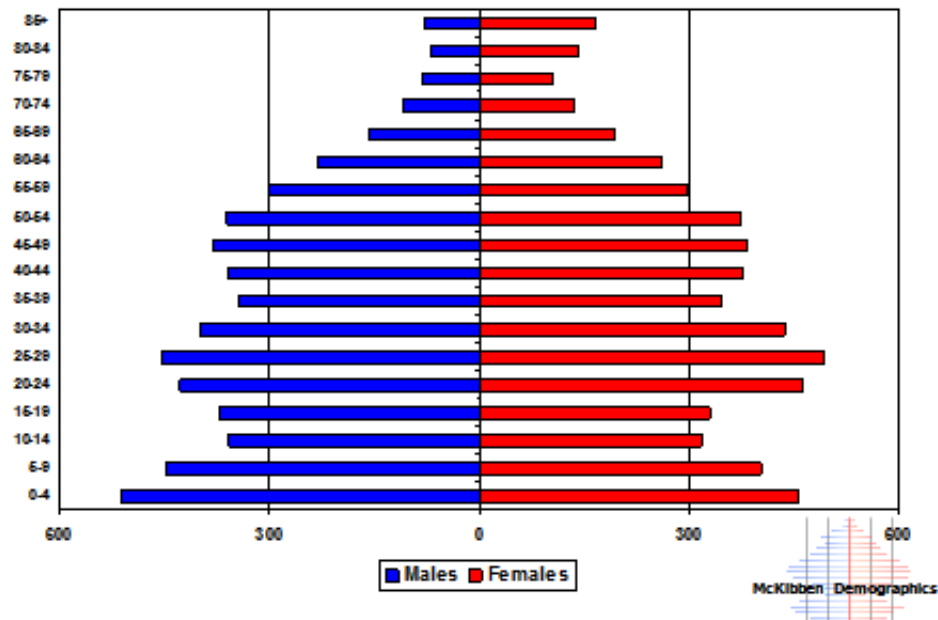
Schenectady City Schools Zone 2 Total Population Census 2010



Schenectady City Schools Zone 3 Total Population Census 2010



Schenectady City Schools Zone 4 Total Population Census 2010





Appendix B: Enrollment Forecast Tables

Schenectady City School District Enrollment Forecasts-District Total

February 2013

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
PS	112	154	188	145	145	145	145	145	145	145	145	145	145	145
PK	348	352	411	370	370	370	370	370	370	370	370	370	370	370
K	904	850	917	889	899	886	908	891	882	869	860	850	832	832
1	827	897	853	856	854	863	851	872	863	854	841	832	822	813
2	776	816	846	796	820	819	828	819	840	831	825	812	805	797
3	784	768	777	806	770	793	793	803	794	816	808	803	790	786
4	771	786	764	750	784	748	773	774	784	776	799	791	786	776
5	758	763	767	735	733	767	731	757	759	770	763	786	780	775
6	754	752	757	740	719	717	750	719	743	747	759	752	776	770
Total PS-6	6034	6138	6280	6087	6094	6108	6149	6150	6180	6178	6170	6141	6106	6064
Change		64	18	-73	-3	0	-1	-2	-16	8	-6	-7	-15	-8
% Change		3.9%	1.1%	-4.2%	-0.2%	0.0%	-0.1%	-0.1%	-1.0%	0.5%	-0.4%	-0.4%	-0.9%	-0.5%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
7	755	828	803	776	773	754	751	790	758	785	788	801	796	821
8	768	738	785	741	747	743	726	723	763	733	758	763	777	772
Total: 7-8	1523	1566	1588	1517	1520	1497	1477	1513	1521	1518	1546	1564	1573	1593
Change		-4	-27	-8	-19	-11	2	2	16	-12	-9	12	3	5
% Change		-0.9%	-5.8%	-1.8%	-4.4%	-2.7%	0.5%	0.5%	4.0%	-2.9%	-2.2%	3.0%	0.7%	1.2%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
9	947	871	924	828	834	843	830	813	808	854	821	844	852	867
10	772	779	689	726	669	671	678	672	656	650	688	658	679	685
11	626	679	650	593	638	588	589	595	591	577	572	605	579	599
12	639	700	803	782	691	742	686	686	695	691	674	668	706	675
Total: 9-12	2984	3029	3066	2929	2832	2844	2783	2766	2750	2772	2755	2775	2816	2826
Change		44	18	-51	-46	1	-59	3	-12	-8	16	-14	7	4
% Change		5.2%	2.0%	-5.6%	-5.4%	0.1%	-7.3%	0.4%	-1.6%	-1.1%	2.2%	-1.9%	1.0%	0.5%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Other	156	122	150	154	154	154	154	154	154	154	154	154	154	154
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total: PS-12	10697	10855	11084	10687	10600	10603	10563	10583	10605	10622	10625	10634	10649	10637
Change		91	20	-119	-68	-10	-58	3	-12	-12	1	-9	-5	1
% Change		3.0%	0.6%	-3.8%	-2.3%	-0.3%	-2.0%	0.1%	-0.4%	-0.4%	0.0%	-0.3%	-0.2%	0.0%



**Schenectady City School District Enrollment Forecasts-Forecast Zone 1
February 2013**

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
PS	34	51	63	47	47	47	47	47	47	47	47	47	47	47
PK	103	99	112	108	108	108	108	108	108	108	108	108	108	108
K	273	258	256	261	271	256	279	272	269	265	262	260	254	250
1	192	259	260	239	248	259	245	267	263	260	256	253	251	248
2	213	194	250	232	227	236	247	234	255	251	249	245	243	241
3	202	209	191	234	226	221	230	241	228	249	245	244	240	238
4	236	202	223	185	231	224	219	228	239	226	248	244	243	239
5	212	246	201	200	182	227	220	216	225	236	223	245	242	241
6	227	206	236	189	193	175	219	213	209	218	229	216	238	235
Total PS-6	1692	1724	1792	1695	1733	1753	1814	1826	1843	1860	1867	1862	1866	1847
Change		32	68	-97	38	20	61	12	17	17	7	-5	4	-19
% Change		1.9%	3.9%	-5.4%	2.2%	1.2%	3.5%	0.7%	0.9%	0.9%	0.4%	-0.3%	0.2%	-1.0%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
7	210	238	228	261	207	211	191	239	232	228	237	249	235	258
8	212	212	236	208	257	204	208	189	237	230	226	235	248	234
Total: 7-8	422	450	464	469	464	415	399	428	469	458	463	484	483	492
Change		28	14	5	-5	-49	-16	29	41	-11	5	21	-1	9
% Change		6.6%	3.1%	1.1%	-1.1%	-10.6%	-3.9%	7.3%	9.6%	-2.3%	1.1%	4.5%	-0.2%	1.9%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
9	266	245	254	253	240	296	234	238	216	271	262	257	267	281
10	230	215	196	210	205	194	240	190	193	175	220	212	208	216
11	166	205	179	172	183	178	169	209	165	168	152	191	184	181
12	195	190	249	213	203	216	210	199	247	195	198	179	225	217
Total: 9-12	857	855	878	848	831	884	853	836	821	809	832	839	884	895
Change		-2	23	-30	-17	53	-31	-17	-15	-12	23	7	45	11
% Change		-0.2%	2.7%	-3.4%	-2.0%	6.4%	-3.5%	-2.0%	-1.8%	-1.5%	2.8%	0.8%	5.4%	1.2%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Other	53	37	56	41	41	41	41	41	41	41	41	41	41	41
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total: PS-12	3024	3066	3190	3053	3069	3093	3107	3131	3174	3168	3203	3226	3274	3275
Change		42	124	-137	16	24	14	24	43	-6	35	23	48	1
% Change		1.4%	4.0%	-4.3%	0.5%	0.8%	0.5%	0.8%	1.4%	-0.2%	1.1%	0.7%	1.5%	0.0%



Schenectady City School District Enrollment Forecasts-Forecast Zone 2
February 2013

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
PS	33	34	35	34	34	34	34	34	34	34	34	34	34	34
PK	75	104	106	93	93	93	93	93	93	93	93	93	93	93
K	225	170	231	206	207	206	204	199	197	194	192	190	187	188
1	206	217	188	215	198	199	198	196	193	191	188	186	184	183
2	204	200	207	173	204	189	190	189	188	185	184	181	180	178
3	232	190	202	199	165	195	181	182	181	180	178	177	174	174
4	181	229	197	202	197	163	193	180	181	180	179	177	176	174
5	212	170	232	196	197	192	159	188	176	177	176	175	174	173
6	187	203	167	216	187	188	183	152	180	168	170	169	168	167
Total PS-6	1555	1517	1565	1534	1482	1459	1435	1413	1423	1402	1394	1382	1370	1364
Change		-38	48	-31	-52	-23	-24	-22	10	-21	-8	-12	-12	-6
% Change		-2.4%	3.2%	-2.0%	-3.4%	-1.6%	-1.6%	-1.5%	0.7%	-1.5%	-0.6%	-0.9%	-0.9%	-0.4%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
7	181	215	200	157	213	185	186	181	151	179	167	169	168	167
8	177	170	209	185	149	202	176	177	172	144	171	160	162	161
Total: 7-8	358	385	409	342	362	387	362	358	323	323	338	329	330	328
Change		27	24	-67	20	25	-25	-4	-35	0	15	-9	1	-2
% Change		7.5%	6.2%	-16.4%	5.8%	6.9%	-6.5%	-1.1%	-9.8%	0.0%	4.6%	-2.7%	0.3%	-0.6%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
9	250	198	193	209	199	160	216	188	189	183	153	181	169	171
10	209	215	176	167	182	173	139	188	164	164	159	133	157	147
11	178	180	185	161	147	160	152	122	165	144	144	140	117	138
12	174	207	222	214	190	173	189	179	144	195	170	170	165	138
Total: 9-12	811	800	776	751	718	666	696	677	662	686	626	624	608	594
Change		-11	-24	-25	-33	-52	30	-19	-15	24	-60	-2	-16	-14
% Change		-1.4%	-3.0%	-3.2%	-4.4%	-7.2%	4.5%	-2.7%	-2.2%	3.6%	-8.7%	-0.3%	-2.6%	-2.3%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Other	27	27	23	29	29	29	29	29	29	29	29	29	29	29
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total: PS-12	2751	2729	2773	2656	2591	2541	2522	2477	2437	2440	2387	2364	2337	2315
Change		-22	44	-117	-65	-50	-19	-45	-40	3	-53	-23	-27	-22
% Change		-0.8%	1.6%	-4.2%	-2.4%	-1.9%	-0.7%	-1.8%	-1.6%	0.1%	-2.2%	-1.0%	-1.1%	-0.9%



