To the Graduate Council:

I am submitting herewith a thesis written by Leif Engstrom Heg entitled "An Examination of the Relationship Between Suburban School Construction and School Enrollment." I have examined the final paper copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science in Planning, with a major in Planning.

Bruce Tonn, Major Professor

We have read this thesis
And recommend its acceptance

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Accepted for the Council:

Vice Provost and Dean of Graduate Studies

# AN EXAMINATION OF THE RELATIONSHIP BETWEEN SUBURBAN SCHOOL CONSTRUCTION AND SCHOOL ENROLLMENT

A Thesis
Presented for the
Master of Science in Planning
Degree
The University of Tennessee, Knoxville

Leif Engstrom Heg
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# DEDICATION

This Thesis is dedicated to my parents, Verna and Robert Engstrom Heg who provided me with the support, encouragement, and means to choose a new career and more meaningful life.

# ABSTRACT

The purpose of this thesis was to examine the impact of suburban school construction on public school district enrollment. A determination of a direct, positive relationship could shed light on the effect of public schools on urban migration patterns. It could also provide public school administrators with information regarding planning post-construction staffing.

In-depth data and information were collected with regard to three New York State suburban school districts that showed interesting trends in both school construction and enrollment patterns. A thorough enrollment study was conducted on these three school districts. Enrollment and school construction information was collected from 13 additional New York State suburban school districts that had experienced significant construction during the 1990's. A statistical study, comparing district-wide enrollment patterns with construction dates, was done for 15 school districts.

The study found a significant positive relationship between school construction and post-construction district-wide enrollment only when the construction project was district-wide. There was no identifiable relationship between post-construction district-wide enrollment and large construction projects involving individual schools.

There are two primary possible explanations for the results. One possibility is that district-wide projects garner enough attention to affect the housing and/or school enrollment decisions of suburban families. A second likely cause is that there was a drop in enrollment during the construction with those students returning to the public schools following construction. There is some, but far from conclusive, evidence for the second explanation in the data.

No significant data was gathered with respect to the previous enrollment of the post-construction new students. The intent of this thesis was to establish a link between enrollment levels and school construction, providing the basis for a study of the origin of post-construction enrollees.

The findings do indicate that suburban school administrators should be prepared for a moderate spike in enrollment following district-wide construction projects.

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## I. Introduction

This thesis examines the relationship between suburban school construction and public school district enrollment. It is widely accepted that public school quality has a major impact on housing markets. This is particularly applicable in areas where parents have a choice of school districts when selecting their homes.

While there is little literature documenting a connection between school facilities, school quality, and migration patterns, Maryland Governor Glendening has made some policy decisions that seem to be based on this premise. Gov. Glendening made solving the problems caused by sprawl development a major part of his administration's agenda with a smart growth initiative. Even before he put forward that initiative, the state government dramatically shifted school construction funds away from suburban schools. In 1995, 43 percent of school construction spending went to older schools while the rest went to new schools. By 1998, more than 80 percent of the state construction money went to older schools, despite the fact that suburban schools were experiencing the largest increases in enrollment. It was viewed that the new, suburban schools were adding to their own increased enrollment and that some of the students would follow the construction money to the older districts.(Freece, 1998)

The basis of this thesis is the hypothesis that school construction helps sway many parents when choosing their homes. This thesis looks for evidence of this pattern in the post-school construction enrollment figures. If newly constructed or renovated schools attract families with children, it follows that there should be a spike in enrollment following the construction. This is of particular interest to school district administrators who plan for future enrollments. An unexpected post-construction enrollment spike

could have a serious negative impact on a school district's budget, staffing and classroom capacity.

The extent to which construction affects enrollment also demonstrates public schools' effects on migration and development patterns within regions. While this does not provide a measurement of education's effects on migration and development, it does imply that there is a cause and effect relationship.

This study focuses entirely on suburban school districts in New York State. Parents in rural school districts have less school choice because their jobs often preclude the long commute that would be required if they moved to a new district. City residents may also have difficulty changing school districts. 1990 Census figures show that city residents with children are generally less affluent and more dependent on public transportation than their suburban counterparts. This thesis looks at the effects of school construction on suburbanites, who have more choices in where to locate their homes.

New York State public school district boundaries, with the exception of city school districts, do not usually follow municipal boundaries. The districts vary dramatically in size and population. A 200-student school district with only a K-3 elementary school can be surrounded by 5,000-student school districts. Major cities in New York usually have their own school districts with boundaries that follow the city lines.(Wardle 1999) Considering that most city boundaries in the State have not changed in over 100 years, New York State suburban school construction can be identified and studied with relative ease.

## II. Methodology

Three case studies generated the hypothesis for this thesis and form Chapters IV, V, and VI. Two of the case studies examine Averill Park and Ballston Spa, suburban school districts that have recently undergone major upgrades in their facilities. The third case study examines Shenendehowa, a suburban district that has experienced significant controversy due to the perceived inadequacy of its high school facilities. Both Averill Park and Ballston Spa experienced unexpected spikes in their enrollment soon after the construction was completed. Shenendehowa, on the other hand, saw its private high school enrollment go up by 34% the year following the tension and newspaper headlines.

All three of these districts have good academic reputations, with Shenendehowa having the best reputation. All three districts spend between $8,500 and $9,500 per student per year on instructional costs.

After the case studies, the thesis examines statewide enrollment patterns to verify whether the case study experiences are pervasive or isolated. The first step was to identify New York State's suburban school districts. School districts in the counties containing major cities and the adjacent counties were selected during the first cut. The New York State Education Department school construction records were then examined to determine which of these districts have had significant school construction in the recent past. The construction data are available in digital format starting with 1987 contracts. Those school districts that have had construction approved for more than $9,000 per full-time enrolled student on school construction since 1987 were selected as the second cut. Then, each of these school districts was evaluated based on commuting

distance to the central urban areas. Those school districts from the second cut that were determined to be suburban, with more than 1,000 students, make up the study group.

The $9,000 cut-off was selected as a means of paring down the field to those districts that may have had the largest construction projects.

After the school districts were selected, the historical enrollment and construction dates for each district were assembled. For the 16 years between the 1983-84 school year and the 1999-00 school year, the school district's 2nd through 12th grade enrollment was divided by the 1st through 11th grade enrollment from the previous year. This study averages these survival ratios and compares them with the survival ratios for the two years following construction completion. Kindergarten enrollments were not incorporated in this study because Kindergarten enrollment is not compulsory.

For the purposes of this study, a survival ratio is defined as the number of students in a cohort divided by the number of students in that same cohort in the previous year. For example, if there are 102 Fifth and Sixth Graders this year and there were 100 Fourth and Fifth Graders last year, the survival ratio would be 1.02 (102 students divided by 100 students.)

If the hypothesis is correct, there should be a spike in the survival ratios for the school years following construction.

This thesis will conclude that the experiences of the case study school districts were either isolated occurrences or part of a pattern that school administrators should keep in mind when planning construction.

## III. Literature Review

This thesis examines a segment of the population with many schooling options. There is limited literature about the motivations of suburban families when selecting between highly regarded public schools. There is a great amount of literature debating the merits of school choice laws and programs where a family is not required to pay tuition or move to a different home to change schools. Most of these books and articles discuss the effects of school choice on the schools from which students transfer, particularly urban schools with high minority enrollments.

The literature covering school choice issues does have some data about the motivations of families that move their children when given school choice. These motivations are relevant to this thesis, but they are the motivations of a different demographic than suburban families. Families who change their children's schools without having to change residences may have different motivating factors than families choosing between suburban housing locations. Families choosing between suburban home locations will face an array of issues such as property tax levels, commuting time, and the real estate market in making their decisions. Families given school choice without having to move will not consider the multitude of migration-related factors. They may however include such things as school safety that suburban parents are less likely to consider in choosing between affluent school districts.

The following is a summary of the literature relating to facilities' effects on enrollment.

Competition in Education: a Case Study of Interdistrict Choice, written by David Armor in 1997, is a thorough examination of 20 school districts during the first five years

after the 1991 adoption of Massachusetts' comprehensive interdistrict school choice law. Armor's study was a product of the Pioneer Institute for Public Policy Research and strongly favors school choice and a "market" approach to public education. For this thesis, the most pertinent aspect of Armor's study is his extensive surveying of parents and students who chose to change school districts. His surveys of the sending and receiving school district staff may also shed some light on the way school administrators view facilities' impact on enrollment.

Armor found that facilities were cited 60% of the time by parents as a major reason for choosing a different school district. Facilities were third behind high standards and curriculum as major reasons for school choice. Students took a different view. While standards and curriculum topped the student's list, students also picked safety and teachers ahead of facilities. Only 33% of the surveyed students selected facilities as a major reason for changing schools.

The staff surveys deviated significantly from the parent and student interviews. Staff from the receiving school districts overwhelmingly selected high standards as a major reason for choice. No other categories were selected more than 1/3 as many times as high standards. Interestingly, not even one staff member from a receiving school district selected facilities as a major reason for students changing districts. This may indicate a significant oversight on behalf of school administrators.

Naturally, staff from school districts that lost students had a very different view from the receiving staff, parents, and students. They selected race most frequently as a major reason for changing schools. Facilities came in second to race for the sender staff.

While the sociological implications of other motivations are interesting, they are outside the purview of this thesis. Three of the four surveyed groups viewed facilities as a significant factor in school choice. Remarkably, the one group that did not, the receiving staff, is the group that will be most affected by facilities issues surrounding rising enrollment. The receiving staff views indicate that this thesis may have an audience in need of information.

Choosing Schools- the Consumer's Perspective, by Anne West is an essay on different school choice studies and can be found in Parental Choice and Education: Principles, Policy and Practice, edited by Mark Halstead. In her essay, West notes that secondary school students have significant input about school choice. One study found that "Our child wanted to go to the school" was a very important reason for 38% of parents of a group of secondary school students.

If older students are given a larger say over their school choice, and if Armor's study is correct that students value facilities less than parents, it is possible that school construction has a greater impact on elementary and middle school enrollments.

In Family Choice in Schooling: Issues and Dilemmas, Michael Manley-Casimir conducted a study of a college town of 47,000 persons that had intradistrict school choice. He found that with intradistrict choice, parents place little priority on facilities. This could be because there may be little variation in facility quality within the district. Another reason for the lack of interest in facilities could be that parents may view facilities as a measure of a district's commitment to funding education. If this is the case, post-construction school enrollment spikes should include students that do not attend the new or renovated schools.

School Ways: The Planning and Design of America's Schools, written by Ben Graves in 1993, lays out the three primary forces influencing school construction. Graves ranks enrollment as the leading force while he ranks program requirements second and the need to replace outmoded facilities is third. Enrollment certainly is the major factor in new school construction, which raises a concern about this thesis. Will any spikes in enrollment be the result of good planning by school district administrators? Could they be aware of planned housing developments and expand their facilities accordingly?

The experiences of the case studies indicates that in New York the answer is no. Two of the three case studies are school districts in Saratoga County, the fastest growing county between 1990 and 2000 in Upstate New York and the third fastest growing county outside of New York City. No single subdivision in any of the case studies was large enough or developed quickly enough to create a one or two year spike in enrollment.

Graves also sites numerous city school systems in need of billions of dollars in renovations to underscore widespread inadequacies in the nation's school facilities. Widespread disparities in facility quality may help account for the importance that American parents place on facilities. A number of studies of European and New Zealand school choice found little concern about facilities.

## IV. Ballston Spa Central School District

In the 2000-01 school year, the Ballston Spa School District administration was surprised by a significant jump in enrollment. Ballston Spa's Director of Business and Support Services said that the unexpected 176-student increase almost forced the district to hire teachers on an emergency basis (Engstrom 2000).

In 1998-99, Ballston Spa opened its new High School at a cost of $46,690 per High School student (NYS Education Department). That same year, the middle school renovations were completed and the Middle School reopened. In 1997-98, the school district instituted new, more stringent promotion standards. These new academic standards created the possibility that a large number of students would need to spend five years in high school. In 1998-99 and 1999-00, after the effects of the new policy became clear, there was a major drop in the cohort survival level in the High School grades (Engstrom, 2000). In 2000-01, possibly after the students adjusted to the higher academic standards, the school district saw an unexpected enrollment increase. This chapter investigates the causes of that increase.

### A. Historical Enrollment Trends

The data shown on Table A1 represent the number of Ballston Spa students enrolled by grade between 1983-84 and 2000-01. In each year between 1991-92 and 2000-01, total enrollment increased over the previous year. The 176-student increase in 2000-01 was a return to the larger increases of the early 1990's. The enrollment increases from 1996-97 to 1999-00 averaged 68 students. By comparison, increases between 1991-92 and 1995-96 averaged 143 students. District-wide enrollment rose from a low of 2976 students in 1986-87 to an enrollment of 4381 in 2000-01, a 47% increase.

Since Kindergarten at Ballston Spa is half-day and not required, First Grade enrollment is the best measure of the size of the incoming classes. There have been three significant jumps in First Grade enrollment. As shown on Table 1, the first two were from 1984-85 to 1985-86 and from 1987-88 to 1988-89. A later jump was from 322 students in 1994-95 to 389 students in 1995-96. After each jump, the enrollment stabilized around the new level. The effects of the first two jumps can be seen in the rapid increase in high school enrollment after 1995-96. The effects of all three jumps are shown in the 70% increase in K-5 enrollment between 1984-85 and 2000-01.

- Elementary Enrollment

As shown on Table A1, in 13 out of the 14 years between 1986-87 and 2000-01, enrollment in Grades K-5 increased from the previous year. The 2000-01 K-5 enrollment of 2,164 was 82 more than in 1999-00 and represents a 32% increase over 1990-91 and a 70% increase over 1984-85.

- Middle School Enrollment

The larger incoming classes started having their impact on grades 6-8 enrollment after 1992-93. Between 1992-93 and 1996-97, 6-8 enrollment increased 29%. The 6-8 enrollment continued to grow steady but at a slower rate after 1996-97.

- High School Enrollment

After bouncing back from a low of 864 students in 1990-91, high school enrollment increased consistently in the mid-900's until 1996-97 when it climbed back over the 1,000 student mark. High school enrollment rose steadily after 1996-97, reaching 1,204 in 2000-01.

## B. Grade-To-Grade Survival Ratios

Table 1 identifies the grade-to-grade survival ratio for 1995-96 to the 1999-00 school years, comparing the five and ten-year average for each grade. The most striking element of Table 1 is the high school survival ratio. The 1997-98 academic policy changes had a significant effect on the Grade 9-12 enrollment. The 0.96 and 0.93 survival ratios for 1998-99 and 1999-00 are significantly lower than the 10 year average of 0.98. At the same time, the elementary and middle school grades had no major deviation from the historic averages. By the 2000-01 school year the turmoil over the new high school academic standards subsided and enrollment surged.

## C. Live Births and Building Activity

The number of resident live births in the Towns of Malta and Milton, and the Village of Ballston Spa between 1979 and 1998 are listed in Table A3. Though the school district encompasses only a portion of each of these towns, the number of town-wide births is the most comprehensive data set available for computing survival ratios. Between 1992 and 1998, the number of live births in these communities stayed within 25 births of 500. New York State Health Department figures show that between 1979 and 1992, there was a steady increase in the number of live births

As noted on Table A4, since 1990, with the exception of 1991, single-family home construction has stayed between 100 and 150 new homes per year. This building activity is still below the levels experienced in the late 1980's. However, due to

**Table 1**
**Grade-To-Grade Survival Ratios**

| Grade to Grade | 1999-00-2000-01 | 1998-99-1999-00 | 1997-98-1998-99 | 1996-97-1997-98 | 1995-96-1996-97 | 5-Year Average | 10-Yr Average |
|---|---|---|---|---|---|---|---|
| Birth to K | 0.68 | 0.69 | 0.68 | 0.69 | 0.73 | 0.69 | 0.73 |
| K to 1st | 1.04 | 1.06 | 1.04 | 1.08 | 1.06 | 1.04 | 1.06 |
| 1st to 2nd | 1.02 | 1.01 | 0.90 | 0.94 | 0.93 | 0.96 | 0.97 |
| 2nd to 3rd | 1.04 | 0.96 | 0.99 | 0.98 | 0.98 | 0.98 | 1.00 |
| 3rd to 4th | 1.04 | 1.01 | 0.94 | 1.00 | 0.91 | 0.98 | 0.98 |
| 4th to 5th | 1.04 | 0.99 | 1.02 | 0.98 | 1.02 | 1.01 | 1.01 |
| 5th to 6th | 1.03 | 1.02 | 1.07 | 0.98 | 0.99 | 1.02 | 1.04 |
| 6th to 7th | 1.02 | 1.05 | 1.03 | 0.99 | 1.03 | 1.02 | 1.02 |
| 7th to 8th | 1.01 | 0.99 | 1.00 | 0.96 | 1.00 | 0.99 | 0.99 |
| 8th to 9th | 1.13 | 1.03 | 1.21 | 1.03 | 1.02 | 1.09 | 1.09 |
| 9th to 10th | 0.99 | 0.83 | 0.91 | 0.95 | 0.97 | 0.92 | 0.93 |
| 10th to 11th | 0.81 | 0.86 | 0.80 | 0.94 | 0.93 | 0.87 | 0.90 |
| 11th to 12th | 0.99 | 1.06 | 0.90 | 0.95 | 1.00 | 0.98 | 1.01 |
| **1st-11th to 2nd-12th** | **1.015** | **0.981** | **0.979** | **0.976** | **0.981** | **0.986** | **0.995** |
| **1st-7th to 2nd-8th** | **1.029** | **1.005** | **0.988** | **0.977** | **0.981** | **0.996** | **1.002** |
| **8th-11th to 9th-12th** | **0.987** | **0.934** | **0.960** | **0.973** | **0.982** | **0.967** | **0.982** |

Note: Survival ratios involving Kindergarten and 9th Grade tend to be unpredictable. The live birth data are not geographically consistent with school district boundaries and Kindergarten is optional, leaving enrollment decisions completely up to the families. The 8th to 9th Grade ratio depends significantly on the academic performance of 9th grade students. A 9th Grade student can fail one class and be classified in the 9th Grade for a second year.

consistency, the 1990's saw approximately the same number of single-family homes constructed as in the 1980's. Townhouses account for most of the difference in building activity. While hundreds of townhouses were constructed during the 1980's, primarily at Luther Forest in Malta, almost none were constructed in the 1990's. Colonial Hills in Ballston Spa was originally approved for construction of 286 townhouses in the mid 1990's, but those plans were changed in favor of single family homes.