Schenectady City School District Enrollment Forecasts-Forecast Zone 3

February 2013

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
PS	27	42	54	39	39	39	39	39	39	39	39	39	39	39
PK	91	86	114	98	98	98	98	98	98	98	98	98	98	98
K	249	243	245	248	242	243	241	239	237	234	232	229	224	226
1	237	255	253	222	237	235	236	234	233	231	228	226	223	220
2	212	230	231	239	211	225	223	225	223	222	221	218	216	214
3	205	221	219	216	230	203	217	215	217	216	215	214	211	210
4	216	209	203	202	202	215	190	203	201	204	203	202	201	199
5	195	216	197	197	197	198	210	186	199	197	201	200	199	198
6	217	211	215	197	199	199	200	213	189	203	201	205	205	204
Total PS-6	1649	1713	1731	1658	1655	1655	1654	1652	1636	1644	1638	1631	1616	1608
Change		64	18	-73	-3	0	-1	-2	-16	8	-6	-7	-15	-8
% Change		3.9%	1.1%	-4.2%	-0.2%	0.0%	-0.1%	-0.1%	-1.0%	0.5%	-0.4%	-0.4%	-0.9%	-0.5%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
7	234	233	224	217	203	205	205	207	220	196	210	208	213	213
8	236	233	215	214	209	196	198	198	201	213	190	204	202	207
Total: 7-8	470	466	439	431	412	401	403	405	421	409	400	412	415	420
Change		-4	-27	-8	-19	-11	2	2	16	-12	-9	12	3	5
% Change		-0.9%	-5.8%	-1.8%	-4.4%	-2.7%	0.5%	0.5%	4.0%	-2.9%	-2.2%	3.0%	0.7%	1.2%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
9	295	279	307	230	253	247	231	233	233	236	250	223	239	237
10	204	241	198	230	175	192	188	176	177	177	179	190	169	182
11	171	183	196	163	196	149	163	160	150	150	150	152	162	144
12	173	184	204	231	184	221	168	184	181	170	170	170	172	183
Total: 9-12	843	887	905	854	808	809	750	753	741	733	749	735	742	746
Change		44	18	-51	-46	1	-59	3	-12	-8	16	-14	7	4
% Change		5.2%	2.0%	-5.6%	-5.4%	0.1%	-7.3%	0.4%	-1.6%	-1.1%	2.2%	-1.9%	1.0%	0.5%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Other	48	35	46	59	59	59	59	59	59	59	59	59	59	59
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total: PS-12	3010	3101	3121	3002	2934	2924	2866	2869	2857	2845	2846	2837	2832	2833
Change		91	20	-119	-68	-10	-58	3	-12	-12	1	-9	-5	1
% Change		3.0%	0.6%	-3.8%	-2.3%	-0.3%	-2.0%	0.1%	-0.4%	-0.4%	0.0%	-0.3%	-0.2%	0.0%



Schenectady City School District Enrollment Forecasts-Forecast Zone 4

February 2013

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
PS	18	27	36	25	25	25	25	25	25	25	25	25	25	25
PK	79	63	79	71	71	71	71	71	71	71	71	71	71	71
K	157	179	185	174	179	181	184	181	179	176	174	171	167	168
1	192	166	152	180	171	170	172	175	174	172	169	167	164	162
2	147	192	158	152	178	169	168	171	174	173	171	168	166	164
3	145	148	165	157	149	174	165	165	168	171	170	168	165	164
4	138	146	141	161	154	146	171	163	163	166	169	168	166	164
5	139	131	137	142	157	150	142	167	159	160	163	166	165	163
6	123	132	139	138	140	155	148	141	165	158	159	162	165	164
Total PS-6	1138	1184	1192	1200	1224	1241	1246	1259	1278	1272	1271	1266	1254	1245
Change		46	8	8	24	17	5	13	19	-6	-1	-5	-12	-9
% Change		4.0%	0.7%	0.7%	2.0%	1.4%	0.4%	1.0%	1.5%	-0.5%	-0.1%	-0.4%	-0.9%	-0.7%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
7	130	142	151	141	150	153	169	163	155	182	174	175	180	183
8	143	123	125	134	132	141	144	159	153	146	171	164	165	170
Total: 7-8	273	265	276	275	282	294	313	322	308	328	345	339	345	353
Change		-8	11	-1	7	12	19	9	-14	20	17	-6	6	8
% Change		-2.9%	4.2%	-0.4%	2.5%	4.3%	6.5%	2.9%	-4.3%	6.5%	5.2%	-1.7%	1.8%	2.3%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
9	136	149	170	136	142	140	149	154	170	164	156	183	177	178
10	129	108	119	119	107	112	111	118	122	134	130	123	145	140
11	111	111	90	97	112	101	105	104	111	115	126	122	116	136
12	97	119	128	124	114	132	119	124	123	131	136	149	144	137
Total: 9-12	473	487	507	476	475	485	484	500	526	544	548	577	582	591
Change		14	20	-31	-1	10	-1	16	26	18	4	29	5	9
% Change		3.0%	4.1%	-6.1%	-0.2%	2.1%	-0.2%	3.3%	5.2%	3.4%	0.7%	5.3%	0.9%	1.5%
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Other	28	23	25	25	25	25	25	25	25	25	25	25	25	25
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Total: PS-12	1912	1959	2000	1976	2006	2045	2068	2106	2137	2169	2189	2207	2206	2214
Change		47	41	-24	30	39	23	38	31	32	20	18	-1	8
% Change		2.5%	2.1%	-1.2%	1.5%	1.9%	1.1%	1.8%	1.5%	1.5%	0.9%	0.8%	0.0%	0.4%



Appendix C: Population Forecast Tables

Schenectady School District

Males	2010	2015	2020
0-4	2,581	2,420	2,340
5-9	2,192	2,280	2,190
10-14	2,132	2,060	2,190
15-19	2,635	2,650	2,520
20-24	3,022	3,290	3,240
25-29	2,532	2,590	2,840
30-34	2,169	2,260	2,360
35-39	1,993	2,050	2,180
40-44	2,036	1,970	1,990
45-49	2,350	2,000	1,940
50-54	2,324	2,290	1,950
55-59	1,825	2,230	2,200
60-64	1,397	1,650	2,040
65-69	971	1,170	1,390
70-74	604	730	890
75-79	468	430	520
80-84	470	410	320
85+	489	440	310
Total	32,189	32,920	33,410

Females	2010	2015	2020
0-4	2,405	2,330	2,250
5-9	2,193	2,100	2,110
10-14	1,977	2,050	2,010
15-19	2,506	2,500	2,530
20-24	3,132	3,170	3,110
25-29	2,775	2,710	2,730
30-34	2,341	2,530	2,510
35-39	2,089	2,230	2,430
40-44	2,099	2,080	2,180
45-49	2,346	2,070	2,040
50-54	2,286	2,360	2,070
55-59	1,915	2,200	2,260
60-64	1,609	1,780	2,050
65-69	1,132	1,480	1,640
70-74	827	920	1,230
75-79	740	740	820
80-84	806	700	680
85+	1,183	1,140	1,070
Total	34,361	35,090	35,720

Total	2010	2015	2020
0-4	4,986	4,750	4,590
5-9	4,385	4,380	4,300
10-14	4,108	4,110	4,200
15-19	5,141	5,150	5,050
20-24	6,153	6,460	6,350
25-29	5,307	5,300	5,570
30-34	4,510	4,790	4,870
35-39	4,082	4,280	4,610
40-44	4,134	4,050	4,170
45-49	4,696	4,070	3,980
50-54	4,610	4,650	4,020
55-59	3,740	4,430	4,460
60-64	3,007	3,430	4,090
65-69	2,103	2,650	3,030
70-74	1,431	1,650	2,120
75-79	1,208	1,170	1,340
80-84	1,276	1,110	1,000
85+	1,672	1,580	1,380
Total	66,550	68,010	69,130
Median Age	33.5	34.0	34.6

	2010-2015	2015-2020
Births	5,080	4,880
Deaths	3,080	3,160
Natural Increase	2,000	1,720
Net Migration	-530	-460
Change	1,470	1,260

Differences between period Totals may not equal Change due to rounding.

Forecast Zone 1

Males	2010	2015	2020
0-4	822	810	780
5-9	612	720	720
10-14	650	550	680
15-19	1,011	1,110	960
20-24	1,517	1,550	1,600
25-29	917	920	950
30-34	770	720	760
35-39	646	700	680
40-44	628	640	670
45-49	718	620	630
50-54	721	700	600
55-59	568	690	670
60-64	459	510	630
65-69	319	380	420
70-74	186	230	280
75-79	149	130	170
80-84	138	130	120
85+	123	120	110
Total	10,954	11,230	11,430

Females	2010	2015	2020
0-4	766	780	750
5-9	676	660	690
10-14	566	610	620
15-19	1,041	1,030	1,030
20-24	1,544	1,580	1,520
25-29	977	950	990
30-34	789	790	800
35-39	704	720	740
40-44	627	700	700
45-49	725	620	690
50-54	718	730	620
55-59	603	690	700
60-64	520	560	640
65-69	322	470	510
70-74	231	250	390
75-79	236	210	230
80-84	201	220	190
85+	274	270	280
Total	11,518	11,840	12,090

Total	2010	2015	2020
0-4	1,588	1,590	1,530
5-9	1,287	1,380	1,410
10-14	1,216	1,160	1,300
15-19	2,052	2,140	1,990
20-24	3,061	3,130	3,120
25-29	1,895	1,870	1,940
30-34	1,559	1,510	1,560
35-39	1,350	1,420	1,420
40-44	1,255	1,340	1,370
45-49	1,442	1,240	1,320
50-54	1,439	1,430	1,220
55-59	1,171	1,380	1,370
60-64	979	1,070	1,270
65-69	641	850	930
70-74	417	480	670
75-79	385	340	400
80-84	339	350	310
85+	397	390	390
Total	22,473	23,070	23,520
Median Age	30.4	30.9	31.5

	2010-2015	2015-2020
Births	1,710	1,590
Deaths	890	960
Natural Increase	820	630
Net Migration	-210	-190
Change	610	440

Differences between period Totals may not equal Change due to rounding.

SCHENECTADY CITY SCHOOLS
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Forecast Zone 2

Males	2010	2015	2020
0-4	544	510	490
5-9	512	490	470
10-14	543	490	470
15-19	595	590	530
20-24	484	620	610
25-29	616	590	710
30-34	542	560	540
35-39	501	500	520
40-44	478	480	490
45-49	619	470	480
50-54	633	600	460
55-59	516	610	580
60-64	400	470	560
65-69	275	340	400
70-74	193	210	260
75-79	137	140	150
80-84	171	120	120
85+	195	170	130
Total	7,956	7,960	7,970

Females	2010	2015	2020
0-4	540	490	470
5-9	523	490	450
10-14	492	500	470
15-19	547	540	540
20-24	566	570	560
25-29	715	670	670
30-34	593	660	630
35-39	522	550	620
40-44	565	510	540
45-49	686	560	500
50-54	645	690	560
55-59	597	620	660
60-64	506	560	580
65-69	386	470	520
70-74	288	320	390
75-79	253	260	280
80-84	288	240	240
85+	495	460	410
Total	9,206	9,160	9,090

Total	2010	2015	2020
0-4	1,084	1,000	960
5-9	1,035	980	920
10-14	1,035	990	940
15-19	1,142	1,130	1,070
20-24	1,050	1,190	1,170
25-29	1,330	1,260	1,380
30-34	1,135	1,220	1,170
35-39	1,023	1,050	1,140
40-44	1,042	990	1,030
45-49	1,305	1,030	980
50-54	1,278	1,290	1,020
55-59	1,112	1,230	1,240
60-64	906	1,030	1,140
65-69	661	810	920
70-74	481	530	650
75-79	391	400	430
80-84	459	360	360
85+	690	630	540
Total	17,161	17,120	17,060
Median Age	38.8	38.8	39.0

	2010-2015	2015-2020
Births	1,100	1,040
Deaths	1,020	990
Natural Increase	80	50
Net Migration	-120	-100
Change	-40	-50

Differences between period Totals may not equal Change due to rounding.

Forecast Zone 3

Males	2010	2015	2020
0-4	702	630	610
5-9	619	610	570
10-14	580	590	600
15-19	656	570	580
20-24	593	670	580
25-29	544	610	690
30-34	456	560	620
35-39	502	480	580
40-44	569	530	490
45-49	632	560	520
50-54	608	620	550
55-59	440	580	590
60-64	306	400	530
65-69	221	260	340
70-74	114	170	200
75-79	100	80	120
80-84	92	90	10
85+	93	80	10
Total	7,826	8,090	8,190

Females	2010	2015	2020
0-4	643	610	590
5-9	592	550	550
10-14	601	560	540
15-19	588	590	550
20-24	559	610	610
25-29	589	580	620
30-34	523	610	600
35-39	518	550	630
40-44	531	550	560
45-49	551	530	540
50-54	550	550	530
55-59	420	530	530
60-64	325	390	500
65-69	233	300	360
70-74	173	190	250
75-79	147	150	170
80-84	175	140	140
85+	250	240	220
Total	7,970	8,230	8,490

Total	2010	2015	2020
0-4	1,346	1,240	1,200
5-9	1,211	1,160	1,120
10-14	1,181	1,150	1,140
15-19	1,244	1,160	1,130
20-24	1,152	1,280	1,190
25-29	1,133	1,190	1,310
30-34	979	1,170	1,220
35-39	1,020	1,030	1,210
40-44	1,100	1,080	1,050
45-49	1,183	1,090	1,060
50-54	1,158	1,170	1,080
55-59	860	1,110	1,120
60-64	631	790	1,030
65-69	453	560	700
70-74	286	360	450
75-79	247	230	290
80-84	267	230	150
85+	343	320	230
Total	15,796	16,320	16,680
Median Age	33.2	34.2	35.1

	2010-2015	2015-2020
Births	1,300	1,290
Deaths	670	700
Natural Increase	630	590
Net Migration	-110	-90
Change	520	500

Differences between period Totals may not equal Change due to rounding.

SCHENECTADY CITY SCHOOLS
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Forecast Zone 4

Males	2010	2015	2020
0-4	513	470	460
5-9	449	460	430
10-14	359	430	440
15-19	373	380	450
20-24	428	450	450
25-29	455	470	490
30-34	401	420	440
35-39	344	370	400
40-44	361	320	340
45-49	381	350	310
50-54	362	370	340
55-59	301	350	360
60-64	232	270	320
65-69	156	190	230
70-74	111	120	150
75-79	81	80	80
80-84	69	70	70
85+	78	70	60
Total	5,453	5,640	5,820

Females	2010	2015	2020
0-4	456	450	440
5-9	402	400	420
10-14	318	380	380
15-19	330	340	410
20-24	463	410	420
25-29	494	510	450
30-34	436	470	480
35-39	345	410	440
40-44	376	320	380
45-49	384	360	310
50-54	373	390	360
55-59	295	360	370
60-64	258	270	330
65-69	192	240	250
70-74	135	160	200
75-79	104	120	140
80-84	142	100	110
85+	164	170	160
Total	5,667	5,860	6,050

Total	2010	2015	2020
0-4	969	920	900
5-9	851	860	850
10-14	676	810	820
15-19	703	720	860
20-24	890	860	870
25-29	949	980	940
30-34	837	890	920
35-39	689	780	840
40-44	736	640	720
45-49	765	710	620
50-54	735	760	700
55-59	596	710	730
60-64	491	540	650
65-69	348	430	480
70-74	246	280	350
75-79	185	200	220
80-84	211	170	180
85+	242	240	220
Total	11,120	11,500	11,870
Median Age	33.1	33.4	33.8

	2010-2015	2015-2020
Births	970	960
Deaths	500	510
Natural Increase	470	450
Net Migration	-90	-80
Change	380	370

Differences between period Totals may not equal Change due to rounding.



Appendix D: Forecast Zone Areas Map

Before the demographic study was performed, Schenectady schools' administration, Educational Legacy Planning Group, and Cropper GIS met to discuss the best approach to providing forecasts for the district. It was determined that the district would be analyzed in 4 regions to assess population dynamics and differences within these areas. Most of the Forecast Zones were created through grouping together current school attendance zones, although there were a few exceptions. Van Corlaer and Hamilton both have parts of the attendance zone that are separate from their main zone (satellite areas), and these satellite areas are divided by a major road (Route 890). The satellites were not analyzed together because they are not located in the immediate proximity of the primary zone. The Forecast Zones were defined as:

Forecast Zone 1: A combination of Zoller, Yates, and Elmer Elementary school zones

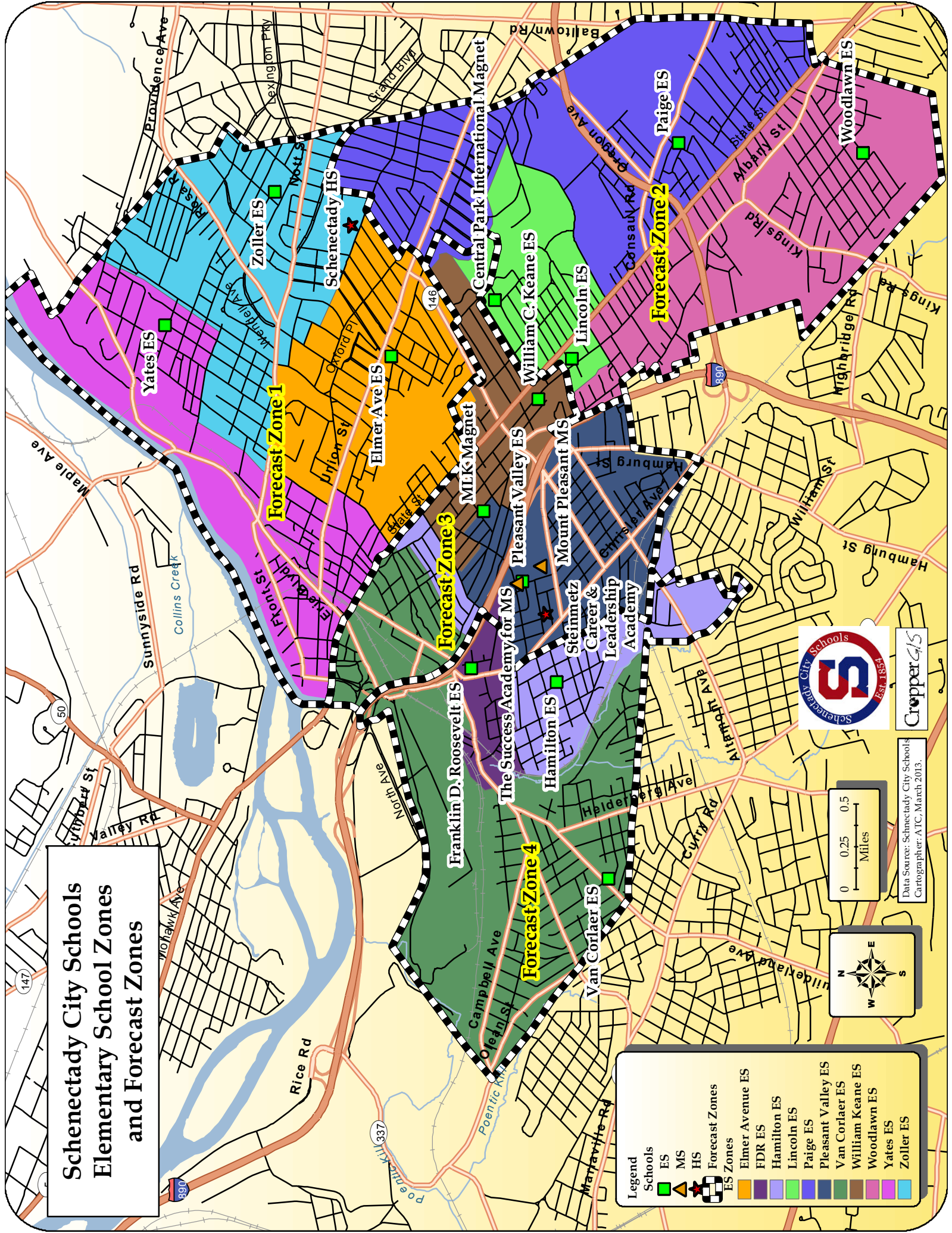
Forecast Zone 2: A combination of Paige, Woodlawn, and Lincoln Elementary school zones

Forecast Zone 3: A combination of Keane, Pleasant Valley, Van Corlaer and Hamilton parts east of RT. 890

Forecast Zone 4: A combination of Van Corlaer (west of 890) / Hamilton (west of 890), and FDR Elementary school zones.