The building inspectors in the Towns of Malta and Milton have noted an apparent trend in the mobile home developments. A significant number of old mobile homes are being replaced with larger doublewide homes that are more likely to house families.

The consistent strength in building activity during the past decade can be attributed to several types of developments. Two or three large subdivisions have been under construction at any one time throughout the 1990's. In 2000, Highpointe at Malta and Kayaderosseras Estates, both single-family subdivisions, were each adding about 25 houses per year. Previously, Colonial Hills and Milton Oaks had provided similar activity. Smaller, fast-moving subdivisions, such as West Wind Hills, whose 60 single-family homes were completed in one year, also added significantly to the yearly totals. As a result the District is seeing consistent building patterns as opposed to the 1980's when the District was impacted by the development of one major subdivision, Luther Forest, with 1,323 units. Moderately low interest rates and a solid local economy, buoyed by a high level of consumer confidence, helped to maintain the consistent growth (CDRPC 2000). Ballston Spa's location, Central Saratoga County, is also considered a desirable place to live, particularly for families with children. The area served by the Ballston Spa School District is the fastest growing part of the Capital Region and the marketplace remains very

competitive, with a fairly large inventory of new and existing homes on the market throughout the Region.

In the six years between 1986 and 1991, the number of single-family housing units in the School District increased by approximately 30%(Table A4). In the nine years after 1991, the number of single-family units increased by approximately 20% while maintaining a consistent level of construction activity. These facts, combined with the Building Inspector's comments about the replacement of old mobile homes with doublewide homes, lead to the assumption that it is fairly easy for families to locate in the Ballston Spa School District.

**D. Enrollment Events**

Ballston Spa's 47% increase in enrollment between 1986-87 and 2000-01 is unmatched in the Capital Region of New York State, a region that only grew by 2% between 1990 and 2000. Ballston Spa's growth was fairly consistent between 1986 and 2000, with the largest increases coming in the five years following the 1986-1989 construction of Luther Forest (Table A4). After the large enrollment increases of the early 1990's, the enrollment increases tapered off until the large increase of 2000-01 (Table 1).

This chapter's focus is whether the 1998-99 opening of the new High School caused the 2000-01 enrollment spike. It seems easy to dismiss the suggestion that a 1998-99 school opening would have a two-year delay before impacting enrollment. However, in this case, the High School survival ratios speak to the additional impact of the new academic policies. In 1998-99 the $11^{th}$ and $12^{th}$ grade survival ratios were 10% off the ten - year average. The following year, the $10^{th}$ grade survival ratio was 10% off the ten-year average while the $12^{th}$ grade survival ratio was 5% above the 10 year average. These drastic

swings in survival ratios are likely a result of the grade assignment policy and the unease in the school community as it adjusted to the new academic policies.

As Table A5 demonstrates, the 5-8th Grade enrollment in 1995-96 had 108 more students than those same classes four years later in high school. Historically, that had not been the case. High School students left the Ballston Spa school system, most likely as a result of the new academic policies. These policies were having their impact at the same time as the new High School was opening. As a result, it is possible that the new policies delayed the positive impact of the new High School.

The remaining question is whether there could be another explanation for the 2000-01 spike in enrollment. Table A4 demonstrates that housing construction has not changed significantly since 1992. The local economy has remained stable with a strong base of government and university employment. At the same time, there were no major new employers in Saratoga County or the Capital District between 1996 and 2000 (CDRPC 2000). Census2000 showed that the Capital District's population grew by 2% in the 1990's while Saratoga County grew 10.7%. These are all indications of a stable environment where large enrollment swings would not be expected.

With a lack of alternatives and the evidence of the 1998-99 and 1999-00 High School survival ratios, there is a good likelihood that the 2000-01 spike in enrollment was a delayed result of the 1998-99 opening of the new Ballston Spa High School.

## V. Averill Park School District School Enrollment Study

Averill Park is a primarily suburban school district in Rensselaer County. Due to the rough topography in the eastern and southern portions of the district, Averill Park has large amount of sparsely populated rural land. According to the 2000 Census, most of the population is located in the northwestern portion of the district, where sewer and water services are available.

During the mid-to-late 1990's, Averill Park saw its enrollment increase dramatically, primarily due to changes in the district's policies and configuration. In 1994-95, Averill Park began accepting students from two small adjacent school districts. One school district, North Greenbush Common, has a very limited elementary program while the Wynattskill School District has a K-8 program. The following year, in 1995-96, Averill Park merged with Brunswick Common School District, a district with a K-5 program. Because of the merger, the State of New York paid for 95% of any enrollment related construction. Thanks to this largess, Averill Park embarked on a $67 million construction program. All of the district's schools were completely renovated and additions were built on to all but one school. In the 1997-98 school year, the year after the vast majority of the construction was completed, Averill Park experienced a spike in enrollment comparable to the enrollment increases resulting from the transfers and the merger. However, in 1997-98, there was no merger and there was no change in transfer policies.

This chapter will examine whether the 1997-98 jump in enrollment was a result of the district-wide construction.

## A. Historical Enrollment Trends

The data shown on Table A6 represent the number of students enrolled by grade between 1983-84 and 2000-01. The 2000-01 enrollment represents the third year of consistent District-wide enrollment. Between 1997-98 and 2000-01, the School district did not see a change of more than 21 students from the previous year. Prior to 1997-98, Averill Park underwent some dramatic enrollment increases. In four years, from 1993-94 to 1997-98, the School District experienced a 30% increase in enrollment. The 1997-98 enrollment also represented a 39% increase over the 1990-91 enrollment.

There are three factors that may account for the mid-90's enrollment increases. The first factor was the increase in live births that occurred during the late 1980's (Table A8). The second factor was the transfer of students from other school districts. The third factor was the complete renovation and expansion of the school facilities that occurred following the Brunswick Common merger.

Due to the higher number of births, larger elementary classes began replacing the smaller graduating classes of the early and mid 1990's. Soon after, in 1994-95, the School District began admitting students from the Wynantskill and North Greenbush Common school districts. The following year, Averill Park merged with the Brunswick Common School District. As a result, enrollment increased by 438 students over two years. While most of the construction was done by 1996-97, in September 1997-98 the last of the facility improvements were complete and the district experienced another surge of new students. That year, the Wynantskill and North Greenbush Common transfer enrollment more than doubled (Table A10). Thanks to the new Wynantskill and North Greenbush students and

202 other new students, the School District saw an increase of 298 students in the 1997-98 school year.

- Elementary Enrollment

Between 1998-99 and 2000-01, enrollment in Grades K-5 decreased from the previous year (Table A7). Smaller entering classes have replaced the larger "boomlet" classes as they moved into middle school. The 2000-01 K-5 enrollment represents a 7% decrease from the all-time high of 1,591 in 1997-98. Elementary enrollment increased dramatically in 1995-96 with the addition of Brunswick Common School District.

- Middle School Enrollment

Middle school enrollment increased each year between 1989-90 and 2000-01. In 2000-01, enrollment in Grades 6-8 was 62% higher than it was in 1989-90. In 1997-98, after the new facilities were completed, Grades 6-8 showed an increase of 101 students. This was largely the result of a 312-student cohort entering 6$^{th}$ Grade and a 231-student cohort entering 9$^{th}$ Grade. The increases in middle school enrollment leveled off after 1998-99.

- High School Enrollment

With the exception of 1999-00, high school enrollment has increased each year since 1993-94. Students transferred from other districts combined with larger classes to result in 329 additional high school students between 1993-94 and 2000-01.

## B. Grade-To-Grade Survival Ratios

Table 2 identifies the grade-to-grade survival ratios between 1994-95 and 2000-01 and compares them to the five and ten-year average for each grade.

**Table 2**
**Grade-To-Grade Survival Ratios**

| Grade to Grade | 1999-00-2000-01 | 1998-99-1999-00 | 1997-98-1998-99 | 1996-97-1997-98 | 1995-96-1996-97 | 1994-95 1995-96 | 5-Year Average | 10-Yr Average |
|---|---|---|---|---|---|---|---|---|
| Birth to K | 1.14 | 1.13 | 1.10 | 1.13 | 0.95 | 1.09 | 1.09 | 1.07 |
| K to 1st | 1.02 | 1.05 | 1.00 | 1.20 | 1.15 | 1.27 | 1.08 | 1.12 |
| 1st to 2nd | 1.02 | 1.01 | 1.02 | 1.00 | 0.97 | 1.06 | 1.00 | 0.97 |
| 2nd to 3rd | 1.03 | 1.01 | 1.03 | 1.11 | 1.05 | 1.15 | 1.05 | 1.04 |
| 3rd to 4th | 0.99 | 1.00 | 1.01 | 1.04 | 1.04 | 1.14 | 1.02 | 1.04 |
| 4th to 5th | 1.04 | 1.02 | 1.04 | 1.09 | 1.03 | 1.17 | 1.04 | 1.04 |
| 5th to 6th | 1.05 | 1.05 | 1.05 | 1.11 | 1.06 | 1.21 | 1.09 | 1.10 |
| 6th to 7th | 0.99 | 1.03 | 0.99 | 1.03 | 1.00 | 1.06 | 1.02 | 1.01 |
| 7th to 8th | 0.97 | 0.99 | 1.01 | 1.05 | 0.99 | 1.04 | 1.00 | 1.00 |
| 8th to 9th | 1.13 | 1.09 | 1.18 | 1.19 | 1.10 | 1.03 | 1.14 | 1.09 |
| 9th to 10th | 0.96 | 0.94 | 1.07 | 1.14 | 0.91 | 1.02 | 1.00 | 1.01 |
| 10th to 11th | 0.85 | 0.82 | 0.91 | 1.12 | 1.00 | 1.02 | 0.93 | 0.97 |
| 11th to 12th | 0.96 | 0.89 | 0.91 | 1.08 | 0.93 | 0.99 | 0.95 | 0.99 |
| **1st-11th to 2nd-12th** | **1.00** | **0.99** | **1.02** | **1.08** | **1.01** | **1.08** | **1.02** | **1.02** |
| *Change in District Enrollment* | *+7* | *-31* | *+20* | ***+298*** | *+71* | ***+262*** | | |

Note: Survival ratios involving Kindergarten and 9th Grade tend to be unpredictable. Kindergarten is optional, leaving enrollment decisions completely up to the families. The 8th to 9th Grade ratio depends significantly on the academic performance of 9th grade students. A 9th Grade student can fail one class and be classified in the 9th Grade for a second year.

From 1998-99 to 2000-01, survival ratios were similar to the historic averages. The ratios show that the enrollment increase in 1995-96 only affected the elementary grades while the 1997-98 enrollment jump was spread throughout the grades. The 1995-96 increase was due to the merger with Brunswick Common, which only had a K-6 program. Reasons for the 1997-98 increase are harder to pin down.

In 1997-98, enrollment from Wynattskill (Grades 9 to 12) increased by 72 students while enrollment from North Greenbush Common increased by 24 students (Table A10). There was no change in policy regarding these districts until the 1999-00 school year, when transferring from Wynatskill began to be phased out.

If the Wynatskill and North Greenbush Common Students are removed from the totals, the 1997-98 $1^{st}$-$11^{th}$ to $2^{nd}$-$12^{th}$ survival ratio drops to 1.05, still significantly higher than years when there were no mergers or changes in transfer policies.

## C. Live Births and Building Activity

The number of resident live births since 1979 in the Towns of Poestenkill, Sand Lake and 50% of the live births in the town of North Greenbush are listed in Table A8. Though these towns only cover part of the school district, the number of town-wide births is the most comprehensive data set available. These Towns were chosen because they represent the vast majority of the School District's population and they produced the strongest correlation with First Grade enrollment. Table A8 displays a strong correlation between live births and $1^{st}$ Grade enrollment six years later. Between 1985 and 1993, the number of live births per year averaged 210 while in the five years before and after they averaged 192.

As shown in Table A9, since 1990, single-family home construction has stayed between 65 and 91 new homes per year. Since no significant increases or decreases in home

building have been experienced, building activity has not likely changed the survival ratios during the 1990's.

The second half of the 1980's did see a rapid increase in housing activity. Averill Park School District went from 35-40 home starts per year in the early 1980's to well over 100 by the end of the decade. This surge coincided with the rise in the number of live births. Not coincidentally, the District saw increasing class sizes five to six years after the beginning of the surge in home construction and the rise in live births.

The northwest part of the Averill Park School District is experiencing the vast majority of the residential growth. The Town of North Greenbush, on the west side of the district, has experienced the most development activity. With the 100-lot Lake Meadows subdivision and the 42-lot Hills of North Greenbush subdivision under construction, North Greenbush has seen significant growth for a relatively small area of the School district. The areas around West Sand Lake and Averill Park are also experiencing a moderate level of subdivision activity.

**D. Enrollment Events**

The municipalities in Averill Park School District have experienced slow growth during the 1990's. The highest growth rate was in the Town of Sand Lake with 7% growth (2000 Census). With this slow growth and the consistently low level of residential construction, sharp increases in enrollment should have identifiable, non-growth related causes.

In 1994-95, the first year that Wynatskill High School students were allowed to transfer to Averil Park, the rise in enrollment was seen primarily in the High School. There was an unprecedented 108-student increase in 1994-95 High School enrollment. The 8$^{th}$

through 11th Grade cohorts from the previous year would have suggested a 30-student increase in High School enrollment. School records indicate that 45 Wynantskill students enrolled at Averill Park in 1994-95. It is clear that the 1994-95 increase in enrollment was significantly influenced by the new transfers.

In 1995-96, the year that Brunswick Common's K-5 program merged with Averill Park, the K-5 enrollment saw a 262 student increase that corresponded directly with the Brunswick Common enrollment. The cause of the 1995-96 increase is clearly due to the merger.

Between 1995-96 and 1998-99, Averill Park made no changes in transfer policies and did not form any new mergers. However, in the 1997-98 school year, Averill Park's enrollment was up in all grades. This happened despite no significant change in residential building patterns or birth rates. The one thing that did happen before 1997-98 was the completion of the $67 million in construction projects associated with the Brunswick Common merger.

The 1997-98 enrollment was 298 students higher than the previous year. The increase in transfers from other districts was significant. There were 96 additional students from Wynantskill and North Greenbush Common (Table A10). This still leaves 202 new students attending Averill Park Schools.

One could question whether the classes were overcrowded before the construction. That might result in a return of students to a newly adequate school situation in 1997-98. There are two pieces of evidence against this argument. The teacher-student ratio at Averill Park was 16 to 1 before and after the construction. Additionally, New York State sets strict requirements for class sizes. There were no reports of any violations of state class size

standards before the construction. Unfortunately, records on average class sizes were not reported by New York State until the 1997-98 school year, making it difficult to completely rule out this scenario. (NYS Education Department)

## VI. Shenendehowa Central School District Enrollment Study

During the 1999-00 school year, a controversy over the Shenendehowa High School facilities came to a head. The District residents voted down two construction bond issues. In the next school year private school enrollment saw a noticeable increase, particularly in the upper grades. The controversy was resolved during the 2000-01 school year, but the process may have exposed a negative side of the relationship between facilities and enrollment.

### A. Historical Enrollment Trends

The data shown on Table A11 represent the number of students enrolled by grade between 1980-81 and 2000-01. While enrollment declined considerably during the first half of the 1980's, from a high of 8,771 in 1980 to a low of 7,662 in 1985, it did show consistent increases through the 1999-00 school year. Excluding un-graded students, enrollment rose from 7,662 students in 1985-86 to a high of 8,622 in 1999-00. This represented an increase of 960 students or 12.5% in 14 years. The 2000-01 enrollment of 8,453, a drop of 169 students, was a sharp reversal in this trend and represents the lowest enrollment since the 1992-93 school year. Three factors help to account for the 2000-01 drop in enrollment: higher private school enrollment (Tables A16 and A17), the Waterford-Halfmoon Central School District waiving out-of-district tuition, and the seven-year gradual trend toward lower elementary school enrollment.

- Elementary Enrollment

As shown on Table A12, in six of the seven years between 1994-95 and 2000-01, enrollment in Grades K-5 declined from the previous year. The 2000-01 K-5 enrollment of

4,060, 69 fewer than the previous year, was the lowest since the 1989-90 school year, and represented a 6% decrease from the high of 4,334 in 1993-94. The declining K-5 enrollment is in contrast with the earlier increases. For the ten-year period leading up to 1994-95, there had been steady enrollment increases in Grades K-5. Between the 1984-85 and 1993-94 school years, enrollment for this group increased by 1,196 students or 38.1%. These increases coincide with the 1983-1989 spike in building activity shown in Table A14 and the 1982-1990 rise in live births shown in Table A13.

- Middle School Enrollment

A grade reconfiguration made it necessary to reclassify sixth grade Special Education students previously included in the regular class population. As a result, in 1995-96, the Sixth Grade special education students became non-graded and were not included in the by-grade enrollment figures. This change skews calculations comparing Sixth Grade enrollments from before and after the 1995-96 school year.

Enrollment in Grades 6-8 increased significantly between 1987-88 when there were 1,694 students and 1994-95, when there were 2,005 students. This increase coincided with the larger elementary classes leaving Fifth Grade. In 1998-99, there were 2,010 Middle School students, excluding the 56 reclassified sixth graders receiving Special Education services. In 2000-01, enrollment in grades 6-8 declined to 1,907 students, 103 fewer than 1998-99. Some of this decline can be attributed to higher private school enrollments. Table A16 shows that there was a 68-student or 44% increase in private school enrollment for Grades 6-8 between 1998-99 and 2000-01. At the same time, Fifth Grade classes were getting smaller, providing fewer potential private school students (Table A11). The result

was an even higher percentage of middle school students in private school. Between 1998-99 and 2000-01, private middle school enrollment as a percentage of Shenendehowa Middle School enrollment went from 8% to 12%.