The map on the following page depicts the Forecast Zones. Background colors are the current elementary zones, and the dashed outlines reflect the Forecast Zones which are the basis for the population/enrollment forecasts.

Schenectady City Schools Elementary School Zones and Forecast Zones



Legend

Schools

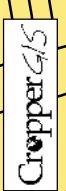
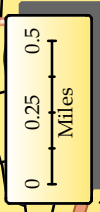
- ES
- MS
- HS

Forecast Zones

- Forecast Zone 1
- Forecast Zone 2
- Forecast Zone 3
- Forecast Zone 4

Schools

- Elmer Avenue ES
- FDR ES
- Hamilton ES
- Lincoln ES
- Paige ES
- Pleasant Valley ES
- Van Corlaer ES
- William Keane ES
- Woodlawn ES
- Yates ES
- Zoller ES



Data Source: Schenectady City Schools
Cartographer: AIC, March 2013.



Appendix E: Live Attend Report

LIVE ATTEND ANALYSIS

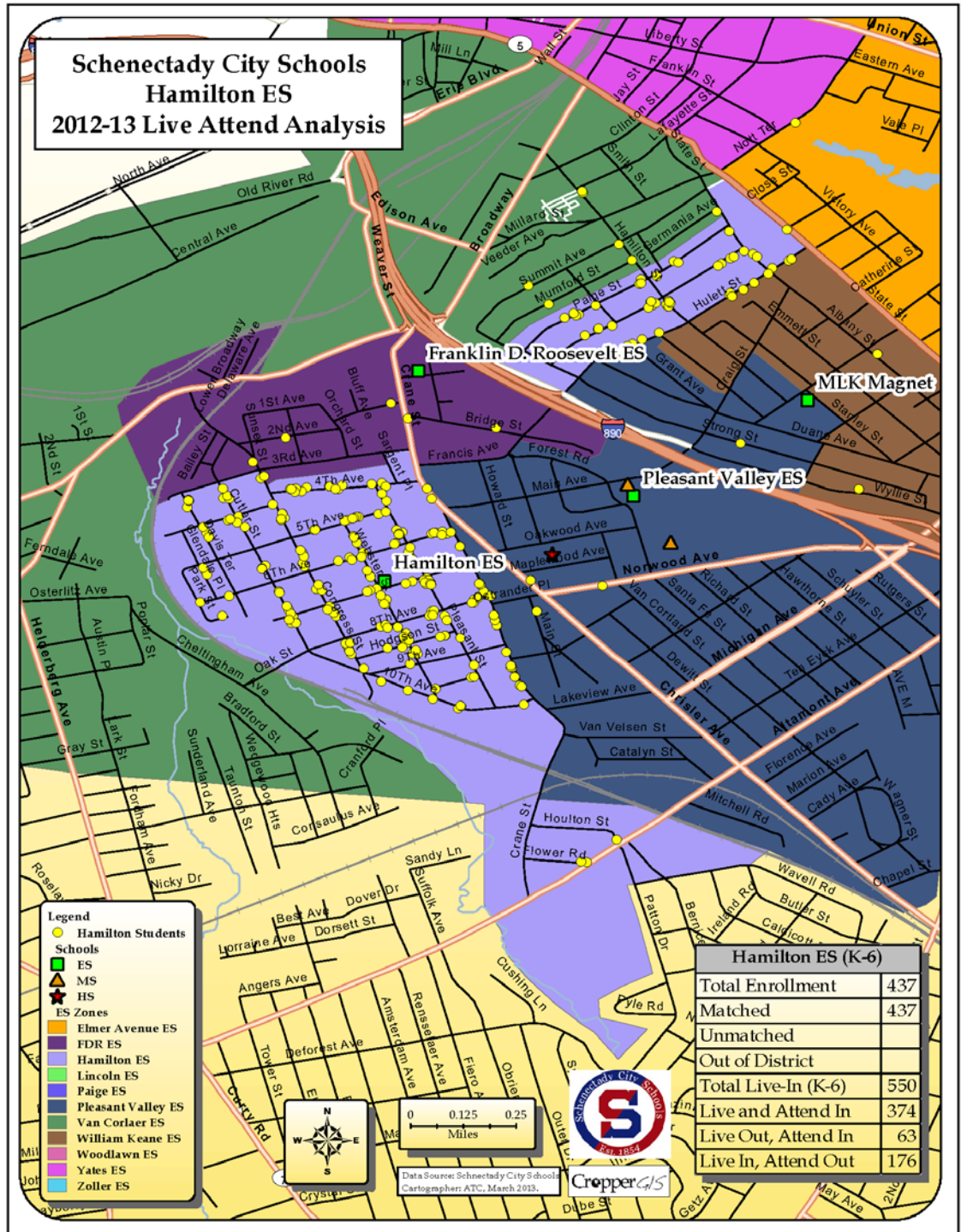
This map series focuses on illustrating the geographic distribution of Schenectady City Schools' 2012-2013 students in relation to school attendance boundaries.

Here is an example of a map from this series.

Basic Map Elements

The legend explains how different features are represented, either by a point (e.g. schools and students), or by an area/polygon (e.g. attendance boundaries). The scale bar references the distance ratio of the map in relation to the real world. So the length between 0 and 2 on the map image is equal to a real world distance of two miles.

Please note that each yellow dot represents a student's address, at which, multiple students could reside. Therefore, counting the number of dots shown on the map might not reflect the student population accurately.





Live-Attend Tables

Each map has a table listing various statistics about the student data in this region. Here is a guide for reading this table:

Hamilton ES (K-6)	
Total Enrollment	437
Matched	437
Unmatched	
Out of District	
Total Live-In (K-6)	550
Live and Attend In	374
Live Out, Attend In	63
Live In, Attend Out	176

Total Enrollment - number of students attending Hamilton ES.

Matched - number of students attending Hamilton ES whose addresses were located by the GIS, and placed on the map.

Unmatched - number of students whose addresses were not able to be located, and have not been placed on the map.

Out of District - number of students who live outside of the Schenectady City Schools boundaries, yet attend this school.

Total Live-In - number of students who live within the school's attendance boundary, who are in the K-6 grade cohort. The 'total-live in' statistic here indicates there are 378 Kindergarten through Sixth grade students living within the Hamilton ES attendance boundary.

Live and Attend In - number of K-6 students who live within the attendance boundary, and also attend that school. In this example, 326 of the 394 Kindergarten through Sixth grade students who live within the Hamilton ES attendance boundary also attend Hamilton ES.

Live Out, Attend In - number of K-6 students who live outside of the Hamilton ES attendance boundary, but attend Hamilton ES. Any student records that are unmatched are not included in this count, since it is not known whether or not these unmatched students live within or outside the attendance boundary in question. Due to the methods used to calculate the statistics in this table, this is the only circumstance where this is relevant.

Live In, Attend Out - number of K-6 students who live inside the Hamilton ES attendance boundary, yet attend a different elementary school.

SCHENECTADY CITY SCHOOLS
LIVE ATTEND ANALYSIS 2012-2013

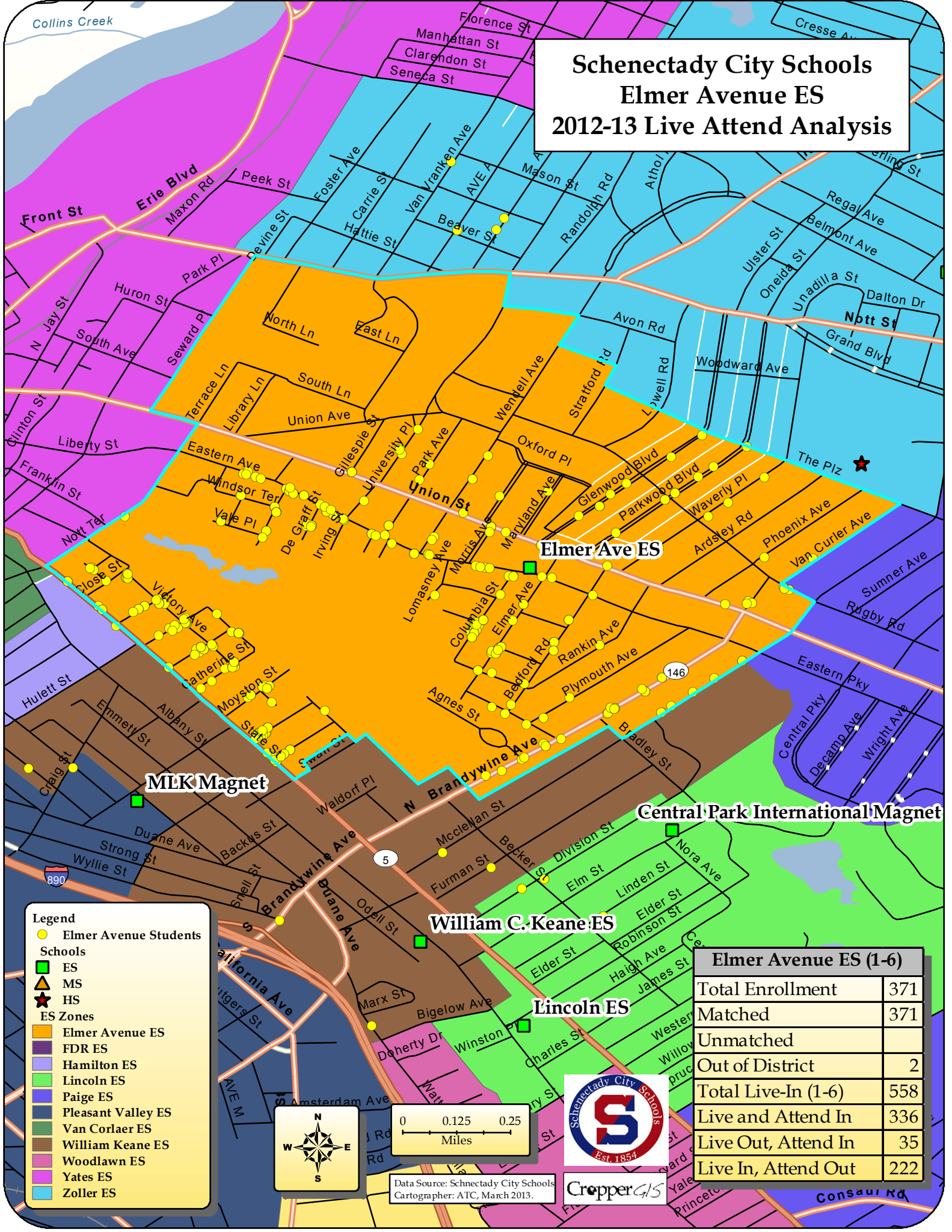


LIVE ATTEND MATRIX

The table below gives details on the schools that students attend and the school zones where they live. The schools of attendance are listed on the left while the zones where students live are listed across the top. This table includes all students in Kindergarten through Sixth Grade. The numbers highlighted in green are counts of students who attend the assigned schools for the zones where they live.