- High School Enrollment

During the ten-year period after 1984-85, enrollment in Grades 9-12 steadily declined. There was a decrease of 529 students or 19.1% between 1984-85 and 1994-95. From the mid-1990's through 1999-00, 9-12 enrollment saw steady increases. From 1994-95 through 1999-00, enrollment increased by 295 students or 13.2%. The 2000-01 enrollment was 2,486 students, a decrease of 43 from the previous year. The decrease is somewhat surprising, since the 6-8 enrollment peaked when it included the same cohorts in 1998-99. A possible cause for the decrease was the marked increase in the private school enrollment for the 2000-01 $10^{th}$ and $11^{th}$ grade classes.

**B. Grade-To-Grade Survival Ratios**

A review of the historical grade-to-grade survival ratios shows a downward trend for selected grades from historical averages. Table 3 identifies the grade-to-grade survival ratio last year compared the five and ten-year average for each grade. The K-5 survival ratios for 2000-01 were generally lower than the historical five- and ten-year averages. With the exception of the Grade 4 to 5 ratio, all the Elementary survival ratios were less than or equal to the historical averages. The most significant deviation was the Birth-to-Kindergarten ratio, which was 11% lower than the 5-year average and 14% lower than the 10-year average. This change is partially due to the 2000-01 elimination of out-of-district tuition in

**Table 3**
**Grade-To-Grade Survival Ratios**

| Grade to Grade | 1999-00-2000-01 | 1998-99-1999-00 | 1997-98-1998-99 | 1996-97-1997-98 | 1995-96-1996-97 | 5-Year Average | 10-Yr Average |
|---|---|---|---|---|---|---|---|
| Birth to K | 0.84 | 0.95 | 1.02 | 0.97 | 0.99 | 0.95 | 0.98 |
| K to 1st | 1.06 | 1.11 | 1.06 | 1.04 | 1.06 | 1.06 | 1.05 |
| 1st to 2nd | 0.98 | 1.00 | 1.01 | 0.99 | 1.03 | 1.00 | 0.99 |
| 2nd to 3rd | 1.00 | 1.03 | 1.00 | 1.02 | 1.02 | 1.01 | 1.00 |
| 3rd to 4th | 0.96 | 1.00 | 1.01 | 1.01 | 0.99 | 0.99 | 1.00 |
| 4th to 5th | 1.02 | 0.98 | 1.00 | 1.02 | 1.00 | 1.01 | 1.00 |
| 5th to 6th | 0.90 | 0.90 | 0.90 | 0.91 | 0.91 | 0.90 | NA |
| 6th to 7th | 1.01 | 0.99 | 1.03 | 1.00 | 1.02 | 1.01 | NA |
| 7th to 8th | 0.97 | 0.98 | 1.00 | 1.01 | 0.98 | 0.99 | 0.99 |
| 8th to 9th | 1.01 | 1.03 | 0.98 | 0.99 | 1.00 | 1.00 | 1.00 |
| 9th to 10th | 0.95 | 0.99 | 0.97 | 0.99 | 0.99 | 0.98 | 0.99 |
| 10th to 11th | 0.95 | 1.00 | 0.96 | 0.93 | 0.93 | 0.95 | 0.96 |
| 11th to 12th | 0.93 | 0.93 | 0.92 | 0.96 | 0.93 | 0.93 | 0.95 |
| **1st-11th to 2nd-12th** | **1.00** | **0.99** | **1.02** | **1.08** | **1.01** | **1.08** | **1.02** |

Note: Survival ratios involving Kindergarten and 9th Grade tend to be unpredictable. Kindergarten is optional, leaving enrollment decisions completely up to the families. The 8th to 9th Grade ratio depends significantly on the academic performance of 9th grade students. A 9th Grade student can fail one class and be classified in the 9th Grade for a second year.

the Waterford-Halfmoon School District. Of the 52 Shenendehowa students that chose to attend Waterford-Halfmoon, 20 of them were Kindergarteners.

The 2000-01 survival ratios for the middle school grades were mixed but very close to the historical ratios. The ten-year averages are not available for Grades 5 to 6 and 6 to 7 due to the changes in the school district's configuration and the reclassification of sixth graders receiving resource room services.

In the high school, the 2000-01 survival ratios for all grades were lower compared to the prior year. The 2000-01 ratios were also generally lower than the historical averages. The only exception is the Grade 8 to 9 ratio which was slightly higher than the 5 and 10 year averages. Ninth Grade enrollment is generally unstable because of promotion policies. A $10^{th}$ Grade student can repeat one $9^{th}$ Grade class and be classified in the $9^{th}$ Grade.

The 2000-01 Grade 9 to 10 survival ratio hit a 20-year low. That 2000-01 low can be partially credited to the private school enrollment of this cohort increasing by 16 students (compared to an increase of 4 for last year's cohort as shown in Table A17).

## C. Live Births and Building Activity

The number of resident live births in the Towns of Clifton Park, Halfmoon, and Waterford, and the Village of Round Lake since 1975 are listed in Table A13. Though the school district encompasses only a portion of each of these towns, the number of town-wide births is the most comprehensive data set available for computing survival ratios. Between 1985 and 1994, the number of live births in these communities, with the exception of 1990, were in the mid-to-high 600 range. Between 1995 and 2000-01, has been a slight increase in the number of live births.

As noted on Table A14, between 1998 and 2000, single-family home construction

was higher than previous years. Though there was an increase in construction activity during the time between 1998 and 2000, the activity was still well below the levels experienced during the mid and late 1980's. The increase in single-family home construction between 1998 and 2000 was offset by the decline in the number of apartment units being built in the District. In 2000, only 18 apartment units were constructed in the District, compared to 282 in 1996, 336 in 1997, and 154 in 1998. This decline in apartment construction is primarily attributable to the completion of several apartment complexes located in the Town of Halfmoon. Between 1997 and 1999, construction was completed at The Landings, a 240-unit apartment complex, Carole Jean and Cranberry Estates, 96- and 88-unit apartment complexes, respectively, and an additional 24 units at Squire Park Apartments located on Sitterly Road.

The increase in housing activity between 1998 and 2000 can be attributed to several factors. Building activity was initiated in several previously approved subdivisions, including The Oaks, Somerset and Sun Meadows (formerly a part of Peacock Glen) in Clifton Park, Windsor Pointe, also in Clifton Park, Kingsbrook Estates in Halfmoon, and Burton Meadows in Malta. There has also been a noticeable increase in activity in several of the subdivisions throughout the district (Towns of Clifton Park and Halfmoon planning and building departments). The southern part of Saratoga County is considered a desirable place to live, particularly for families with children. According to the 2000 Census, the area served by the Shenendehowa School District is the fastest growing part of the Capital Region.

**D. Enrollment Events**

The Shenendehowa School District's total population increased by 16% between

1990 and 2000 (Census Bureau). Residential construction in Shenendehowa is strong by Upstate New York standards and the number of live births is at near-record levels. With these numbers, school enrollment would be expected to increase. Instead, enrollment, particularly elementary enrollment, is steady to declining. A large part of the explanation for this is private school enrollment. Tables A15 and A16 show that private school enrollment has gone from approximately 5% of Shenendehowa's enrollment in 1991-92 to a likely 10% in 2000-01. As shown in the Historic Enrollment Trends, these changes were not large enough to have a noticeable effect on year-to-year survival ratios. However, this trend does show that residents of Shenendehowa School District have the means, and frequently the inclination, to move their children to different educational settings. This, in turn, makes a recent controversy over school facilities interesting with respect to enrollment.

Shenendehowa High School consists of two instructional buildings, the original High School and Junior High. The original High School is now called High School West while the original Junior High is High School East. High School West can hold one and a half grade levels at current enrollment levels, while High School East holds a maximum of two and a half grade levels. During the late 1990's, pressures from new state standards for graduation and the viewed inadequacy of the split-grade situation created community pressure for change. In 1999-00, the Shenendehowa Board of Education put two construction bond issues before the voters. Because both of these construction plans proposed the creation of a "two house" system with each High School housing separate ninth through 12$^{th}$ grade classes, both bond issues were defeated amidst significant controversy. (Times Union, 2000)

In the 2000-01 school year, the Shenendehowa Board of Education put forward a

bond issue that expands High School East to house grades 10, 11, and 12 with the entire Ninth Grade attending High School West. The voters approved this bond issue by an almost three-to-one margin.

In 2000-01, the year after the bond issues were defeated, private school enrollment was up by 15%, or 130 students over 1999-00 and 25%, or 199 students over 1998-99. Every cohort in 2000-01, with the exception of the 1st grade class, saw an increase in private school enrollment (Table A17). The 2000-01 10th and 11th grade cohorts showed especially large increases in private school enrollment. Both cohorts had private school enrollments increase by more than 30% over 1999-00 (Table A17). Compared to the increase for the 1999-00 10th and 11th grade cohorts, (both well under 10%), 2000-01 represents a significant jump. In spite of the consistent increases in Shenendehowa private school enrollment, the 2000-01 increase was unprecedented.

Without conducting a highly personal survey, there is no way to definitively say that the facilities controversy was the reason for the large jump in private school enrollment in the upper grades. One thing that can be eliminated is academic performance. Between 1987-88 and 1997-98, Shenendehowa Schools have consistently had among the highest percentages of Regents diplomas and students going on to college in the four-county Capital District. (NYS Department of Education) Construction patterns, live birth data, and migration patterns remained consistent between 1996 and 2000. There is also no sign that the School District became a less desirable location during this period.

In 1998, a major private high school, Christian Brothers Academy (CBA), did move to a location closer to Shenendehowa School District. It is a possibility that the rise in private school enrollment was a result of this move. However, Shenendehowa's private

school records show an increase of only four students attending CBA in 2000-01.

The economy was especially strong before the 2000-01 school year, but it had been strong throughout the late 1990's. The economy may have helped parents in their ability to change schools. However, if the economy is a major player in short-term private school enrollment trends, we should have seen a decline during recessions. In contrast, Shenendehowa saw a 10% increase in private school enrollment for the 1992-93 school year, during the 1991-1993 recession. Additionally, at no point during Governor Pataki's 1994 cuts in government employment, which sent the local economy into recession (Wardle, 2000), did Shenendehowa private school enrollment decline (Table A16). The principal variable leading up to the 2000-01 school year was the controversy and uncertainty over the High School facilities and their configuration.

Another development was that in 2000-01, the Waterford-Halfmoon School District started a 3½-year trial plan to eliminate tuition for out-of-district students. The objective is to increase enrollment from approximately 870 to 1000 students. This year, 52 Shenendehowa students enrolled at Waterford-Halfmoon. Most significant are the 20 Kindergarteners who enrolled. There were less than 10 high school students who transferred to the Waterford-Halfmoon District, which includes some older urban core areas and does not share Shenendehowa's academic reputation. The primary reason for some Shenendehowa students to attend Waterford-Halfmoon is the much shorter trip to the Waterford-Halfmoon schools. (Times Union, Sept. 2000)

## VII. Comparison of the Enrollment Studies

The three case studies showed a strong possibility that suburban public school facilities have a direct impact on enrollment and, in turn, on the location of suburban families. While the spike in private school enrollment in Shenendehowa showed little with respect to the location of families, it did demonstrate the willingness of families to change educational settings due to a facilities controversy.

The Ballston Spa and Averill Park studies demonstrated, through a lack of other obvious explanation, that new facilities may attract students at a rate that can have serious staffing consequences. Because neither school district has more than 10 students paying out-of-district tuition, it can be assumed that most of the increase in enrollments was a result of families locating in the school district.

There are certainly other possible explanations for the enrollment changes in these three districts. The higher educational standards at Ballston Spa could have drawn new families to the District and Averill Park could have had a similar occurrence. The Shenendehowa High School students that transferred to private schools could have had a problem with an administrator or a group of parents could have had a financial windfall.

All of the above are possibilities, which requires the examination of a larger group of school districts. The following chapter analyzes the enrollments of 14 other suburban school districts. The analysis examines the district-wide survival ratios for school districts that have had significant construction projects during the 1990's.

## VIII. Analysis of Suburban New York State Enrollment Patterns with Respect to School Construction Activity.

In the selection process described in Chapter II, 25 school districts met the final criteria. They are suburban school districts, they had significant construction approved after 1987, and they have enrollments of greater than 1,000 students. The task for this analysis is to compare the construction completion dates with the school districts' survival ratios.

Unfortunately, the New York State Education Department does not keep records on the completion dates of construction projects. It does keep records of the contract approval dates, however that is not a reliable indicator of the completion date. As a result, the construction date information needed for this analysis had to be gathered from the individual school districts. Of the 24 districts, two were studied earlier in this thesis. They were Averill Park and Ballston Spa. Two others had approved construction contracts but had not completed construction at the time of this study. These two, Schodack and Central Square were not included.

Mount Sinai School District went through some major changes at the time of construction. Mount Sinai expanded from a K-9 program to a full K-12 program, making survival ratios incomparable to the other districts. As a result Mount Sinai was not included. Of the remaining 20 school districts, 13 responded to phone calls with useable information.

Data about these 13 districts, along with Averill Park and Ballston Spa School Districts, are displayed in Tables A18 through A32 and in Figures A3 through A17. Each of these figures displays a graph showing the district-wide survival ratio for 2$^{nd}$ through

12th Grades compared to 1st through 11th grades the previous year. Each of these figures also has at least one arrow indicating the year of a major construction project completion. Each of these tables displays the historical enrollment for an individual district, the survival ratios, and the district's construction information.

Tables A18-A32 and Figures A3-A17 make it clear that this collection of 15 school districts do not have a significant enrollment pattern associated with construction activity. While eight of the school districts did experience a rise in enrollment either the year of completion or the following year, four actually had negative survival ratio trends associated with the completion of the construction. As shown in Figure 1, there is no consistent pattern when the construction-related survival ratios are compared with the 16-year historical averages.

While this would seem to preclude a connection between construction activity and enrollment, a closer look at the amount of construction reveals a significant pattern. Of the seven school districts where construction affected 100% of the student body in the same year, six had a sizeable survival ratio increase in the year following the construction completion. In each of these six cases, the survival ratio was more than 1.4% greater than the 16-year average. Table 4 lists the seven school districts and the relevant data.

| # of Survival Ratios Less Than Historic Average | # of Survival Ratios Less Than 1% Greater Than Historic Average | # of Survival Ratios More Than 1% Greater Than Historic Average |
|---|---|---|
| 15 | 9 | 11 |

**Figure 1: Post-Construction Survival Ratios Compared With Historic Averages**

## Table 4

## Survival Ratios for School Districts with District-wide Construction

| School District | Survival Ratio For the Year of Completion | **Survival Ratio For the Year Following Completion** | 16-Year Average Survival Ratio | % Difference Between the Completion Yr and Following Year | % Difference Between 16 Yr Average and Following Year |
|---|---|---|---|---|---|
| **Elmira Heights** | 1.01 | **1.02** | 0.98 | 0.54% | 4.11% |
| **Holland** | 0.98 | **1.00** | 0.99 | 1.80% | 1.40% |
| **Sauquoit Valley** | 0.98 | **1.03** | 1.01 | 5.04% | 1.80% |
| **Averill Park** | 1.01 | **1.09** | 1.01 | 7.98% | 7.68% |
| **Schuylerville** | 0.97 | **1.00** | 0.99 | 3.35% | 1.46% |
| **Hampton Bays** | 1.01 | **1.03** | 1.01 | 1.73% | 1.99% |
| **Katonah Lewisboro** | 1.00 | **1.00** | 1.01 | -0.03% | -0.67% |

It should be noted that this study did not investigate the nature of the individual construction projects. The presumption that the projects were district-wide is based on records the State data base that specify how many students attend the schools where the construction occurred. The database does not specify the nature of the construction.

It appears that the construction-related enrollment spikes frequently occur when the construction project covers the entire district. The fact that Katonah-Lewisboro was in the process of a merger at the time of the construction might explain its deviation.

It is noticeable that the enrollment in the year of completion was generally lower than the historic averages, possibly as a result of the construction activity. This might indicate that the survival ratio rise in the following year is a result of the construction activity coming to an end. Such a rebound effect is a real possibility and further study would be required to determine the true cause of the spike.

## IX. Conclusion

The three case studies indicated that there might be a facility-enrollment connection in suburban public schools. Averill Park provided by far the most conclusive evidence of this connection with its dramatic rise in enrollment following the district-wide construction project. Interestingly, the results of the statistical analysis indicate that only school districts with district-wide construction projects consistently experienced jumps in enrollment. Even large construction projects that affected only a segment of the school district do not appear to have any similar impact on 1-12 Grade enrollment.

The most obvious conclusion would be that larger, broader school construction projects attract more attention and thus families to the new schools. However, that conclusion would be premature without further study. There are other possibilities such as a depression in enrollment during construction and a resulting rebound following construction. A determination of the cause of the spike would require an in depth study of each of the seven school districts that had district-wide construction.

There are numerous avenues of further study that could be followed based on the results of this thesis. One possibility would be an in-depth analysis of each of the seven school districts with district-wide construction. This analysis should explore the previous enrollment of the students for the years in question, the nature of the construction projects, and any patterns in the marketing of the school districts' real estate. Another avenue for further study would emphasize a more in-depth statistical analysis of the existing data. This would look particularly at regression models comparing enrollment trends to assorted variables including, but not limited to, the cost of construction, the grades affected by the construction, and the type of construction. This analysis should

also include a control-group of school districts that did not experience heavy construction.

In Competition in Education, Armor discovered that there is an almost complete dichotomy between the views of administrators at schools that receive transfer students and administrators at schools that lose transfer students. As discussed in Chapter III, none of the administrators who were net receivers of transfer students believed (or willing to admit they believed) that school facilities were a factor in the students' transfer decision. At the same time, a significant portion of the administrators losing students, the transferring students, and the students' parents listed facilities as a major reason for the transfers. The results of this thesis indicate that suburban school districts undertaking district-wide construction projects should plan for a moderate spike in enrollment during the year following the completion of the construction projects. If Armor's surveys were accurate, administrators of school districts that gain transfer students may not be aware that they might want to plan for the impact of new or renovated facilities on their enrollment.

In contrast to the lack of recognition from the receiving-school administrators, the Governor of Maryland has embarked on significant policy shifts based on the principle that there is a school construction-enrollment relationship. His premise is that removing school construction funding from the suburbs and expanding it in urban areas will help shift the migration patterns back to the older urban areas. While there is little prior research establishing the construction-enrollment link, it appears that the link is intuitive enough for some lawmakers to use it to make major shifts in resources.

While this thesis does not explore the effect of facility construction on urban school enrollment, it does establish a likely link between suburban district-wide construction and district-wide enrollment. Further study may create a clearer picture of the construction-enrollment relationship and provide policy-makers and school planners with accurate information for their decisions.

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Wardle, D.L. 2000. *Economic Update for the Capital District.* Albany, NY: Capital District Regional Planning Commission.

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Administrative Offices of the following School Districts responded with completion dates for construction projects:

Clarence CSD
East Aurora UFSD
Elmira Heights CSD
Guilderland CSD
Hampton Bays UFSD
Holland CSD
Jamesville-Dewitt CSD
Jordan Elbridge CSD
Katonah Lewisboro UFSD
Monroe Woodbury CSD
Nyack UFSD
Saquoit Valley CSD
Schylerville CSD

# APPENDIX

# TABLE A1

## Ballston Spa Central School District

## Historical School Enrollment : 1983-1984 to 2000-2001

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 223 | 219 | 239 | 218 | 285 | 275 | 262 | 313 | 304 | 297 | 316 | 357 | 361 | 342 | 352 | 354 | 342 | 352 |
| 1 | 212 | 199 | 246 | 252 | 244 | 324 | 312 | 292 | 334 | 345 | 322 | 322 | 389 | 381 | 369 | 367 | 356 | 355 |
| 2 | 209 | 232 | 204 | 224 | 253 | 220 | 268 | 295 | 285 | 319 | 342 | 309 | 325 | 365 | 360 | 334 | 372 | 364 |
| 3 | 190 | 209 | 233 | 203 | 220 | 252 | 236 | 273 | 303 | 290 | 314 | 326 | 324 | 320 | 358 | 355 | 319 | 386 |
| 4 | 203 | 201 | 218 | 230 | 205 | 234 | 239 | 224 | 274 | 301 | 282 | 314 | 326 | 296 | 321 | 335 | 360 | 334 |
| 5 | 230 | 192 | 211 | 212 | 241 | 210 | 228 | 238 | 236 | 274 | 311 | 282 | 314 | 331 | 290 | 327 | 333 | 373 |
| 6 | 237 | 229 | 198 | 205 | 219 | 251 | 221 | 232 | 260 | 245 | 297 | 324 | 297 | 311 | 326 | 311 | 332 | 344 |
| 7 | 253 | 246 | 238 | 201 | 222 | 225 | 263 | 229 | 243 | 248 | 257 | 293 | 335 | 307 | 308 | 335 | 328 | 338 |
| 8 | 250 | 249 | 237 | 230 | 222 | 224 | 213 | 255 | 221 | 246 | 255 | 249 | 293 | 335 | 295 | 308 | 332 | 331 |
| 9 | 347 | 303 | 309 | 296 | 262 | 243 | 246 | 248 | 302 | 243 | 257 | 260 | 269 | 300 | 346 | 359 | 317 | 378 |
| 10 | 271 | 253 | 252 | 253 | 259 | 213 | 210 | 222 | 239 | 270 | 225 | 244 | 251 | 260 | 285 | 315 | 297 | 313 |
| 11 | 242 | 221 | 201 | 223 | 230 | 226 | 201 | 194 | 213 | 210 | 243 | 223 | 233 | 234 | 244 | 229 | 274 | 241 |
| 12 | 262 | 248 | 237 | 229 | 233 | 228 | 219 | 200 | 207 | 222 | 229 | 249 | 215 | 233 | 223 | 220 | 243 | 272 |
| **Total** | **3,129** | **3,001** | **3,023** | **2,976** | **3,095** | **3,125** | **3,118** | **3,215** | **3,421** | **3,510** | **3,650** | **3,752** | **3,932** | **4,015** | **4,077** | **4,149** | **4,205** | **4,381** |

# TABLE A2

## Ballston Spa Central School District

## Aggregated School Enrollment: 1983-84 to 2000-2001

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K-5 | 1267 | 1252 | 1351 | 1339 | 1448 | 1515 | 1545 | 1635 | 1736 | 1826 | 1887 | 1910 | 2039 | 2035 | 2050 | 2072 | 2082 | 2164 |
| 6-8 | 740 | 724 | 673 | 636 | 663 | 700 | 697 | 716 | 724 | 739 | 809 | 866 | 925 | 953 | 929 | 954 | 992 | 1013 |
| 9-12 | 1122 | 1025 | 999 | 1001 | 984 | 910 | 876 | 864 | 961 | 945 | 954 | 976 | 968 | 1027 | 1098 | 1123 | 1131 | 1204 |
| **Total** | **3,129** | **3,001** | **3,023** | **2,976** | **3,095** | **3,125** | **3,118** | **3,215** | **3,421** | **3,510** | **3,650** | **3,752** | **3,932** | **4,015** | **4,077** | **4,149** | **4,205** | **4,381** |

Source: Ballston Spa Central School District Fall Enrollment Figures

# TABLE A3

**Ballston Spa Central School District**
**Town of Malta, Town of Milton,**
**and the Village of Ballston Spa**
**Number of Live Births: 1979-1998**

| Year of Birth | Number of Births | Yr. to Enter First Grade | Number of First Grade Students | Survival Ratio |
|---|---|---|---|---|
| 1979 | 297 | 1985 | 246 | 0.82828 |
| 1980 | 326 | 1986 | 252 | 0.77301 |
| 1981 | 309 | 1987 | 244 | 0.78964 |
| 1982 | 321 | 1988 | 324 | 1.00935 |
| 1983 | 360 | 1989 | 312 | 0.86667 |
| 1984 | 350 | 1990 | 292 | 0.83429 |
| 1985 | 347 | 1991 | 334 | 0.96254 |
| 1986 | 423 | 1992 | 345 | 0.81560 |
| 1987 | 412 | 1993 | 322 | 0.78155 |
| 1988 | 377 | 1994 | 322 | 0.85411 |
| 1989 | 447 | 1995 | 389 | 0.87025 |
| 1990 | 475 | 1996 | 381 | 0.80211 |
| 1991 | 468 | 1997 | 369 | 0.78846 |
| 1992 | 513 | 1998 | 367 | 0.71540 |
| 1993 | 519 | 1999 | 356 | 0.68593 |
| 1994 | 498 | 2000 | 355 | 0.71285 |
| 1995 | 518 | 2001 | - | |
| 1996 | 498 | 2002 | - | |
| 1997 | 482 | 2003 | - | |
| 1998 | 475 | 2004 | - | |

Source: NYS Department of Health, Division of Biometrics

# TABLE A4

## Ballston Spa Central School District

## Number of Housing Units by Type

| | Total Beginning of the Year | | | | | Net Change During Year | | | | | Total End of Year | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | S.F. | T.H. | Duplex | Apt. | M.H. | S.F. | T.H. | Duplex | Apt. | M.H. | S.F. | T.H. | Duplex | Apt. | M.H. |
| 1982 | | | | | | 19 | 70 | -2 | 22 | 32 | | | | | |
| 1983 | | | | | | 47 | 70 | 0 | 95 | 28 | | | | | |
| 1984 | | | | | | 63 | 50 | 0 | 32 | 39 | | | | | |
| 1985 | | | | | | 94 | 32 | 14 | 21 | 71 | | | | | |
| 1986 | | | | | | 198 | 120 | 28 | 1 | 26 | | | | | |
| 1987 | | | | | | 218 | 75 | 18 | 84 | 36 | | | | | |
| 1988 | | | | | | 138 | 200 | 30 | 108 | 44 | | | | | |
| 1989 | | | | | | 212 | 260 | -2 | 68 | 13 | | | | | |
| 1990 | 4,452 | 723 | 654 | 1,133 | 1,853 | 134 | 0 | 10 | 40 | 0 | 4,586 | 723 | 684 | 1,173 | 1,853 |
| 1991 | 4,586 | 723 | 684 | 1,173 | 1,853 | 210 | 22 | 20 | 0 | 0 | 4,796 | 745 | 704 | 1,173 | 1,853 |
| 1992 | 4,796 | 745 | 704 | 1,173 | 1,853 | 143 | 0 | 2 | 0 | 0 | 4,939 | 745 | 706 | 1,173 | 1,853 |
| 1993 | 4,939 | 745 | 706 | 1,173 | 1,853 | 135 | 0 | 12 | 0 | 0 | 5,074 | 745 | 718 | 1,173 | 1,853 |
| 1994 | 5,074 | 745 | 718 | 1,173 | 1,853 | 100 | 0 | 6 | 0 | 1 | 5,174 | 745 | 724 | 1,173 | 1,854 |
| 1995 | 5,174 | 745 | 724 | 1,173 | 1,854 | 109 | 0 | 6 | 18 | 1 | 5,283 | 745 | 730 | 1,191 | 1,855 |
| 1996 | 5,283 | 745 | 730 | 1,191 | 1,855 | 134 | 0 | 0 | 0 | 0 | 5,417 | 745 | 730 | 1,191 | 1,855 |
| 1997 | 5,417 | 745 | 730 | 1,191 | 1,855 | 122 | 0 | 4 | 8 | 0 | 5,539 | 745 | 734 | 1,199 | 1,855 |
| 1998 | 5,539 | 745 | 734 | 1,199 | 1,855 | 116 | 0 | 0 | 4 | 0 | 5,655 | 745 | 734 | 1,203 | 1,855 |
| 1999 | 5,655 | 745 | 734 | 1,203 | 1,855 | 128 | 0 | 0 | 12 | 0 | 5,783 | 745 | 734 | 1,215 | 1,855 |
| 2000 | 5,783 | 745 | 734 | 1,215 | 1,855 | 144 | 0 | 0 | 12 | 0 | 5,927 | 745 | 734 | 1,227 | 1,855 |

S.F. = Single Family
T.H. = Townhouse/Condominium
APT. = Apartment
M.H. = Mobile Home

Source: U.S. Bureau of the Census; Individual Town & Village Building Permit Records
Note: Totals begin in 1990 because the 1990 Census enumerated the housing units within the School District boundaries by type.
The 1980 Census did not provide the same format.

# TABLE A5

## Ballston Spa Central School District

## High School Cohort Survival

| Year | 5th-8th Enrollment | Year | 9th-12th Enrollment | Difference | Percent Difference | Year | 6th-8th Enrollment | Year | 9th-11th Enrollment | Difference | Percent Difference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1983-84** | 970 | **1987-88** | 984 | 14 | 1.4% | **1984-85** | 724 | **1987-88** | 751 | 27 | 3.7% |
| **1984-85** | 916 | **1988-89** | 910 | -6 | -0.7% | **1985-86** | 673 | **1988-89** | 682 | 9 | 1.3% |
| **1985-86** | 884 | **1989-90** | 876 | -8 | -0.9% | **1986-87** | 636 | **1989-90** | 657 | 21 | 3.3% |
| **1986-87** | 848 | **1990-91** | 864 | 16 | 1.9% | **1987-88** | 663 | **1990-91** | 664 | 1 | 0.2% |
| **1987-88** | 904 | **1991-92** | 961 | 57 | 6.3% | **1988-89** | 700 | **1991-92** | 754 | 54 | 7.7% |
| **1988-89** | 910 | **1992-93** | 945 | 35 | 3.8% | **1989-90** | 697 | **1992-93** | 723 | 26 | 3.7% |
| **1989-90** | 925 | **1993-94** | 954 | 29 | 3.1% | **1990-91** | 716 | **1993-94** | 725 | 9 | 1.3% |
| **1990-91** | 954 | **1994-95** | 976 | 22 | 2.3% | **1991-92** | 724 | **1994-95** | 727 | 3 | 0.4% |
| **1991-92** | 960 | **1995-96** | 968 | 8 | 0.8% | **1992-93** | 739 | **1995-96** | 753 | 14 | 1.9% |
| **1992-93** | 1013 | **1996-97** | 1027 | 14 | 1.4% | **1993-94** | 809 | **1996-97** | 794 | -15 | -1.9% |
| **1993-94** | 1120 | **1997-98** | 1098 | -22 | -2.0% | **1994-95** | 866 | **1997-98** | 875 | 9 | 1.0% |
| **1994-95** | 1148 | **1998-99** | 1123 | -25 | -2.2% | **1995-96** | 925 | **1998-99** | 903 | -22 | -2.4% |
| **1995-96** | 1239 | **1999-00** | 1131 | -108 | -8.7% | **1996-97** | 953 | **1999-00** | 888 | -65 | -6.8% |
| **1996-97** | 1284 | **2000-01** | 1204 | -80 | -6.2% | **1997-98** | 929 | **2000-01** | 932 | 3 | 0.3% |

Source: Ballston Spa Cantral School district Fall Enrollment Figures

# TABLE A6

## Averill Park Central School District

## Historical School Enrollment : 1980-1981 to 2000-2001

| Grade | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 176 | 172 | 193 | 181 | 184 | 164 | 196 | 232 | 208 | 201 | 217 | 221 | 215 | 234 | 224 | 216 | 228 |
| 1 | 217 | 214 | 214 | 237 | 228 | 224 | 203 | 219 | 258 | 243 | 221 | 275 | 254 | 258 | 234 | 236 | 232 |
| 2 | 168 | 175 | 184 | 193 | 188 | 206 | 201 | 193 | 194 | 233 | 227 | 234 | 266 | 253 | 263 | 236 | 240 |
| 3 | 175 | 180 | 175 | 196 | 197 | 192 | 200 | 207 | 185 | 184 | 240 | 261 | 245 | 296 | 260 | 267 | 243 |
| 4 | 205 | 172 | 189 | 180 | 195 | 188 | 190 | 204 | 204 | 193 | 206 | 274 | 272 | 254 | 300 | 260 | 265 |
| 5 | 169 | 200 | 168 | 188 | 164 | 208 | 200 | 197 | 200 | 200 | 196 | 241 | 281 | 296 | 265 | 306 | 270 |
| 6 | 196 | 178 | 209 | 186 | 186 | 186 | 207 | 211 | 215 | 211 | 220 | 238 | 256 | 312 | 310 | 278 | 320 |
| 7 | 215 | 206 | 182 | 222 | 177 | 190 | 183 | 217 | 215 | 231 | 221 | 234 | 237 | 264 | 309 | 320 | 276 |
| 8 | 236 | 227 | 204 | 176 | 219 | 183 | 198 | 182 | 222 | 214 | 230 | 229 | 231 | 249 | 266 | 305 | 310 |
| 9 | 240 | 241 | 217 | 214 | 162 | 201 | 175 | 203 | 178 | 212 | 241 | 236 | 253 | 274 | 294 | 291 | 346 |
| 10 | 207 | 249 | 230 | 226 | 207 | 159 | 203 | 175 | 198 | 175 | 227 | 245 | 215 | 289 | 294 | 276 | 280 |
| 11 | 229 | 211 | 233 | 220 | 205 | 202 | 160 | 206 | 179 | 196 | 195 | 232 | 244 | 240 | 265 | 244 | 235 |
| 12 | 220 | 221 | 216 | 223 | 213 | 190 | 195 | 163 | 213 | 183 | 211 | 194 | 216 | 264 | 219 | 237 | 234 |
| **Total** | **2,653** | **2,646** | **2,614** | **2,642** | **2,525** | **2,493** | **2,511** | **2,609** | **2,669** | **2,676** | **2,852** | **3,114** | **3,185** | **3,483** | **3,503** | **3,472** | **3,479** |

Source: Averill Park Central School District Fall Enrollment Figures.

# TABLE A7

## Averill Park Central School District

## Aggregate School Enrollment : 1984-1985 to 2000-2001

| Grade | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K - 5 | 1,110 | 1,113 | 1,123 | 1,175 | 1,156 | 1,182 | 1,190 | 1,252 | 1,249 | 1,254 | 1,307 | 1,506 | 1,533 | 1,591 | 1,546 | 1,521 | 1,478 |
| 6 - 8 | 647 | 611 | 595 | 584 | 582 | 559 | 588 | 610 | 652 | 656 | 671 | 701 | 724 | 825 | 885 | 903 | 906 |
| 9 - 12 | 896 | 922 | 896 | 883 | 787 | 752 | 733 | 747 | 768 | 766 | 874 | 907 | 928 | 1,067 | 1,072 | 1,048 | 1,095 |
| **Total** | **2,653** | **2,646** | **2,614** | **2,642** | **2,525** | **2,493** | **2,511** | **2,609** | **2,669** | **2,676** | **2,852** | **3,114** | **3,185** | **3,483** | **3,503** | **3,472** | **3,479** |

Source: Averill Park Central School District Fall Enrollment Figures.