K-6 Live-Attend Matrix		Where Students Live														
		Total Attending	Elmer Avenue ES	FDR ES	Hamilton ES	Lincoln ES	Paige ES	Pleasant Valley ES	Van Corlaer ES	William Keane ES	Woodlawn ES	Yates ES	Zoller ES	Live Outside of District	Unmatched	Live Out, Attend In
Where Students Attend School	Total Live In	675	204	550	433	405	640	627	604	569	372	493				
	Elmer Elementary	371	336		4	3	1	4	4	5	3	4	2			35
	FDR Elementary	159	7	116	9	2	2	8	3	3	6	2	1			43
	Hamilton Elementary	437	3	6	374	3	1	11	13	17	2	6	1			63
	Lincoln Elementary	331	2		2	270	2	9	2	32	7	2	2	1		61
	Paige Elementary	373	21	1	5	4	285	3	6	3	35	3	2	5		88
	Pleasant Valley Elementary	517	4	14	10	3	1	438	5	38	1		3			79
	Van Corlaer Elementary	445	7	4	7	4	3		406	1	1	6	5	1		39
	Keane Elementary	314	7	1	6	7		9		274	6		3	1		40
	Woodlawn Elementary	456	4	5	9	11	4	1	4	8	403		4	1	2	53
	Yates Elementary	383	29	2	11	5	5	8	13	11	7	260	31		1	123
	Zoller Elementary	370	5	1	3		3		2	4	1	30	320	1		50
	Blodgett Elementary	20	1	4	5	1		3		2	1	1	2			
	CPIM Elementary	456	85	18	23	74	16	56	42	44	40	23	33	2		
	Fulton School	181	5	5	29	1		15	88	32		2	2	2		
	Howe	300	99	2	2	7	69	4	2	8	14	19	72	2		
	MLK Elementary	414	53	19	42	35	5	57	29	115	36	13	8	2		
	CPIM Middle School	2					1						1			
	Out of District Placement	71	7	6	9	3	7	14	8	7	4	2	2	1	1	
	Live In, Attend Out		339	88	176	163	120	202	221	330	166	112	173			

Schenectady City Schools Elmer Avenue ES 2012-13 Live Attend Analysis



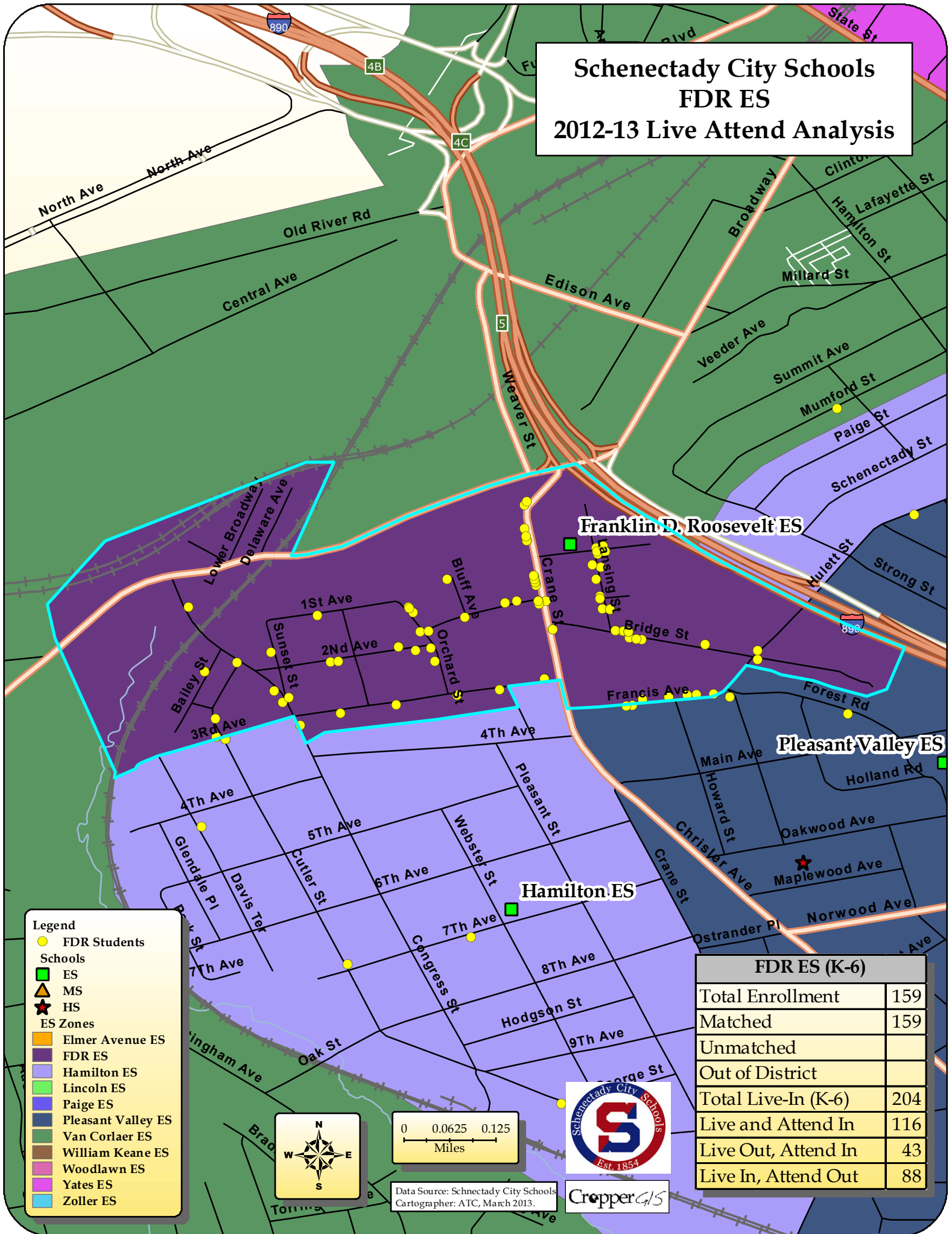
- Legend**
- Elmer Avenue Students
 - Schools**
 - ES
 - ▲ MS
 - ★ HS
 - ES Zones**
 - Elmer Avenue ES
 - FDR ES
 - Hamilton ES
 - Lincoln ES
 - Paige ES
 - Pleasant Valley ES
 - Van Corlaer ES
 - William Keane ES
 - Woodlawn ES
 - Yates ES
 - Zoller ES

Elmer Avenue ES (1-6)	
Total Enrollment	371
Matched	371
Unmatched	
Out of District	2
Total Live-In (1-6)	558
Live and Attend In	336
Live Out, Attend In	35
Live In, Attend Out	222

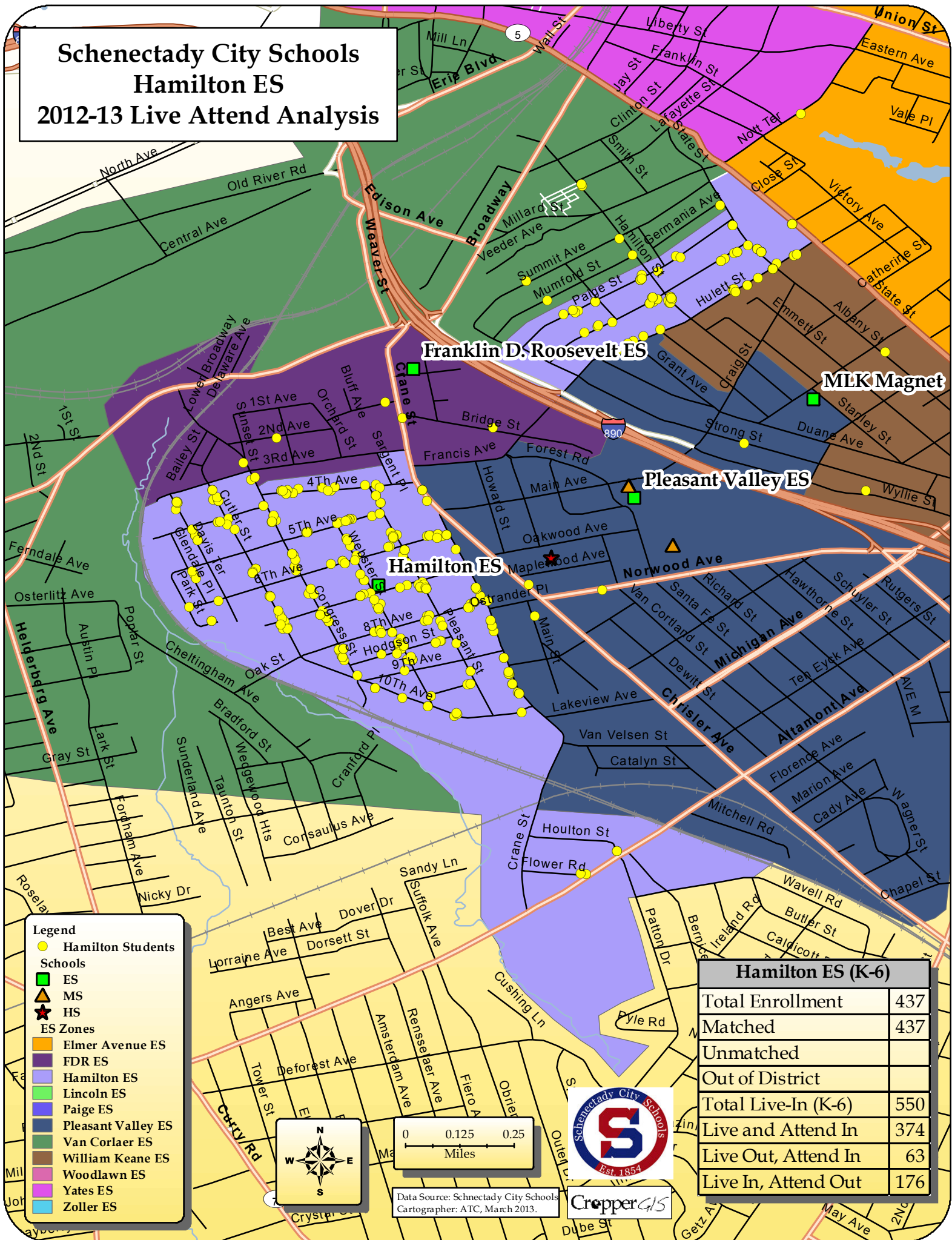
Data Source: Schenectady City Schools
Cartographer: ATC, March 2013.