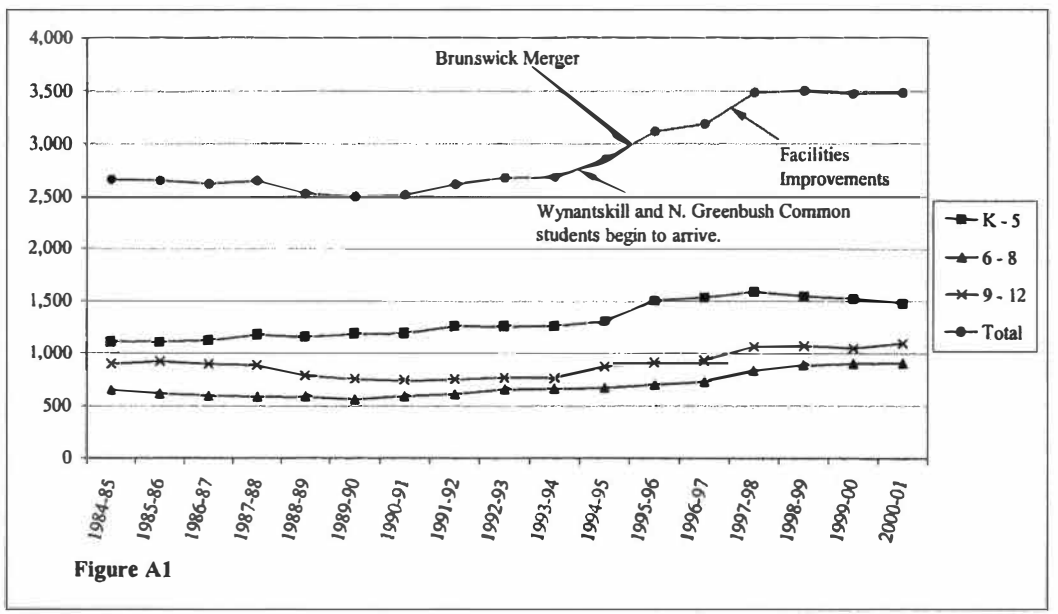


**Figure A1**

# TABLE A8

**Averill Park Central School District**
**Towns of Poestenkill, Sand Lake,**
**and 50% of North Greenbush**
**Number of Live Births: 1976-2000**

| Year of Birth | Number of Births | Yr. to Enter 1st Grade | Number of 1st Grade Students | Survival Ratio |
|---|---|---|---|---|
| 1978 | 159 | 1984 | 217 | 1.36478 |
| 1979 | 176 | 1985 | 214 | 1.21591 |
| 1980 | 195 | 1986 | 214 | 1.09744 |
| 1981 | 189 | 1987 | 237 | 1.25397 |
| 1982 | 200 | 1988 | 228 | 1.14000 |
| 1983 | 200 | 1989 | 224 | 1.12000 |
| 1984 | 180 | 1990 | 203 | 1.12778 |
| 1985 | 228 | 1991 | 219 | 0.96053 |
| 1986 | 220 | 1992 | 258 | 1.17273 |
| 1987 | 208 | 1993 | 243 | 1.16827 |
| 1988 | 195 | 1994 | 221 | 1.13333 |
| | | Merger with Brunswick Common | | |
| 1989 | 206 | 1995 | 275 | 1.33495 |
| 1990 | 202 | 1996 | 254 | 1.25743 |
| 1991 | 226 | 1997 | 258 | 1.14159 |
| 1992 | 207 | 1998 | 234 | 1.13043 |
| 1993 | 203 | 1999 | 236 | 1.16256 |
| 1994 | 191 | 2000 | 232 | 1.21466 |
| 1995 | 199 | 2001 | - | |
| 1996 | 205 | 2002 | - | |
| 1997 | 177 | 2003 | - | |
| 1998 | 187 | 2004 | - | |

Source: NYS Department of Health, Division of Biometrics

# TABLE A9

## Number of Housing Units

## Averill Park Central School District

| | Beginning of the Year | | | | | Net Change During the Year | | | | | Total End of Year | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | S.F. | T.H. | Duplex | Apt. | M.H. | S.F. | T.H. | Duplex | Apt. | M.H. | S.F. | T.H. | Duplex | Apt. | M.H. |
| 1980 | | | | | | 36 | 0 | 2 | na | na | | | | | |
| 1981 | | | | | | 34 | 0 | 2 | na | na | | | | | |
| 1982 | | | | | | 35 | 0 | 2 | na | na | | | | | |
| 1983 | | | | | | 49 | 0 | 2 | na | na | | | | | |
| 1984 | | | | | | 59 | 0 | 2 | na | na | | | | | |
| 1985 | | | | | | 87 | 0 | 6 | na | na | | | | | |
| 1986 | | | | | | 111 | 0 | 0 | na | na | | | | | |
| 1987 | | | | | | 120 | 0 | 8 | na | na | | | | | |
| 1988 | | | | | | 97 | 0 | 8 | na | na | | | | | |
| 1989 | | | | | | 104 | 0 | 0 | na | na | | | | | |
| 1990 | 4,254 | 40 | 261 | 380 | 380 | 77 | 0 | 4 | 0 | 18 | 4,331 | 40 | 265 | 380 | 398 |
| 1991 | 4,331 | 40 | 265 | 380 | 398 | 68 | 0 | 4 | 0 | 12 | 4,399 | 40 | 269 | 380 | 410 |
| 1992 | 4,399 | 40 | 269 | 380 | 410 | 91 | 0 | 4 | 0 | 11 | 4,490 | 40 | 273 | 380 | 421 |
| 1993 | 4,490 | 40 | 273 | 380 | 421 | 66 | 0 | 2 | 0 | 2 | 4,556 | 40 | 275 | 380 | 423 |
| 1994 | 4,556 | 40 | 275 | 380 | 423 | 76 | 0 | 2 | 0 | 3 | 4,632 | 40 | 277 | 380 | 426 |
| 1995 | 4,632 | 40 | 277 | 380 | 426 | 87 | 0 | 4 | 0 | 3 | 4,719 | 40 | 281 | 380 | 429 |
| 1996 | 4,719 | 40 | 281 | 380 | 429 | 70 | 0 | 6 | 0 | 1 | 4,789 | 40 | 287 | 380 | 430 |
| 1997 | 4,789 | 40 | 287 | 380 | 430 | 65 | 0 | 0 | 0 | 2 | 4,854 | 40 | 287 | 380 | 432 |
| 1998 | 4,854 | 40 | 287 | 380 | 432 | 66 | 0 | 2 | 0 | 3 | 4,920 | 40 | 289 | 380 | 435 |
| 1999 | 4,920 | 40 | 289 | 380 | 435 | 82 | 0 | 2 | 0 | 0 | 5,002 | 40 | 291 | 380 | 435 |
| 2000 | 5,002 | 40 | 291 | 380 | 435 | 82 | 0 | 0 | 0 | 0 | 5,084 | 40 | 291 | 380 | 435 |

S.F. = Single Family
T.H. = Townhouse/Condominiums
Apt. = Apartments
M.H. = Mobile Homes
na= not available

Source: U.S. Bureau of the Census, individual town & village building permit issuances.
Note: Totals begin in 1990 because the 1990 Census enumerated the housing units within the School District boundaries by type.
The 1980 Census did not provide the same format.

# Table A10

## Averill Park Central School District

## Transfers from Other School Districts

### North Greenbush

| Grades | 2000-01 | 1999-00 | 1998-99 | 1997-98 | 1996-97 | 1995-96 | 1994-95 |
|---|---|---|---|---|---|---|---|
| 1 | 3 | 1 | 0 | 2 | 0 | 0 | 0 |
| 2 | 0 | 1 | 1 | 2 | 0 | 0 | 0 |
| 3 | 5 | 4 | 9 | 2 | 1 | 1 | 0 |
| 4 | 4 | 9 | 6 | 2 | 3 | 3 | 0 |
| 5 | 9 | 7 | 2 | 5 | 0 | 2 | 0 |
| 6 | 7 | 2 | 9 | 3 | 4 | 4 | 0 |
| 7 | 2 | 4 | 1 | 7 | 4 | 7 | 6 |
| 8 | 3 | 2 | 5 | 8 | 5 | 5 | 2 |
| 9 | 2 | 8 | 10 | 7 | 0 | 3 | 1 |
| 10 | 9 | 9 | 6 | 5 | 6 | 1 | 0 |
| 11 | 8 | 3 | 3 | 5 | 5 | 0 | 0 |
| 12 | 4 | 5 | 0 | 8 | 4 | 0 | 0 |
| **Subtotal** | **56** | **55** | **52** | **56** | **32** | **26** | **9** |

### Wynatskill

| Grades | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9 | 5 | 1 | 27 | 34 | 4 | 18 | 30 |
| 10 | 0 | 21 | 22 | 39 | 13 | 26 | 7 |
| 11 | 16 | 15 | 24 | 20 | 24 | 8 | 5 |
| 12 | 15 | 26 | 15 | 27 | 7 | 5 | 3 |
| **Subtotal** | **36** | **63** | **88** | **120** | **48** | **57** | **45** |
| **Total from Both Districts** | **92** | **118** | **140** | **176** | **80** | **83** | **54** |

Source: Averill Park Central School District Enrollment Records

# TABLE A11

## Shenendehowa Central School District

## Historical School Enrollment : 1980-1981 to 2000-2001

| Grade | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 524 | 511 | 497 | 478 | 525 | 517 | 601 | 596 | 622 | 652 | 697 | 673 | 727 | 679 | 634 | 697 | 641 | 656 | 644 | 638 | 579 |
| Pre-1st | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | 29 | 21 | 28 | 36 | | | | | | | | | | |
| 1 | 567 | 567 | 542 | 498 | 514 | 587 | 572 | 676 | 710 | 738 | 751 | 768 | 695 | 763 | 701 | 634 | 736 | 666 | 693 | 716 | 675 |
| 2 | 604 | 543 | 542 | 522 | 506 | 526 | 574 | 572 | 637 | 678 | 713 | 717 | 743 | 697 | 765 | 704 | 657 | 728 | 672 | 690 | 707 |
| 3 | 588 | 622 | 541 | 552 | 505 | 526 | 551 | 589 | 585 | 651 | 704 | 701 | 722 | 751 | 689 | 750 | 718 | 668 | 729 | 691 | 692 |
| 4 | 640 | 572 | 609 | 541 | 547 | 529 | 553 | 557 | 607 | 608 | 667 | 719 | 711 | 732 | 743 | 696 | 742 | 724 | 676 | 732 | 661 |
| 5 | 741 | 659 | 568 | 606 | 541 | 567 | 556 | 565 | 584 | 612 | 634 | 675 | 703 | 712 | 724 | 741 | 699 | 758 | 725 | 662 | 746 |
| 6 | 736 | 757 | 674 | 567 | 603 | 551 | 573 | 561 | 578 | 585 | 631 | 646 | 649 | 707 | 717 | 645 | 675 | 637 | 682 | 649 | 595 |
| 7 | 724 | 721 | 744 | 648 | 557 | 595 | 565 | 564 | 573 | 568 | 578 | 591 | 595 | 623 | 659 | 658 | 659 | 676 | 653 | 674 | 657 |
| 8 | 735 | 739 | 715 | 748 | 651 | 580 | 600 | 569 | 590 | 580 | 580 | 578 | 583 | 580 | 629 | 655 | 645 | 665 | 675 | 641 | 655 |
| 9 | 700 | 683 | 710 | 701 | 718 | 629 | 570 | 590 | 582 | 592 | 580 | 594 | 596 | 563 | 547 | 630 | 654 | 637 | 649 | 694 | 647 |
| 10 | 780 | 703 | 678 | 716 | 713 | 719 | 661 | 606 | 601 | 588 | 599 | 582 | 578 | 571 | 596 | 569 | 621 | 649 | 615 | 642 | 657 |
| 11 | 707 | 711 | 677 | 659 | 671 | 661 | 707 | 634 | 606 | 577 | 575 | 591 | 565 | 560 | 551 | 573 | 528 | 577 | 622 | 615 | 611 |
| 12 | 725 | 724 | 694 | 676 | 661 | 675 | 695 | 692 | 635 | 583 | 569 | 569 | 565 | 551 | 540 | 527 | 532 | 508 | 530 | 578 | 571 |
| **Sub-total** | **8,771** | **8,512** | **8,191** | **7,912** | **7,712** | **7,662** | **7,778** | **7,800** | **7,931** | **8,040** | **8,314** | **8,404** | **8,432** | **8,489** | **8,495** | **8,479** | **8,507** | **8,549** | **8,565** | **8,622** | **8,453** |
| S.C.† | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | 176 | 161 | 194 | 181 | 200 | 185 | 189 | 203 |
| Resource‡ | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | 205 | 235 | 327 | 352 | 412 | 390 | 389 | 386 |
| **Total** | **8,771** | **8,512** | **8,191** | **7,912** | **7,712** | **7,662** | **7,778** | **7,800** | **7,931** | **8,040** | **8,314** | **8,404** | **8,432** | **8,870** | **8,891** | **9,000** | **9,040** | **9,161** | **9,140** | **9,200** | **9,042** |

† self-contained and language concept students

‡ non self-contained secondary students receiving resource room services

Source: Shenendehowa Central School District Fall Enrollment Figures.

# TABLE A12

## Shenendehowa Central School District

## Aggregate School Enrollment : 1980-1981 to 2000-2001

| | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K - 5 | 3,664 | 3,474 | 3,299 | 3,197 | 3,138 | 3,252 | 3,407 | 3,584 | 3,766 | 3,967 | 4,202 | 4,253 | 4,301 | 4,334 | 4,256 | 4,222 | 4,193 | 4,200 | 4,139 | 4,129 | 4,060 |
| 6 - 8 | 2,195 | 2,217 | 2,133 | 1,963 | 1,811 | 1,726 | 1,738 | 1,694 | 1,741 | 1,733 | 1,789 | 1,815 | 1,827 | 1,910 | 2,005 | 1,958 * | 1,979 * | 1,978 * | 2,010 * | 1,964 * | 1,907 * |
| 9 - 12 | 2,912 | 2,821 | 2,759 | 2,752 | 2,763 | 2,684 | 2,633 | 2,522 | 2,424 | 2,340 | 2,323 | 2,336 | 2,304 | 2,245 | 2,234 | 2,299 | 2,335 | 2,371 | 2,416 | 2,529 | 2,486 |
| **Sub-total** | **8,771** | **8,512** | **8,191** | **7,912** | **7,712** | **7,662** | **7,778** | **7,800** | **7,931** | **8,040** | **8,314** | **8,404** | **8,432** | **8,489** | **8,495** | **8,479** | **8,507** | **8,549** | **8,565** | **8,622** | **8,453** |
| S.C.† | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | 176 | 161 | 194 | 181 | 200 | 185 | 189 | 203 |
| Resource‡ | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | 205 | 235 | 327 | 352 | 412 | 390 | 389 | 386 |
| **Total** | **8,771** | **8,512** | **8,191** | **7,912** | **7,712** | **7,662** | **7,778** | **7,800** | **7,931** | **8,040** | **8,314** | **8,404** | **8,432** | **8,870** | **8,891** | **9,000** | **9,040** | **9,161** | **9,140** | **9,200** | **9,042** |

* These figures do not include 6th grade students who are classified as secondary students receiving resource room services.
The number of 6th Grade resource students in 1995-96 was 46 students; in 1996-97, 63 students; in 1997-98, 55 students; in 1998-99, 56 students; in 1999-00, 56 students; and in 2000-01, 61 stude
These students are included in the "Resource" classification and are included in the enrollment totals for those years.

† self-contained and language concept students
‡ non self-contained secondary students receiving resource room services

Source: Shenendehowa Central School District Fall Enrollment Figures.

# TABLE A13

**Shenendehowa Central School District**
**Towns of Clifton Park, Halfmoon, Waterford**
**and the Village of Round Lake**
**Number of Live Births: 1975-2000**

| Year of Birth | Number of Births | Yr. to Enter First Grade | Number of First Grade Students | Survival Ratio |
|---|---|---|---|---|
| 1975 | 430 | 1981 | 567 | 1.31860 |
| 1976 | 455 | 1982 | 542 | 1.19121 |
| 1977 | 497 | 1983 | 498 | 1.00201 |
| 1978 | 460 | 1984 | 514 | 1.11739 |
| 1979 | 504 | 1985 | 587 | 1.16468 |
| 1980 | 531 | 1986 | 572 | 1.07721 |
| 1981 | 536 | 1987 | 676 | 1.26119 |
| 1982 | 482 | 1988 | 710 | 1.47303 |
| 1983 | 525 | 1989 | 738 | 1.40571 |
| 1984 | 573 | 1990 | 751 | 1.31065 |
| 1985 | 632 | 1991 | 768 | 1.21519 |
| 1986 | 669 | 1992 | 695 | 1.03886 |
| 1987 | 666 | 1993 | 763 | 1.14565 |
| 1988 | 632 | 1994 | 701 | 1.10918 |
| 1989 | 654 | 1995 | 634 | 0.96942 |
| 1990 | 767 | 1996 | 736 | 0.95958 |
| 1991 | 643 | 1997 | 666 | 1.03577 |
| 1992 | 675 | 1998 | 693 | 1.02667 |
| 1993 | 632 | 1999 | 716 | 1.13291 |
| 1994 | 671 | 2000 | 675 | 1.00596 |
| 1995 | 688 | 2001 | - | |
| 1996 | 660 | 2002 | - | |
| 1997 | 706 | 2003 | - | |
| 1998 | 707 | 2004 | - | |

Source: NYS Department of Health, Division of Biometrics

# TABLE A14

## Shenendehowa Central School District

## Number of Housing Units

| | Beginning of the Year | | | | | Net Change During the Year | | | | | Total End of Year | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | S.F. | T.H. | Duplex | Apt. | M.H. | S.F. | T.H. | Duplex | Apt. | M.H. | S.F. | T.H. | Duplex | Apt. | M.H. |
| 1980 | | | | | | 147 | 0 | 26 | 0 | 0 | | | | | |
| 1981 | | | | | | 149 | 0 | 66 | 20 | 0 | | | | | |
| 1982 | | | | | | 140 | 0 | 102 | 90 | 2 | | | | | |
| 1983 | | | | | | 327 | 0 | 48 | 100 | 1 | | | | | |
| 1984 | | | | | | 338 | 52 | 68 | 174 | 0 | | | | | |
| 1985 | | | | | | 543 | 375 | 36 | 285 | 0 | | | | | |
| 1986 | | | | | | 691 | 108 | 40 | 91 | 0 | | | | | |
| 1987 | | | | | | 471 | 246 | 10 | 6 | 0 | | | | | |
| 1988 | | | | | | 377 | 50 | 8 | 218 | 0 | | | | | |
| 1989 | | | | | | 353 | 52 | 8 | 87 | 0 | | | | | |
| 1990 | 11,901 | 1,206 | 912 | 3,959 | 1,166 | 167 | 5 | 4 | 36 | 0 | 12,068 | 1,211 | 916 | 3,995 | 1,166 |
| 1991 | 12,068 | 1,211 | 916 | 3,995 | 1,166 | 164 | 48 | 6 | 37 | 0 | 12,232 | 1,259 | 922 | 4,032 | 1,166 |
| 1992 | 12,232 | 1,259 | 922 | 4,032 | 1,166 | 183 | 26 | 8 | 109 | 0 | 12,415 | 1,285 | 930 | 4,141 | 1,166 |
| 1993 | 12,415 | 1,285 | 930 | 4,141 | 1,166 | 298 | 30 | 20 | 76 | 0 | 12,713 | 1,315 | 950 | 4,217 | 1,166 |
| 1994 | 12,713 | 1,315 | 950 | 4,217 | 1,166 | 252 | 6 | 10 | 85 | 0 | 12,965 | 1,321 | 960 | 4,302 | 1,166 |
| 1995 | 12,965 | 1,321 | 960 | 4,302 | 1,166 | 201 | 4 | 12 | 80 | 0 | 13,166 | 1,325 | 972 | 4,382 | 1,166 |
| 1996 | 13,166 | 1,325 | 972 | 4,382 | 1,166 | 238 | 2 | 10 | 282 | 0 | 13,404 | 1,327 | 982 | 4,664 | 1,166 |
| 1997 | 13,404 | 1,327 | 982 | 4,664 | 1,166 | 251 | 2 | 20 | 336 | 10 | 13,655 | 1,329 | 1,002 | 5,000 | 1,176 |
| 1998 | 13,655 | 1,329 | 1,002 | 5,000 | 1,176 | 331 | 10 | 14 | 154 | 2 | 13,986 | 1,339 | 1,016 | 5,154 | 1,178 |
| 1999 | 13,986 | 1,339 | 1,016 | 5,154 | 1,178 | 293 | 24 | 18 | 32 | 0 | 14,279 | 1,363 | 1,034 | 5,186 | 1,178 |
| 2000 | 14,279 | 1,363 | 1,034 | 5,186 | 1,178 | 328 | 32 | 16 | 18 | 0 | 14,607 | 1,395 | 1,050 | 5,204 | 1,178 |

S.F. = Single Family
T.H. = Townhouse/Condominiums
Apt. = Apartments
M.H. = Mobile Homes

Source: 1990 U.S. Bureau of the Census, individual town & village building permit issuances.
Note: Totals begin in 1990 because the 1990 Census enumerated the housing units within the School District boundaries by type.
The 1980 Census did not provide the same format.

# Table 15

## Shenendehowa Central School District

## Paid Textbooks, Private School Enrollment 1991-92 to 1999-00

| School Year | Private School Enrollment* | Percent Change From Previous Year | Shenendehowa Enrollment | Percent Change From Previous Year |
|---|---|---|---|---|
| 1991-92 | 448 | | 8404 | |
| 1992-93 | 495 | 10% | 8432 | 0.33% |
| 1993-94 | 527 | 6% | 8489 | 0.68% |
| 1994-95 | 545 | 3% | 8495 | 0.07% |
| 1995-96 | 614 | 13% | 8479 | -0.19% |
| 1996-97 | 635 | 3% | 8507 | 0.33% |
| 1997-98 | 670 | 6% | 8549 | 0.49% |
| 1998-99 | 720 | 7% | 8565 | 0.19% |
| 1999-00 | 790 | 10% | 8622 | 0.67% |

* These numbers are the total number of private school students receiving funding for their books from Shenendehowa.

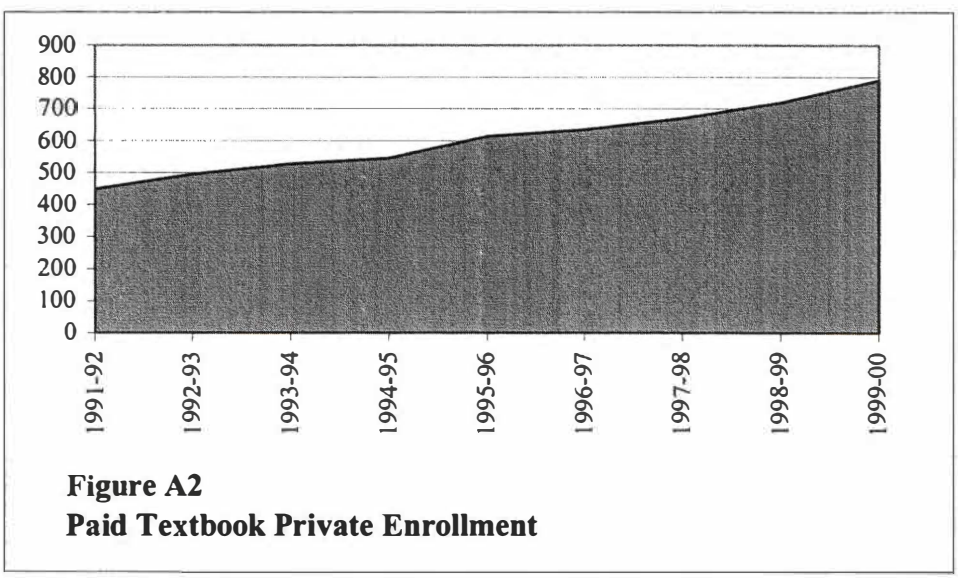


**Figure A2**
**Paid Textbook Private Enrollment**

The best historical data available is the Non-Public Textbooks data, which does not include about 70 private school students but does provide consistent data beginning with the 1991-92 school year. Public school districts in New York State must provide textbooks for students attending private schools.

# Table A16

## Shenendehowa Central School District

## Private School Enrollment, Grade Comparison 1998-99 to 2000-01

| *Grade* | Private Sch Students 1998-99 | % Change 98-99 to 99-00 | Private Sch Students 1999-00 | % Change 99-00 to 00-01 | Private Sch Students 2000-01 |
|---|---|---|---|---|---|
| *k* | 89 | 11% | 99 | 6% | 105 |
| *1* | 79 | 0% | 79 | 6% | 84 |
| *2* | 60 | 23% | 74 | 9% | 81 |
| *3* | 72 | -11% | 64 | 23% | 79 |
| *4* | 52 | 23% | 64 | 5% | 67 |
| *5* | 48 | 8% | 52 | 29% | 67 |
| *6* | 62 | 13% | 70 | -9% | 64 |
| *7* | 45 | 44% | 65 | 23% | 80 |
| *8* | 46 | 15% | 53 | 45% | 77 |
| *9* | 47 | 4% | 49 | 20% | 59 |
| *10* | 55 | -7% | 51 | 27% | 65 |
| *11* | 49 | 18% | 58 | 21% | 70 |
| *12* | 58 | -12% | 51 | 22% | 62 |
| *unkn* | 27 | | 29 | | 28 |
| **Total** | **789** | **9%** | **858** | **15%** | **988** |

Note: This data represents the total private school enrollment and is not available for years prior to 1998-99.
Source: Shenendehowa Central School District Fall Enrollment Records

# Table A17

## Shenendehowa Central School District

## Private School Enrollment, Cohort Comparison 1998-99 to 2000-01

| Grade | Private Sch Students 1998-99 | Cohort % Change 98-99 to 99-00 | Grade | Private Sch Students 1999-00 | Cohort % Change 99-00 to 00-01 | Grade | Private Sch Students 2000-01 |
|---|---|---|---|---|---|---|---|
| | | | | | | *k* | 105 |
| | | | *k* | 99 | -15% | *1* | 84 |
| *k* | 89 | -11% | *1* | 79 | 3% | *2* | 81 |
| *1* | 79 | -6% | *2* | 74 | 7% | *3* | 79 |
| *2* | 60 | 7% | *3* | 64 | 5% | *4* | 67 |
| *3* | 72 | -11% | *4* | 64 | 5% | *5* | 67 |
| *4* | 52 | 0% | *5* | 52 | 23% | *6* | 64 |
| *5* | 48 | 46% | *6* | 70 | 14% | *7* | 80 |
| *6* | 62 | 5% | *7* | 65 | 18% | *8* | 77 |
| *7* | 45 | 18% | *8* | 53 | 11% | *9* | 59 |
| *8* | 46 | 7% | *9* | 49 | 33% | *10* | 65 |
| *9* | 47 | 9% | *10* | 51 | 37% | *11* | 70 |
| *10* | 55 | 5% | *11* | 58 | 7% | *12* | 62 |
| *11* | 49 | 4% | *12* | 51 | | | |
| *12* | 58 | | | | | | |
| *unkn* | 27 | | *unkn* | 29 | | *unkn* | 28 |
| **Total** | **789** | **9%** | | **858** | **15%** | | **988** |

Note: This data represents the total private school enrollment.
Source: Shenendehowa Central School District Fall Enrollment Records

# Table A18
## Averill Park Central School District
### Enrollment and Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 173 | 176 | 172 | 193 | 181 | 184 | 164 | 196 | 232 | 208 | 201 | 217 | 221 | 215 | 234 | 224 | 216 | 228 |
| 1 | 191 | 217 | 214 | 214 | 237 | 228 | 224 | 203 | 219 | 258 | 243 | 221 | 275 | 254 | 258 | 234 | 236 | 232 |
| 2 | 170 | 168 | 175 | 184 | 193 | 188 | 206 | 201 | 193 | 194 | 233 | 227 | 234 | 266 | 253 | 263 | 236 | 240 |
| 3 | 197 | 175 | 180 | 175 | 196 | 197 | 192 | 200 | 207 | 185 | 184 | 240 | 261 | 245 | 296 | 260 | 267 | 243 |
| 4 | 171 | 205 | 172 | 189 | 180 | 195 | 188 | 190 | 204 | 204 | 193 | 206 | 274 | 272 | 254 | 300 | 260 | 265 |
| 5 | 174 | 169 | 200 | 168 | 188 | 164 | 208 | 200 | 197 | 200 | 200 | 196 | 241 | 281 | 296 | 265 | 306 | 270 |
| 6 | 216 | 196 | 178 | 209 | 186 | 186 | 186 | 207 | 211 | 215 | 211 | 220 | 238 | 256 | 312 | 310 | 278 | 320 |
| 7 | 237 | 215 | 206 | 182 | 222 | 177 | 190 | 183 | 217 | 215 | 231 | 221 | 234 | 237 | 264 | 309 | 320 | 276 |
| 8 | 248 | 236 | 227 | 204 | 176 | 219 | 183 | 198 | 182 | 222 | 214 | 230 | 229 | 231 | 249 | 266 | 305 | 310 |
| 9 | 211 | 240 | 241 | 217 | 214 | 162 | 201 | 175 | 203 | 178 | 212 | 241 | 236 | 253 | 274 | 294 | 291 | 346 |
| 10 | 242 | 207 | 249 | 230 | 226 | 207 | 159 | 203 | 175 | 198 | 175 | 227 | 245 | 215 | 289 | 294 | 276 | 280 |
| 11 | 214 | 229 | 211 | 233 | 220 | 205 | 202 | 160 | 206 | 179 | 196 | 195 | 232 | 244 | 240 | 265 | 244 | 235 |
| 12 | 217 | 220 | 221 | 216 | 223 | 213 | 190 | 195 | 163 | 213 | 183 | 211 | 194 | 216 | 264 | 219 | 237 | 234 |
| Total | 2661 | 2653 | 2646 | 2614 | 2642 | 2525 | 2493 | 2511 | 2609 | 2669 | 2676 | 2852 | 3114 | 3185 | 3483 | 3503 | 3472 | 3479 |
| **Survival Ratio** | | **0.99516** | **1.00133** | **0.97958** | **1.00862** | **0.94415** | **0.98919** | **0.98738** | **1.01792** | **0.99503** | **0.99288** | **1.05323** | **1.08003** | ***1.0063*** | ***1.08606*** | **1.0201** | **0.98693** | **1.0000** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| High School | 1997-98 | $ 19,669 | 1105 |
| Sand Lake Elementary | 1997-98 | $ 10,109 | 322 |
| Poestenkill Elementary | 1997-98 | $ 17,208 | 367 |
| West Sand Lake Elementary | 1997-98 | $ 16,917 | 498 |
| Algonquin Middle | 1997-98 | $ 19,411 | 648 |
| Miller Hill Elementary | 1997-98 | $ 34,410 | 212 |
| George Washington Elementar | 1997-98 | $ 22,754 | 160 |

***16-Year Average Survival Ratio*** ***1.0093***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A19
## Ballston Spa Central School District
### Enrollment and Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 | 2000-01 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 223 | 219 | 239 | 218 | 285 | 275 | 262 | 313 | 304 | 297 | 316 | 357 | 361 | 342 | 352 | 354 | 342 | 352 |
| 1 | 212 | 199 | 246 | 252 | 244 | 324 | 312 | 292 | 334 | 345 | 322 | 322 | 389 | 381 | 369 | 367 | 356 | 355 |
| 2 | 209 | 232 | 204 | 224 | 253 | 220 | 268 | 295 | 285 | 319 | 342 | 309 | 325 | 365 | 360 | 334 | 372 | 364 |
| 3 | 190 | 209 | 233 | 203 | 220 | 252 | 236 | 273 | 303 | 290 | 314 | 326 | 324 | 320 | 358 | 355 | 319 | 386 |
| 4 | 203 | 201 | 218 | 230 | 205 | 234 | 239 | 224 | 274 | 301 | 282 | 314 | 326 | 296 | 321 | 335 | 360 | 334 |
| 5 | 230 | 192 | 211 | 212 | 241 | 210 | 228 | 238 | 236 | 274 | 311 | 282 | 314 | 331 | 290 | 327 | 333 | 373 |
| 6 | 237 | 229 | 198 | 205 | 219 | 251 | 221 | 232 | 260 | 245 | 297 | 324 | 297 | 311 | 326 | 311 | 332 | 344 |
| 7 | 253 | 246 | 238 | 201 | 222 | 225 | 263 | 229 | 243 | 248 | 257 | 293 | 335 | 307 | 308 | 335 | 328 | 338 |
| 8 | 250 | 249 | 237 | 230 | 222 | 224 | 213 | 255 | 221 | 246 | 255 | 249 | 293 | 335 | 295 | 308 | 332 | 331 |
| 9 | 347 | 303 | 309 | 296 | 262 | 243 | 246 | 248 | 302 | 243 | 257 | 260 | 269 | 300 | 346 | 359 | 317 | 378 |
| 10 | 271 | 253 | 252 | 253 | 259 | 213 | 210 | 222 | 239 | 270 | 225 | 244 | 251 | 260 | 285 | 315 | 297 | 313 |
| 11 | 242 | 221 | 201 | 223 | 230 | 226 | 201 | 194 | 213 | 210 | 243 | 223 | 233 | 234 | 244 | 229 | 274 | 241 |
| 12 | 262 | 248 | 237 | 229 | 233 | 228 | 219 | 200 | 207 | 222 | 229 | 249 | 215 | 233 | 223 | 220 | 243 | 272 |
| Ungrded | | | | | | | | | | 9 | 12 | 12 | 12 | 16 | 10 | 9 | 6 | |
| Total | 3129 | 3001 | 3023 | 2976 | 3095 | 3125 | 3118 | 3215 | 3421 | 3519 | 3662 | 3764 | 3944 | 4031 | 4087 | 4158 | 4211 | 4381 |
| **Survival Ratio** | | **0.97693** | **1.00158** | **0.9839** | **1.01463** | **0.98021** | **0.97025** | **0.98976** | **1.02998** | **0.98866** | **1.008** | **0.98973** | **1.0114** | **0.98219** | ***0.97396*** | ***0.97864*** | **0.98019** | **1.01324** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Garrett Road High School | 1997-98 | $ 46,691 | 940 |
| Malta Avenue School | 1998-99 | $ 3,493 | 523 |
| Primary Middle School | 1998-99 | $ 4,376 | 1557 |

***16-Year Average Survival Ratio*** ***0.99352***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A20

## Clarence Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 186 | 192 | 213 | 202 | 236 | 251 | 271 | 256 | 258 | 284 | 269 | 280 | 338 | 297 | 300 | 289 | 303 |
| 1 | 220 | 198 | 216 | 233 | 243 | 272 | 295 | 291 | 279 | 281 | 297 | 296 | 288 | 359 | 303 | 304 | 312 |
| 2 | 175 | 212 | 189 | 202 | 239 | 234 | 266 | 278 | 287 | 276 | 283 | 309 | 292 | 291 | 353 | 319 | 314 |
| 3 | 181 | 180 | 221 | 201 | 218 | 256 | 256 | 277 | 287 | 297 | 278 | 295 | 311 | 302 | 302 | 383 | 341 |
| 4 | 209 | 181 | 185 | 226 | 219 | 230 | 279 | 255 | 283 | 298 | 306 | 300 | 297 | 329 | 321 | 315 | 397 |
| 5 | 191 | 217 | 185 | 187 | 236 | 221 | 244 | 295 | 268 | 294 | 305 | 317 | 302 | 313 | 321 | 326 | 329 |
| 6 | 227 | 190 | 223 | 192 | 197 | 243 | 223 | 254 | 291 | 274 | 292 | 322 | 324 | 309 | 314 | 332 | 327 |
| 7 | 237 | 225 | 196 | 231 | 210 | 220 | 257 | 240 | 264 | 297 | 276 | 296 | 331 | 332 | 315 | 322 | 348 |
| 8 | 277 | 241 | 238 | 196 | 228 | 211 | 225 | 260 | 241 | 259 | 301 | 280 | 323 | 333 | 335 | 314 | 335 |
| 9 | 254 | 293 | 233 | 238 | 203 | 244 | 223 | 235 | 279 | 247 | 268 | 297 | 276 | 340 | 337 | 344 | 337 |
| 10 | 277 | 258 | 293 | 236 | 238 | 202 | 243 | 225 | 230 | 269 | 245 | 255 | 284 | 268 | 321 | 331 | 359 |
| 11 | 272 | 283 | 256 | 286 | 236 | 243 | 202 | 245 | 220 | 232 | 273 | 250 | 269 | 289 | 266 | 322 | 338 |
| 12 | 308 | 273 | 276 | 242 | 295 | 228 | 236 | 196 | 235 | 213 | 218 | 268 | 251 | 253 | 272 | 257 | 324 |
| Ungrded | | | | | | | | | | | | | | | 10 | 20 | 26 |
| Total | 3014 | 2943 | 2924 | 2872 | 2998 | 3055 | 3220 | 3307 | 3422 | 3521 | 3611 | 3765 | 3886 | 4015 | 4070 | 4178 | 4390 |
| **Survival Ratio** | | **1.0131** | **1.00686** | **1.00082** | **1.03748** | **1.02635** | **1.03028** | **1.01732** | **1.01051** | **1.00922** | **1.00694** | ***1.02081*** | ***1.01337*** | **1.0188** | **1.00058** | ***1.02487*** | ***1.03937*** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Clarence Central High School | 1998-99 | $ 19,473 | 1,210 |
| Clarence Central Junior High | 1994-95 | $ 7,585 | 979 |