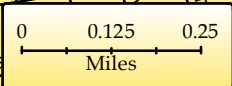
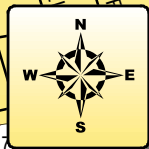
Schenectady City Schools FDR ES 2012-13 Live Attend Analysis



Schenectady City Schools Hamilton ES 2012-13 Live Attend Analysis



- Legend**
- Yellow dot: Hamilton Students
 - Schools
 - Green square: ES
 - Orange triangle: MS
 - Brown star: HS
 - ES Zones
 - Orange: Elmer Avenue ES
 - Purple: FDR ES
 - Light blue: Hamilton ES
 - Green: Lincoln ES
 - Light blue: Paige ES
 - Dark blue: Pleasant Valley ES
 - Brown: Van Corlaer ES
 - Pink: William Keane ES
 - Light green: Woodlawn ES
 - Light blue: Yates ES
 - Light blue: Zoller ES

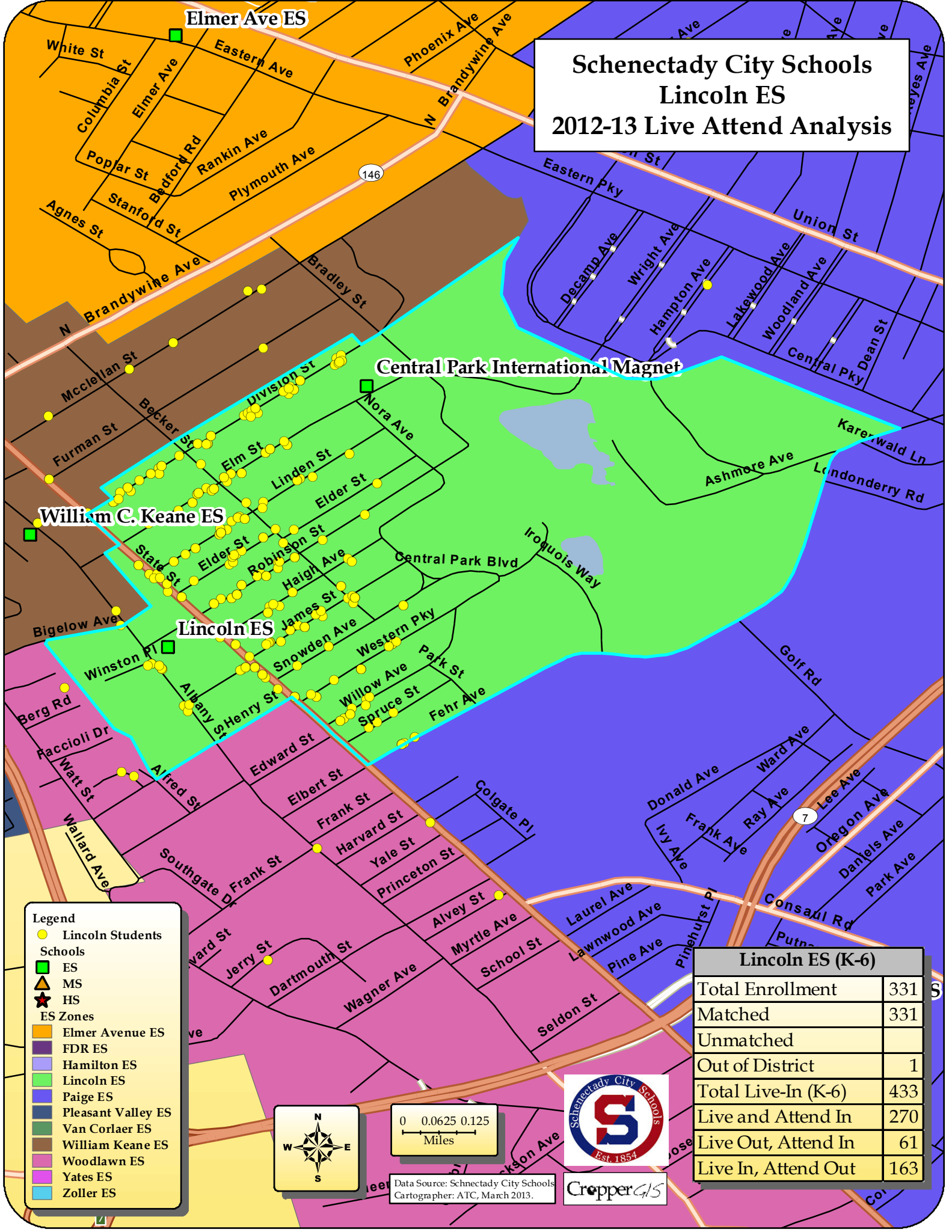


Data Source: Schenectady City Schools
Cartographer: ATC, March 2013.

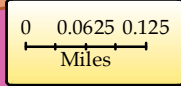


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Schenectady City Schools Lincoln ES 2012-13 Live Attend Analysis



- Legend**
- Lincoln Students
 - Schools
 - ES
 - MS
 - HS
 - ES Zones
 - Elmer Avenue ES
 - FDR ES
 - Hamilton ES
 - Lincoln ES
 - Paige ES
 - Pleasant Valley ES
 - Van Corlaer ES
 - William Keane ES
 - Woodlawn ES
 - Yates ES
 - Zoller ES

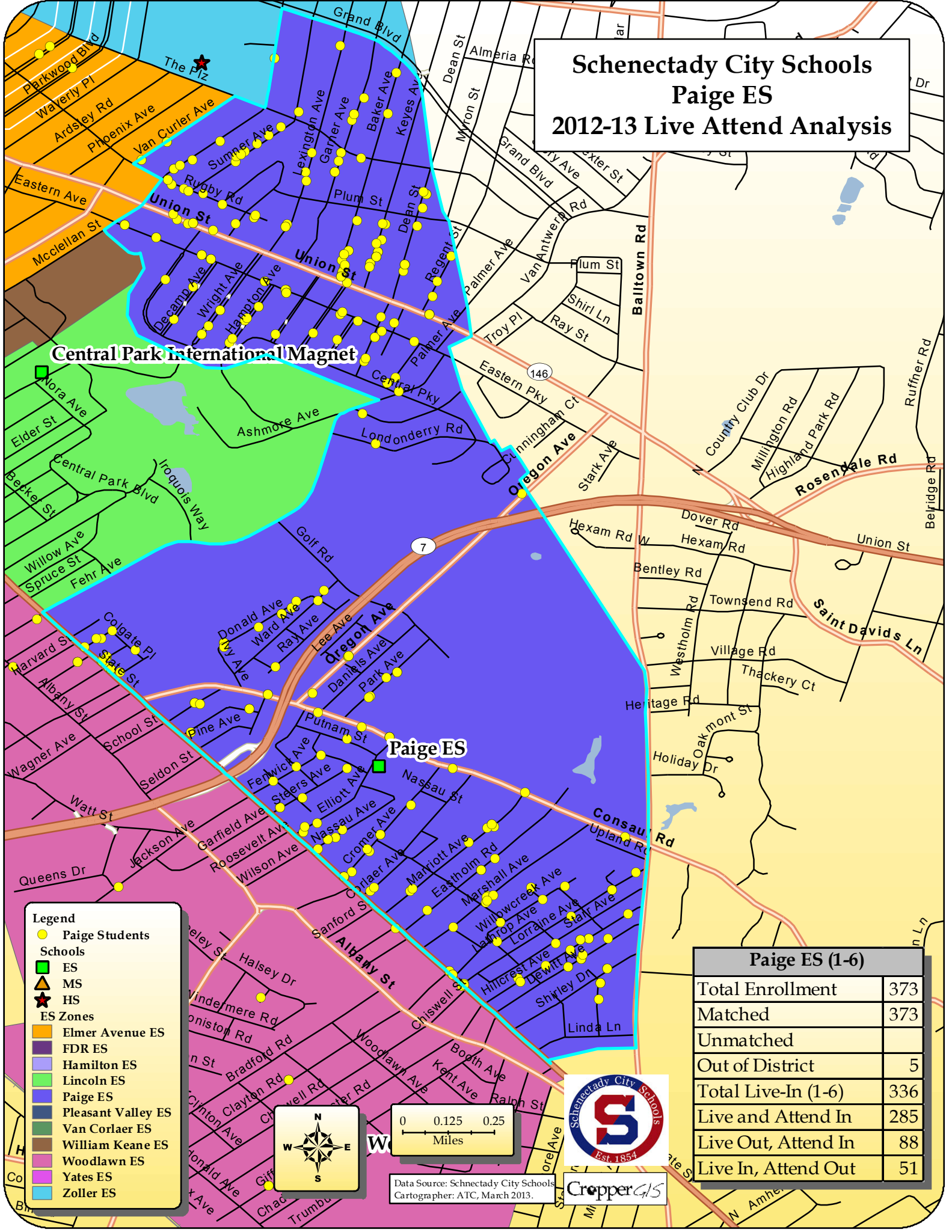


Data Source: Schenectady City Schools
Cartographer: ATC, March 2013.