***16-Year Average Survival Ratio*** ***1.01729***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A21

## East Aurora Union Free School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 114 | 116 | 133 | 140 | 132 | 129 | 143 | 151 | 159 | 166 | 162 | 153 | 155 | 141 | 120 | 143 | 122 |
| 1 | 119 | 109 | 117 | 128 | 149 | 136 | 131 | 151 | 151 | 168 | 174 | 165 | 160 | 162 | 144 | 140 | 137 |
| 2 | 118 | 121 | 117 | 124 | 140 | 153 | 141 | 146 | 160 | 157 | 168 | 168 | 163 | 156 | 159 | 146 | 144 |
| 3 | 124 | 117 | 111 | 118 | 130 | 146 | 147 | 138 | 143 | 151 | 158 | 164 | 162 | 160 | 154 | 164 | 149 |
| 4 | 125 | 116 | 117 | 109 | 125 | 133 | 144 | 147 | 138 | 145 | 150 | 155 | 163 | 167 | 161 | 160 | 169 |
| 5 | 120 | 132 | 116 | 127 | 121 | 128 | 132 | 147 | 152 | 136 | 147 | 147 | 162 | 162 | 169 | 167 | 162 |
| 6 | 125 | 122 | 136 | 126 | 122 | 120 | 131 | 132 | 142 | 147 | 138 | 148 | 152 | 157 | 155 | 171 | 168 |
| 7 | 144 | 135 | 124 | 140 | 121 | 131 | 119 | 133 | 135 | 147 | 141 | 144 | 140 | 142 | 153 | 160 | 174 |
| 8 | 165 | 143 | 139 | 128 | 135 | 125 | 125 | 113 | 126 | 142 | 151 | 136 | 140 | 147 | 144 | 161 | 164 |
| 9 | 220 | 187 | 166 | 147 | 151 | 145 | 133 | 144 | 129 | 138 | 161 | 160 | 130 | 147 | 151 | 157 | 173 |
| 10 | 174 | 206 | 178 | 156 | 145 | 140 | 141 | 136 | 142 | 140 | 138 | 160 | 144 | 133 | 140 | 156 | 162 |
| 11 | 187 | 180 | 208 | 184 | 153 | 145 | 141 | 144 | 141 | 135 | 141 | 135 | 148 | 141 | 131 | 145 | 162 |
| 12 | 213 | 182 | 187 | 209 | 186 | 150 | 152 | 145 | 138 | 136 | 140 | 143 | 126 | 142 | 140 | 127 | 154 |
| Ungrded | | | | | | | | 12 | 8 | 10 | 9 | 10 | 12 | 11 | 28 | 29 | |
| Total | 1948 | 1866 | 1849 | 1836 | 1810 | 1781 | 1780 | 1839 | 1864 | 1918 | 1978 | 1988 | 1957 | 1968 | 1949 | 2026 | 2040 |
| **Survival Ratio** | | **1.01234** | **1.01977** | **1.02551** | **1.02824** | **1.01609** | **1.00266** | **1.03502** | **1.00713** | **1.01085** | **1.01609** | **0.99642** | **0.97045** | **0.99344** | **1.00000** | ***1.03197*** | ***1.01424*** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Parkdale Elementary | 1998-99 | $ 6,111 | 417 |
| Senior High School | 1998-99 | $ 14,150 | 832 |

***16-Year Average Survival Ratio*** ***1.01126***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A22

## Elmira Heights Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 84 | 87 | 108 | 111 | 89 | 109 | 104 | 100 | 84 | 113 | 94 | 95 | 87 | 88 | 91 | 84 | 65 |
| 1 | 80 | 87 | 96 | 112 | 115 | 103 | 106 | 118 | 110 | 98 | 121 | 92 | 97 | 93 | 92 | 94 | 76 |
| 2 | 60 | 72 | 86 | 79 | 92 | 96 | 88 | 90 | 97 | 97 | 90 | 107 | 94 | 87 | 104 | 94 | 81 |
| 3 | 78 | 64 | 75 | 80 | 76 | 91 | 91 | 96 | 81 | 95 | 94 | 79 | 115 | 92 | 86 | 97 | 93 |
| 4 | 74 | 85 | 64 | 70 | 74 | 73 | 90 | 89 | 92 | 85 | 97 | 86 | 83 | 112 | 101 | 88 | 96 |
| 5 | 69 | 72 | 80 | 69 | 63 | 76 | 78 | 91 | 87 | 92 | 88 | 98 | 89 | 88 | 114 | 100 | 88 |
| 6 | 66 | 61 | 67 | 81 | 71 | 64 | 73 | 78 | 85 | 95 | 92 | 91 | 103 | 85 | 94 | 110 | 83 |
| 7 | 87 | 76 | 60 | 74 | 83 | 78 | 71 | 73 | 79 | 91 | 97 | 100 | 104 | 105 | 100 | 89 | 112 |
| 8 | 99 | 87 | 75 | 70 | 78 | 85 | 77 | 76 | 68 | 78 | 91 | 80 | 92 | 101 | 107 | 84 | 77 |
| 9 | 98 | 95 | 84 | 75 | 72 | 82 | 92 | 74 | 71 | 77 | 71 | 80 | 86 | 84 | 90 | 105 | 89 |
| 10 | 82 | 86 | 88 | 79 | 71 | 70 | 75 | 84 | 71 | 74 | 70 | 62 | 84 | 88 | 77 | 114 | 104 |
| 11 | 93 | 82 | 77 | 84 | 76 | 74 | 63 | 81 | 77 | 66 | 78 | 59 | 56 | 81 | 78 | 94 | 87 |
| 12 | 100 | 85 | 78 | 74 | 91 | 76 | 63 | 61 | 78 | 65 | 68 | 59 | 58 | 54 | 79 | 76 | 75 |
| Ungrded | | | | | | 10 | 12 | | 33 | 11 | 10 | 26 | | | | 12 | 39 |
| Total | | | 1038 | 1058 | 1051 | 1087 | 1083 | 1111 | 1113 | 1137 | 1161 | 1114 | 1148 | 1158 | 1213 | 1241 | 1165 |
| **Survival Ratio** | | **0.9763** | **0.96194** | **0.98005** | **0.97022** | **1.00459** | **0.96785** | **0.97489** | **0.96737** | **0.97371** | **0.98644** | **0.92793** | **1.00417** | **0.97408** | ***1.01378*** | ***1.01918*** | **0.94727** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Edison Junior/Senior High | 1997-98 | $ 9,732 | 417 |
| Dr. N. Cohen Elementary | 1997-98 | $ 8,021 | 832 |

***16-Year Average Survival Ratio*** ***0.97811***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A23
## Guilderland Central School District
### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 248 | 286 | 281 | 295 | 309 | 328 | 354 | 338 | 377 | 367 | 345 | 371 | 383 | 340 | 362 | 378 | 378 |
| 1 | 255 | 307 | 323 | 321 | 346 | 336 | 352 | 380 | 380 | 396 | 409 | 399 | 432 | 411 | 384 | 411 | 445 |
| 2 | 279 | 247 | 304 | 350 | 330 | 362 | 351 | 366 | 388 | 384 | 399 | 433 | 405 | 426 | 430 | 401 | 444 |
| 3 | 236 | 293 | 254 | 285 | 355 | 348 | 370 | 360 | 367 | 392 | 377 | 409 | 447 | 421 | 436 | 449 | 415 |
| 4 | 246 | 251 | 286 | 254 | 301 | 369 | 349 | 370 | 368 | 363 | 406 | 406 | 413 | 440 | 434 | 430 | 441 |
| 5 | 285 | 254 | 274 | 312 | 265 | 315 | 393 | 358 | 378 | 372 | 376 | 418 | 415 | 421 | 446 | 432 | 428 |
| 6 | 286 | 292 | 262 | 292 | 327 | 263 | 326 | 390 | 363 | 395 | 403 | 405 | 433 | 428 | 448 | 469 | 461 |
| 7 | 332 | 309 | 309 | 279 | 296 | 332 | 288 | 336 | 406 | 370 | 423 | 395 | 420 | 431 | 438 | 460 | 479 |
| 8 | 368 | 335 | 309 | 333 | 276 | 294 | 349 | 287 | 339 | 400 | 385 | 413 | 411 | 429 | 440 | 432 | 456 |
| 9 | 395 | 418 | 385 | 337 | 334 | 297 | 310 | 339 | 297 | 366 | 404 | 373 | 418 | 412 | 424 | 451 | 433 |
| 10 | 365 | 388 | 405 | 369 | 328 | 332 | 297 | 314 | 334 | 306 | 357 | 396 | 362 | 416 | 415 | 416 | 454 |
| 11 | 423 | 344 | 353 | 401 | 353 | 311 | 325 | 289 | 304 | 331 | 302 | 344 | 398 | 348 | 400 | 405 | 404 |
| 12 | 343 | 362 | 334 | 339 | 378 | 340 | 328 | 333 | 298 | 311 | 330 | 296 | 351 | 394 | 353 | 392 | 402 |
| Ungrded | | | | 9 | 10 | 21 | 26 | 26 | 33 | 34 | 40 | 42 | 42 | 50 | 46 | 47 | 50 |
| Total | 4061 | 4086 | 4079 | 4176 | 4208 | 4248 | 4418 | 4486 | 4632 | 4787 | 4956 | 5100 | 5330 | 5367 | 5456 | 5573 | 5690 |
| **Survival Ratio** | | **1.00663** | **1.01076** | **1.02512** | **1.00283** | **1.01481** | **1.03568** | **1.00863** | **1.01399** | **1.01682** | **1.02135** | ***1.01108*** | ***1.01867*** | **1.00264** | **1.01767** | ***1.00895*** | ***1.01283*** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Guilderland High School | 1998-99 | $ 17,102 | 1,593 |
| Pine Bush Elementary | 1994-95 | $ 15,052 | 533 |

***16-Year Average Survival Ratio*** ***1.01428***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A24

## Hampton Bays Union Free School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 85 | 99 | 71 | 91 | 84 | 103 | 64 | 73 | 82 | 85 | 117 | 111 | 117 | 98 | 106 | 104 | 136 |
| 1 | 69 | 96 | 113 | 92 | 110 | 94 | 106 | 71 | 78 | 94 | 95 | 111 | 119 | 116 | 89 | 120 | 121 |
| 2 | 65 | 63 | 89 | 107 | 89 | 100 | 93 | 104 | 65 | 73 | 89 | 94 | 108 | 112 | 126 | 106 | 118 |
| 3 | 74 | 70 | 71 | 84 | 107 | 88 | 94 | 94 | 109 | 69 | 78 | 91 | 102 | 108 | 105 | 125 | 111 |
| 4 | 70 | 75 | 74 | 76 | 88 | 98 | 89 | 95 | 98 | 97 | 77 | 78 | 93 | 99 | 113 | 107 | 131 |
| 5 | 79 | 70 | 78 | 74 | 80 | 91 | 103 | 91 | 97 | 102 | 106 | 76 | 78 | 96 | 100 | 114 | 104 |
| 6 | 72 | 74 | 66 | 78 | 78 | 79 | 96 | 104 | 97 | 96 | 105 | 113 | 81 | 79 | 91 | 110 | 114 |
| 7 | 107 | 76 | 83 | 90 | 83 | 75 | 80 | 105 | 99 | 116 | 101 | 117 | 117 | 89 | 89 | 94 | 119 |
| 8 | 121 | 111 | 69 | 89 | 82 | 82 | 75 | 85 | 82 | 105 | 113 | 96 | 116 | 123 | 88 | 95 | 108 |
| 9 | 128 | 126 | 119 | 77 | 89 | 82 | 80 | 88 | 73 | 105 | 113 | 114 | 103 | 111 | 128 | 92 | 98 |
| 10 | 90 | 122 | 131 | 121 | 74 | 90 | 84 | 84 | 80 | 79 | 114 | 117 | 113 | 93 | 109 | 125 | 101 |
| 11 | 124 | 80 | 119 | 129 | 116 | 67 | 88 | 90 | 75 | 82 | 77 | 111 | 110 | 108 | 92 | 102 | 99 |
| 12 | 102 | 123 | 82 | 106 | 120 | 105 | 67 | 92 | 69 | 87 | 72 | 78 | 109 | 104 | 104 | 88 | 100 |
| Ungrded | 16 | 15 | 23 | 48 | 73 | 40 | 27 | 94 | 100 | 74 | 61 | 64 | 55 | 36 | 17 |  | 19 |
| Total | 1202 | 1200 | 1188 | 1262 | 1273 | 1194 | 1146 | 1270 | 1204 | 1264 | 1318 | 1371 | 1421 | 1372 | 1357 | 1382 | 1479 |
| **Survival Ratio** |  | **0.99015** | **1.02658** | **1.04251** | **1.01315** | **0.93265** | **0.98986** | **1.10936** | **0.9448** | **1.03039** | **1.01282** | **1.01771** | **1.00254** | **0.96904** | **0.99316** | ***1.00959*** | ***1.02689*** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Hampton Bays Elementary | 1998-99 | $ 8,526 | 562 |
| Junior/Senior High School | 1998-99 | $ 14,013 | 625 |

***16-Year Average Survival Ratio*** ***1.00695***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A25

## Holland Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 104 | 105 | 97 | 121 | 128 | 119 | 104 | 100 | 107 | 94 | 110 | 107 | 104 | 94 | 104 | 103 | 89 |
| 1 | 112 | 112 | 108 | 115 | 139 | 133 | 127 | 128 | 113 | 123 | 109 | 111 | 106 | 115 | 99 | 104 | 101 |
| 2 | 92 | 99 | 105 | 95 | 109 | 120 | 123 | 111 | 119 | 103 | 111 | 112 | 110 | 103 | 120 | 102 | 102 |
| 3 | 85 | 99 | 89 | 103 | 99 | 105 | 122 | 119 | 112 | 118 | 106 | 110 | 109 | 112 | 109 | 114 | 103 |
| 4 | 108 | 88 | 91 | 85 | 115 | 93 | 106 | 126 | 123 | 114 | 124 | 107 | 110 | 111 | 124 | 106 | 118 |
| 5 | 104 | 106 | 89 | 89 | 89 | 104 | 92 | 106 | 123 | 119 | 123 | 126 | 108 | 106 | 110 | 119 | 103 |
| 6 | 119 | 105 | 100 | 88 | 92 | 96 | 105 | 91 | 109 | 124 | 115 | 117 | 117 | 106 | 108 | 110 | 129 |
| 7 | 134 | 116 | 106 | 107 | 91 | 95 | 90 | 106 | 97 | 118 | 129 | 123 | 122 | 133 | 117 | 107 | 111 |
| 8 | 120 | 128 | 109 | 106 | 103 | 86 | 101 | 88 | 103 | 93 | 118 | 122 | 127 | 116 | 124 | 111 | 106 |
| 9 | 144 | 119 | 134 | 119 | 115 | 109 | 77 | 92 | 98 | 94 | 85 | 114 | 116 | 117 | 103 | 121 | 119 |
| 10 | 111 | 130 | 110 | 129 | 103 | 108 | 102 | 73 | 90 | 97 | 96 | 87 | 112 | 111 | 114 | 104 | 108 |
| 11 | 121 | 103 | 113 | 93 | 110 | 93 | 107 | 99 | 80 | 86 | 95 | 91 | 87 | 110 | 110 | 119 | 102 |
| 12 | 112 | 118 | 104 | 116 | 109 | 118 | 88 | 114 | 96 | 83 | 93 | 99 | 86 | 81 | 111 | 111 | 111 |
| Ungrded | | | | | 12 | 11 | 11 | 12 | 6 | 5 | 5 | 5 | | 19 | | | |
| Total | 1466 | 1428 | 1355 | 1366 | 1414 | 1390 | 1355 | 1365 | 1376 | 1371 | 1419 | 1431 | 1414 | 1434 | 1453 | 1431 | 1402 |
| **Survival Ratio** | | **0.9688** | **0.95436** | **0.9792** | **1.01594** | **0.96686** | **0.97485** | **0.97764** | **1.00434** | **0.9838** | **1.00503** | **0.99753** | ***0.98286*** | ***1.00082*** | **0.99285** | **0.98869** | **0.99589** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Bumstead Elementary | 1995-96 | $ 7,191 | 490 |
| High School | 1995-96 | $ 14,894 | 420 |
| Elementary School | 1995-96 | $ 9,060 | 404 |