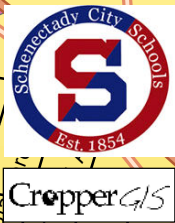
Lincoln ES (K-6)	
Total Enrollment	331
Matched	331
Unmatched	
Out of District	1
Total Live-In (K-6)	433
Live and Attend In	270
Live Out, Attend In	61
Live In, Attend Out	163

Schenectady City Schools Paige ES 2012-13 Live Attend Analysis

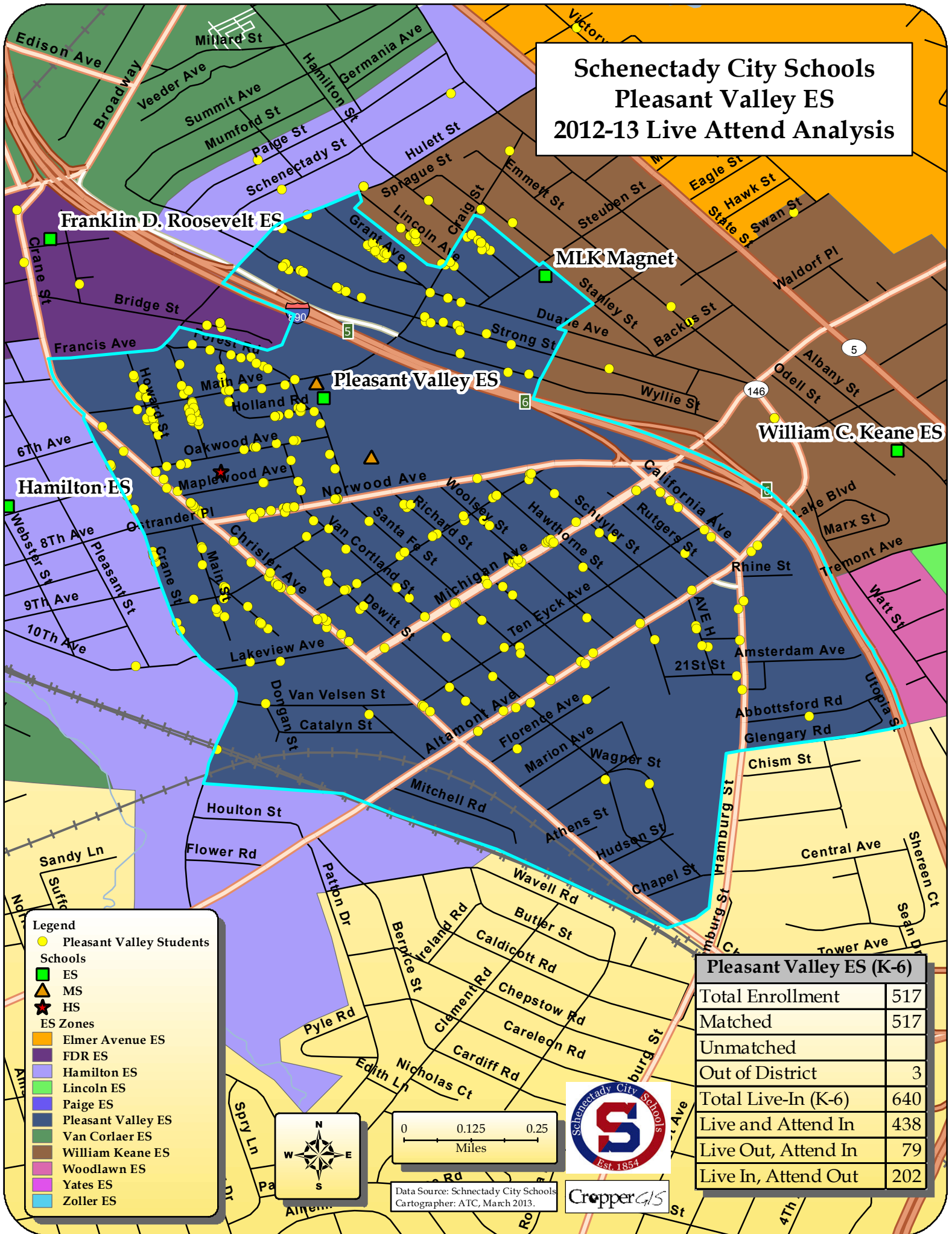


Paige ES (1-6)	
Total Enrollment	373
Matched	373
Unmatched	
Out of District	5
Total Live-In (1-6)	336
Live and Attend In	285
Live Out, Attend In	88
Live In, Attend Out	51

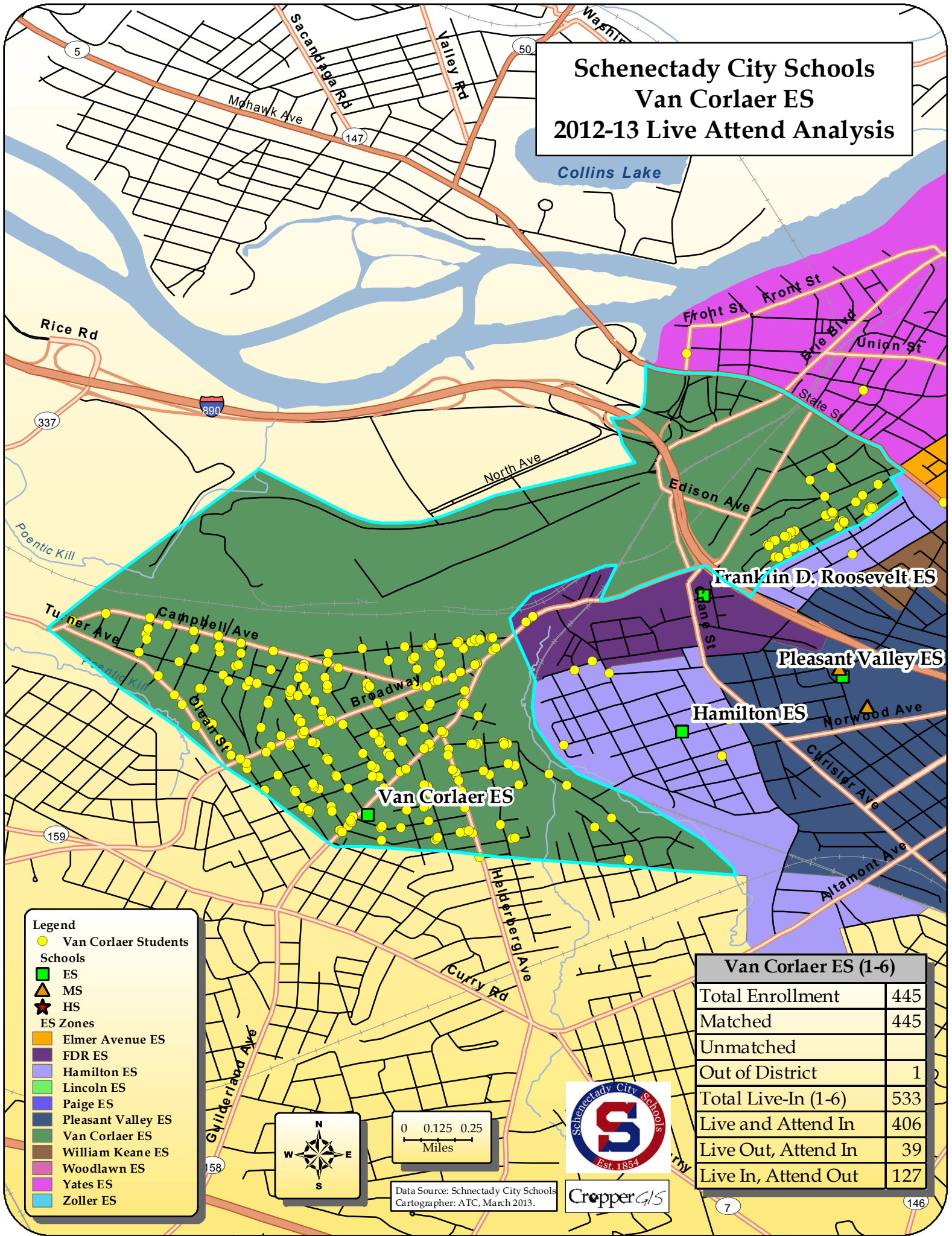
Data Source: Schenectady City Schools
Cartographer: ATC, March 2013.



Schenectady City Schools Pleasant Valley ES 2012-13 Live Attend Analysis



Schenectady City Schools Van Corlaer ES 2012-13 Live Attend Analysis



- Legend**
- Van Corlaer Students
 - Schools
 - ES
 - MS
 - HS
 - ES Zones
 - Elmer Avenue ES
 - FDR ES
 - Hamilton ES
 - Lincoln ES
 - Paige ES
 - Pleasant Valley ES
 - Van Corlaer ES
 - William Keane ES
 - Woodlawn ES
 - Yates ES
 - Zoller ES

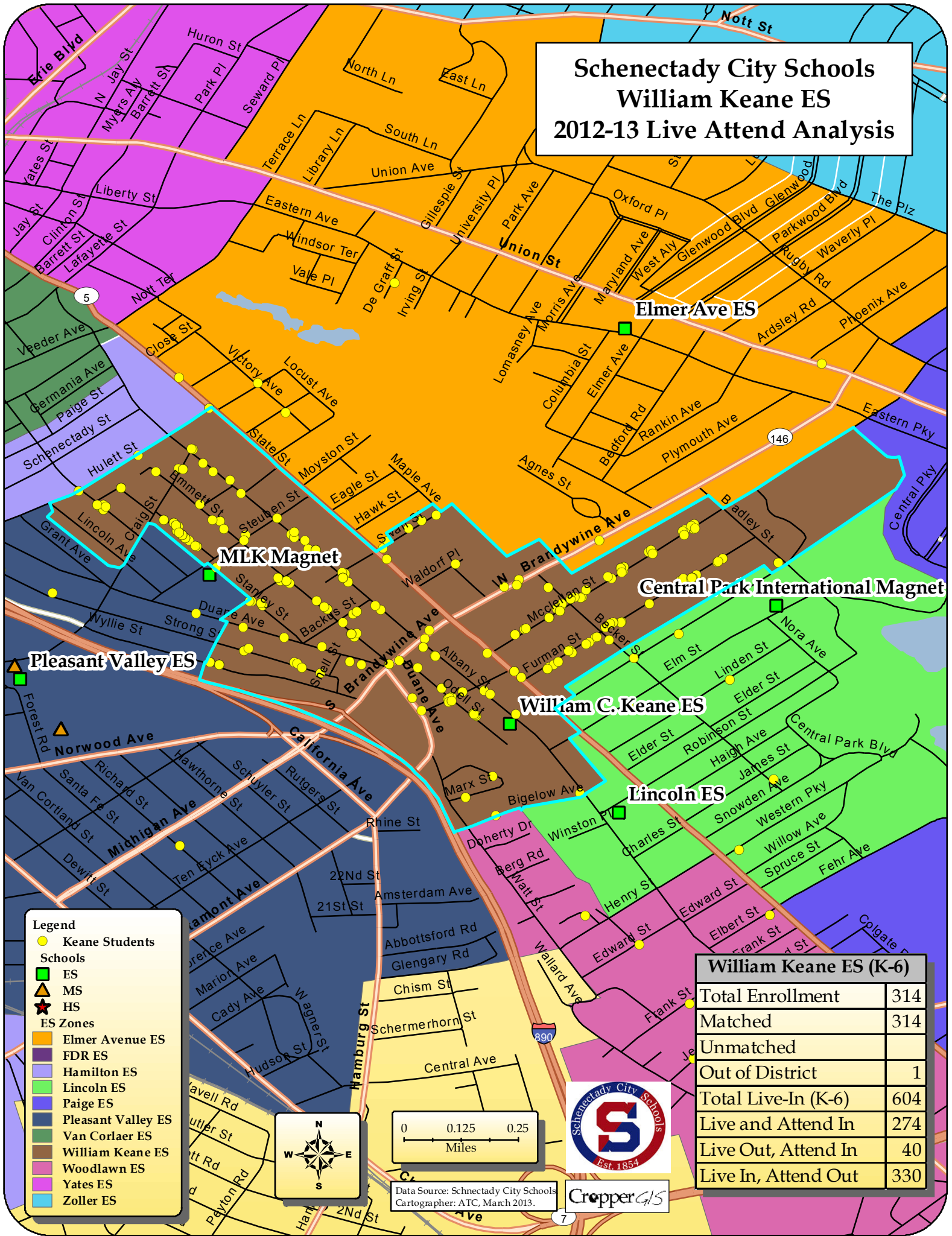
Van Corlaer ES (1-6)	
Total Enrollment	445
Matched	445
Unmatched	
Out of District	1
Total Live-In (1-6)	533
Live and Attend In	406
Live Out, Attend In	39
Live In, Attend Out	127

Data Source: Schenectady City Schools
Cartographer: ATC, March 2013.



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Schenectady City Schools William Keane ES 2012-13 Live Attend Analysis



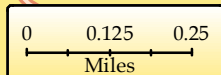
Schenectady City Schools Woodlawn ES 2012-13 Live Attend Analysis

Lincoln ES

Paige ES

Woodlawn ES

- Legend**
- Woodlawn Students
 - Schools**
 - ES
 - ▲ MS
 - ★ HS
 - ES Zones**
 - Elmer Avenue ES
 - FDR ES
 - Hamilton ES
 - Lincoln ES
 - Paige ES
 - Pleasant Valley ES
 - Van Corlaer ES
 - William Keane ES
 - Woodlawn ES
 - Yates ES
 - Zoller ES



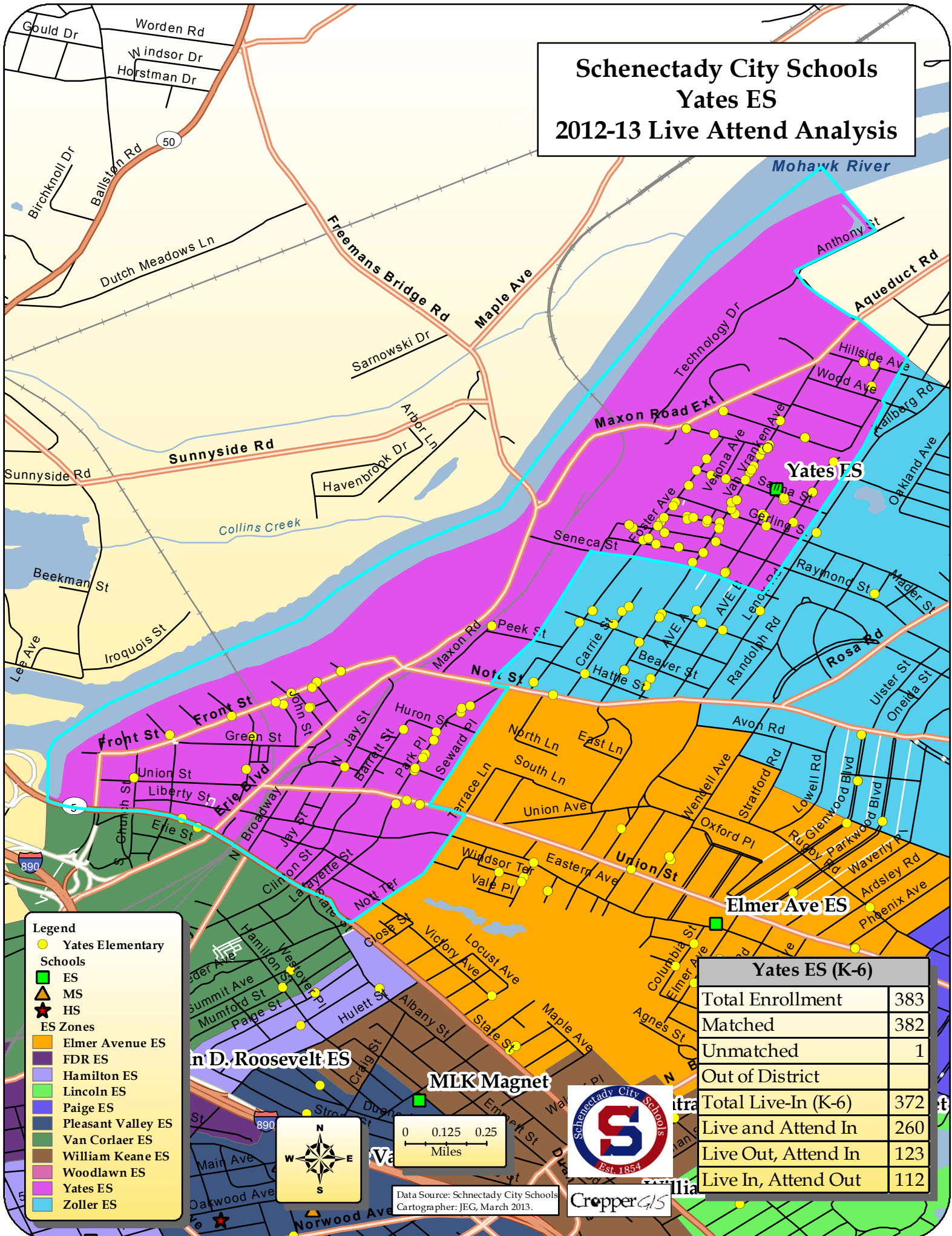
Data Source: Schenectady City Schools
Cartographer: ATC, April 2013.



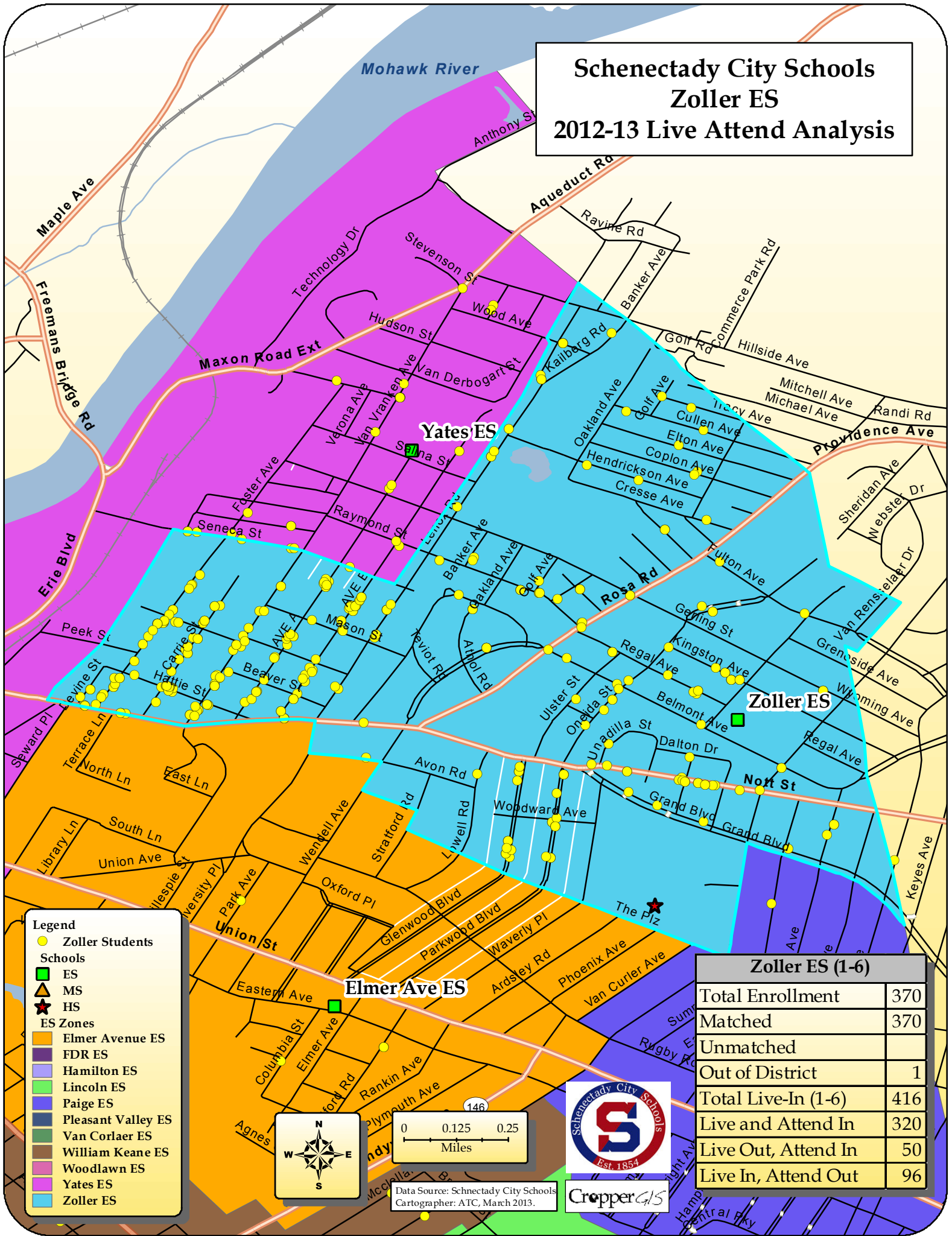
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Woodlawn ES (K-6)	
Total Enrollment	456
Matched	454
Unmatched	2
Out of District	1
Total Live-In (K-6)	569
Live and Attend In	403
Live Out, Attend In	53
Live In, Attend Out	166

Schenectady City Schools Yates ES 2012-13 Live Attend Analysis

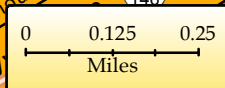


Schenectady City Schools Zoller ES 2012-13 Live Attend Analysis



Legend

- Zoller Students
- Schools**
- ES
- ▲ MS
- ★ HS
- ES Zones**
- Elmer Avenue ES
- FDR ES
- Hamilton ES
- Lincoln ES
- Paige ES
- Pleasant Valley ES
- Van Corlaer ES
- William Keane ES
- Woodlawn ES
- Yates ES
- Zoller ES



Data Source: Schenectady City Schools
Cartographer: ATC, March 2013.



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