***16-Year Average Survival Ratio*** ***0.98684***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A26

## Jamesville-Dewitt Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 151 | 142 | 156 | 155 | 162 | 158 | 146 | 191 | 162 | 158 | 152 | 162 | 158 | 136 | 173 | 201 | 194 |
| 1 | 150 | 171 | 141 | 163 | 159 | 198 | 187 | 172 | 210 | 186 | 187 | 181 | 188 | 173 | 161 | 167 | 208 |
| 2 | 132 | 141 | 164 | 139 | 171 | 166 | 195 | 195 | 180 | 197 | 182 | 193 | 178 | 189 | 177 | 178 | 175 |
| 3 | 163 | 124 | 132 | 169 | 145 | 171 | 161 | 196 | 202 | 181 | 189 | 183 | 187 | 169 | 181 | 198 | 193 |
| 4 | 151 | 152 | 121 | 136 | 156 | 146 | 178 | 162 | 199 | 205 | 187 | 187 | 199 | 189 | 170 | 189 | 200 |
| 5 | 158 | 139 | 164 | 121 | 136 | 162 | 160 | 190 | 170 | 212 | 210 | 195 | 200 | 208 | 190 | 185 | 205 |
| 6 | 182 | 156 | 135 | 168 | 136 | 134 | 173 | 169 | 198 | 174 | 220 | 199 | 193 | 204 | 214 | 191 | 186 |
| 7 | 238 | 179 | 160 | 146 | 172 | 147 | 143 | 174 | 185 | 205 | 192 | 226 | 219 | 200 | 213 | 224 | 199 |
| 8 | 232 | 222 | 178 | 165 | 149 | 178 | 148 | 140 | 170 | 191 | 208 | 178 | 218 | 218 | 201 | 209 | 233 |
| 9 | 252 | 241 | 227 | 172 | 179 | 155 | 183 | 163 | 138 | 178 | 209 | 225 | 213 | 235 | 226 | 230 | 241 |
| 10 | 250 | 236 | 233 | 225 | 168 | 177 | 159 | 163 | 147 | 134 | 171 | 189 | 206 | 193 | 221 | 203 | 203 |
| 11 | 228 | 245 | 236 | 228 | 221 | 158 | 171 | 153 | 171 | 143 | 134 | 168 | 187 | 197 | 191 | 210 | 195 |
| 12 | 260 | 218 | 249 | 228 | 224 | 216 | 147 | 156 | 146 | 174 | 140 | 135 | 164 | 181 | 186 | 182 | 202 |
| Ungrded | 26 | 27 | 14 | 15 | 13 | 15 | 18 | 31 | 4 | | 21 | 18 | | | | | |
| Total | 2573 | 2393 | 2310 | 2230 | 2191 | 2181 | 2169 | 2255 | 2282 | 2338 | 2402 | 2439 | 2510 | 2492 | 2504 | 2567 | 2634 |
| **Survival Ratio** | | **0.96207** | **0.99016** | **1.00367** | **1.01245** | **1.01108** | **1.01605** | **1.00853** | **1.00105** | **1.01013** | **1.02841** | **0.99336** | ***1.01027*** | ***0.99771*** | ***0.9977*** | **1.02517** | **1.02198** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Dewitt Junior/Senior High Sch | 1996-97 | $ 12,136 | 948 |
| Moses Dewitt Elementary | 1995-96 | $ 4,676 | 465 |

***16-Year Average Survival Ratio*** ***1.00561***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A27

## Jordan Elbridge Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 138 | 143 | 163 | 165 | 204 | 177 | 199 | 178 | 169 | 180 | 162 | 171 | 151 | 156 | 152 | 147 | 144 |
| 1 | 126 | 133 | 140 | 174 | 167 | 201 | 159 | 174 | 150 | 173 | 151 | 144 | 161 | 146 | 146 | 159 | 143 |
| 2 | 117 | 129 | 132 | 143 | 165 | 154 | 177 | 149 | 163 | 154 | 163 | 149 | 146 | 161 | 150 | 136 | 138 |
| 3 | 108 | 119 | 117 | 132 | 126 | 158 | 154 | 172 | 152 | 160 | 162 | 164 | 139 | 145 | 153 | 151 | 133 |
| 4 | 113 | 105 | 113 | 123 | 144 | 129 | 150 | 151 | 166 | 149 | 170 | 156 | 164 | 142 | 143 | 157 | 151 |
| 5 | 115 | 121 | 113 | 124 | 116 | 130 | 127 | 149 | 149 | 176 | 151 | 172 | 165 | 162 | 136 | 146 | 155 |
| 6 | 125 | 113 | 112 | 114 | 124 | 110 | 132 | 125 | 142 | 154 | 175 | 153 | 169 | 172 | 164 | 144 | 153 |
| 7 | 179 | 138 | 129 | 120 | 127 | 131 | 116 | 138 | 128 | 159 | 179 | 182 | 158 | 179 | 175 | 167 | 148 |
| 8 | 157 | 174 | 131 | 128 | 127 | 112 | 133 | 108 | 138 | 138 | 146 | 167 | 171 | 145 | 171 | 160 | 164 |
| 9 | 156 | 161 | 168 | 149 | 134 | 127 | 123 | 139 | 136 | 154 | 137 | 150 | 180 | 185 | 149 | 205 | 156 |
| 10 | 136 | 142 | 155 | 157 | 136 | 122 | 121 | 100 | 126 | 114 | 137 | 133 | 146 | 148 | 163 | 144 | 158 |
| 11 | 146 | 139 | 141 | 146 | 147 | 116 | 107 | 103 | 92 | 110 | 88 | 110 | 107 | 122 | 138 | 144 | 122 |
| 12 | 159 | 131 | 133 | 120 | 143 | 137 | 114 | 102 | 106 | 88 | 103 | 83 | 114 | 101 | 110 | 127 | 141 |
| Ungrded | | | 27 | | | 51 | 50 | 66 | 58 | | | | | | | | |
| Total | 1775 | 1748 | 1774 | 1795 | 1860 | 1855 | 1862 | 1854 | 1875 | 1909 | 1924 | 1934 | 1971 | 1964 | 1950 | 1987 | 1906 |
| **Survival Ratio** | | **0.99594** | **0.99796** | **0.98512** | **0.98609** | **0.97621** | **0.97599** | **0.96966** | **0.98856** | ***0.9725*** | ***0.98172*** | **0.97589** | **0.9875** | ***0.97421*** | ***0.96778*** | **0.99585** | **0.94513** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Ramsdell Elementary/Middle | 1996-97 | $ 14,388 | 948 |
| Elbridge Elementary | 1992-93 | $ 13,300 | 465 |

***16-Year Average Survival Ratio*** ***0.97976***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A28

## Katona Lewisboro Union Free School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 163 | 167 | 189 | 188 | 216 | 219 | 210 | 245 | 230 | 242 | 264 | 329 | 310 | 288 | 301 | 329 | 300 |
| 1 | 178 | 175 | 167 | 196 | 183 | 230 | 225 | 218 | 242 | 243 | 244 | 282 | 338 | 327 | 321 | 320 | 353 |
| 2 | 171 | 156 | 165 | 166 | 206 | 180 | 227 | 234 | 217 | 243 | 247 | 250 | 287 | 338 | 342 | 330 | 315 |
| 3 | 172 | 169 | 153 | 168 | 164 | 199 | 181 | 222 | 234 | 219 | 244 | 254 | 250 | 298 | 350 | 361 | 337 |
| 4 | 191 | 176 | 170 | 155 | 179 | 172 | 190 | 181 | 218 | 223 | 225 | 245 | 267 | 263 | 301 | 355 | 351 |
| 5 | 192 | 191 | 173 | 179 | 154 | 180 | 170 | 194 | 187 | 242 | 226 | 225 | 243 | 262 | 276 | 319 | 354 |
| 6 | 191 | 197 | 193 | 176 | 182 | 162 | 178 | 187 | 206 | 198 | 254 | 248 | 232 | 260 | 279 | 288 | 332 |
| 7 | 262 | 207 | 202 | 210 | 179 | 194 | 171 | 187 | 190 | 215 | 210 | 257 | 246 | 237 | 271 | 277 | 292 |
| 8 | 281 | 249 | 191 | 208 | 214 | 181 | 189 | 172 | 190 | 187 | 218 | 217 | 259 | 247 | 241 | 268 | 279 |
| 9 | 295 | 260 | 262 | 206 | 214 | 196 | 187 | 194 | 185 | 199 | 192 | 232 | 220 | 221 | 250 | 230 | 271 |
| 10 | 245 | 289 | 252 | 271 | 224 | 219 | 191 | 192 | 201 | 173 | 195 | 185 | 222 | 226 | 261 | 251 | 227 |
| 11 | 288 | 240 | 277 | 251 | 269 | 216 | 216 | 202 | 186 | 190 | 170 | 194 | 178 | 174 | 205 | 254 | 251 |
| 12 | 295 | 291 | 246 | 275 | 239 | 259 | 205 | 207 | 202 | 184 | 190 | 161 | 185 | 194 | 218 | 203 | 244 |
| Ungrded | 53 | 41 | 46 | 43 | 50 | 55 | 50 | 43 | 56 | 71 | 61 | 62 | 48 | 49 | 38 | 2 | 4 |
| Total | 2977 | 2808 | 2686 | 2692 | 2673 | 2662 | 2590 | 2678 | 2744 | 2829 | 2940 | 3141 | 3285 | 3384 | 3654 | 3787 | 3910 |
| **Survival Ratio** | | **0.97896** | **0.99149** | **1.02532** | **1.02019** | **0.99775** | **0.98672** | **1.01839** | **1.02066** | **1.01384** | **1.01207** | **1.0177** | **0.99472** | **0.99247** | **1.0448** | ***1.00096*** | ***1.00061*** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| John Jay High School | 1998-99 | $ 74,423 | 240 |
| Lewisboro Elementary | 1998-99 | $ 11,950 | 347 |
| Katonah Elementary | 1998-99 | $ 15,871 | 334 |
| Increase Miller Elementary | 1998-99 | $ 11,330 | 399 |
| John Jay Junior High School | 1998-99 | $ 14,940 | 612 |
| Meadow Pond Elementary | 1998-99 | $ 11,545 | 321 |

***16-Year Average Survival Ratio*** ***1.00729***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A29

## Monroe Woodbury Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 283 | 342 | 359 | 396 | 384 | 384 | 410 | 400 | 420 | 445 | 427 | 476 | 502 | 481 | 449 | 469 | 473 |
| 1 | 314 | 310 | 364 | 380 | 395 | 376 | 384 | 427 | 419 | 440 | 458 | 450 | 497 | 528 | 480 | 454 | 495 |
| 2 | 321 | 325 | 331 | 377 | 376 | 386 | 386 | 384 | 416 | 407 | 420 | 472 | 461 | 520 | 525 | 487 | 470 |
| 3 | 329 | 326 | 320 | 341 | 384 | 379 | 384 | 367 | 384 | 421 | 429 | 452 | 483 | 477 | 504 | 525 | 519 |
| 4 | 325 | 345 | 347 | 331 | 355 | 370 | 377 | 381 | 372 | 380 | 410 | 461 | 481 | 496 | 458 | 522 | 550 |
| 5 | 317 | 336 | 355 | 357 | 333 | 361 | 359 | 372 | 384 | 374 | 380 | 434 | 450 | 477 | 488 | 506 | 565 |
| 6 | 308 | 331 | 344 | 370 | 348 | 321 | 345 | 367 | 366 | 385 | 378 | 406 | 450 | 457 | 465 | 525 | 517 |
| 7 | 397 | 348 | 374 | 360 | 400 | 369 | 358 | 387 | 406 | 408 | 434 | 418 | 421 | 447 | 471 | 492 | 546 |
| 8 | 465 | 407 | 348 | 383 | 367 | 376 | 368 | 360 | 378 | 397 | 410 | 448 | 417 | 428 | 451 | 479 | 492 |
| 9 | 399 | 495 | 431 | 379 | 410 | 388 | 404 | 397 | 378 | 397 | 414 | 424 | 459 | 472 | 481 | 496 | 515 |
| 10 | 361 | 381 | 493 | 429 | 363 | 400 | 383 | 385 | 390 | 378 | 391 | 407 | 425 | 434 | 410 | 447 | 480 |
| 11 | 385 | 359 | 358 | 460 | 404 | 346 | 378 | 363 | 378 | 374 | 354 | 373 | 385 | 382 | 423 | 394 | 414 |
| 12 | 453 | 391 | 349 | 364 | 463 | 400 | 344 | 377 | 370 | 373 | 370 | 342 | 375 | 389 | 390 | 410 | 395 |
| Ungrded | | 47 | 49 | 59 | 66 | 75 | 93 | 87 | 116 | 141 | 121 | | | | 130 | 110 | 53 |
| Total | 4657 | 4743 | 4822 | 4986 | 5048 | 4931 | 4973 | 5054 | 5177 | 5320 | 5396 | 5563 | 5806 | 5988 | 6125 | 6316 | 6484 |
| **Survival Ratio** | | **1.04336** | **1.02219** | **1.02333** | **1.01018** | **0.99286** | **1.00772** | **1.00190** | **1.01426** | **1.01094** | **1.002** | **1.00826** | **1.01307** | **1.01014** | **1.01524** | **1.02024** | ***1.01453*** |

| School with Construction | Year | Cost | Enrollment |
|---|---|---|---|
| New High School | 1999-00 | $ 47,500,000 | 0 |

***16-Year Average Survival Ratio*** ***1.01314***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A30

## Nyack Union Free School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 241 | 215 | 233 | 199 | 194 | 185 | 173 | 201 | 198 | 232 | 224 | 238 | 243 | 212 | 210 | 211 | 182 |
| 1 | 224 | 215 | 225 | 251 | 226 | 233 | 224 | 217 | 229 | 198 | 244 | 227 | 263 | 250 | 225 | 227 | 231 |
| 2 | 186 | 208 | 202 | 193 | 200 | 175 | 207 | 198 | 188 | 228 | 198 | 243 | 244 | 250 | 235 | 217 | 231 |
| 3 | 177 | 190 | 196 | 199 | 183 | 204 | 176 | 201 | 198 | 177 | 232 | 196 | 245 | 237 | 250 | 231 | 212 |
| 4 | 182 | 176 | 193 | 189 | 188 | 183 | 200 | 183 | 204 | 194 | 186 | 225 | 197 | 234 | 224 | 247 | 230 |
| 5 | 181 | 184 | 171 | 187 | 185 | 190 | 174 | 191 | 182 | 210 | 200 | 188 | 225 | 195 | 235 | 213 | 238 |
| 6 | 197 | 189 | 183 | 163 | 179 | 180 | 191 | 200 | 215 | 215 | 233 | 224 | 203 | 246 | 210 | 246 | 221 |
| 7 | 235 | 182 | 208 | 190 | 164 | 196 | 197 | 212 | 217 | 214 | 213 | 236 | 226 | 202 | 242 | 213 | 240 |
| 8 | 253 | 208 | 194 | 211 | 185 | 171 | 186 | 185 | 216 | 229 | 217 | 211 | 229 | 198 | 195 | 247 | 220 |
| 9 | 267 | 266 | 267 | 246 | 238 | 225 | 198 | 211 | 226 | 260 | 251 | 256 | 245 | 258 | 270 | 204 | 272 |
| 10 | 291 | 246 | 270 | 228 | 229 | 234 | 201 | 205 | 226 | 214 | 271 | 231 | 233 | 243 | 229 | 250 | 186 |
| 11 | 294 | 265 | 245 | 253 | 237 | 226 | 226 | 204 | 184 | 208 | 214 | 237 | 228 | 237 | 211 | 236 | 219 |
| 12 | 236 | 263 | 265 | 216 | 222 | 208 | 196 | 214 | 205 | 189 | 213 | 207 | 237 | 220 | 217 | 201 | 206 |
| Ungrded | 95 | 93 | 32 | 42 | 48 | 72 | 84 | 60 | 80 | 78 | 69 | 60 | 64 | 72 | 72 | 60 | 44 |
| Total | 3059 | 2900 | 2884 | 2767 | 2678 | 2682 | 2633 | 2682 | 2768 | 2846 | 2965 | 2979 | 3082 | 3054 | 3025 | 3003 | 2932 |
| **Survival Ratio** | | **0.95662** | **1.00165** | **0.97108** | **0.96003** | **1.00088** | **0.97685** | ***1.00000*** | **1.03264** | **1.02156** | ***1.02969*** | **0.99446** | **1.01657** | **0.99616** | **0.9878** | **0.9873** | **0.97221** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Nyack Junior High School | 1993-94 | $ 13,497 | 650 |
| Nyack High School | 1991-92 | | 630 |

***16-Year Average Survival Ratio*** ***0.99409***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A31

## Sauquoit Valley Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 83 | 109 | 98 | 123 | 123 | 123 | 123 | 127 | 151 | 141 | 116 | 118 | 114 | 125 | 96 | 115 | 106 |
| 1 | 79 | 115 | 120 | 105 | 113 | 122 | 123 | 114 | 120 | 144 | 138 | 117 | 120 | 108 | 123 | 99 | 106 |
| 2 | 66 | 95 | 96 | 104 | 114 | 110 | 109 | 113 | 117 | 121 | 142 | 128 | 114 | 118 | 108 | 107 | 96 |
| 3 | 81 | 79 | 103 | 101 | 114 | 114 | 111 | 101 | 123 | 119 | 116 | 138 | 134 | 113 | 113 | 109 | 103 |
| 4 | 70 | 101 | 78 | 96 | 104 | 114 | 116 | 110 | 107 | 126 | 122 | 121 | 131 | 125 | 110 | 109 | 106 |
| 5 | 60 | 88 | 99 | 78 | 95 | 111 | 113 | 113 | 113 | 104 | 119 | 121 | 127 | 130 | 125 | 106 | 113 |
| 6 | 77 | 78 | 94 | 100 | 82 | 95 | 110 | 113 | 116 | 119 | 104 | 114 | 125 | 127 | 130 | 123 | 106 |
| 7 | 88 | 100 | 78 | 90 | 109 | 92 | 95 | 104 | 117 | 115 | 116 | 109 | 116 | 123 | 125 | 122 | 116 |
| 8 | 87 | 109 | 102 | 80 | 89 | 106 | 91 | 94 | 104 | 118 | 109 | 115 | 110 | 119 | 130 | 119 | 122 |
| 9 | 94 | 108 | 116 | 101 | 97 | 88 | 105 | 103 | 98 | 100 | 117 | 110 | 116 | 107 | 124 | 126 | 119 |
| 10 | 79 | 116 | 106 | 103 | 113 | 95 | 91 | 101 | 98 | 100 | 97 | 108 | 111 | 122 | 105 | 118 | 123 |
| 11 | 81 | 100 | 106 | 95 | 81 | 99 | 87 | 85 | 95 | 95 | 97 | 95 | 105 | 103 | 116 | 99 | 106 |
| 12 | 80 | 117 | 100 | 103 | 102 | 92 | 108 | 86 | 93 | 99 | 92 | 81 | 92 | 107 | 97 | 115 | 102 |
| Total | 1025 | 1315 | 1296 | 1279 | 1336 | 1361 | 1382 | 1364 | 1452 | 1501 | 1485 | 1475 | 1515 | 1527 | 1502 | 1467 | 1424 |
| **Survival Ratio** | | **1.26566** | **0.9899** | **0.95719** | **1.04463** | **1.0045** | **0.99127** | ***0.97567*** | ***1.02606*** | **1.00662** | **0.97621** | **0.97103** | **1.00392** | **0.98854** | **0.99073** | **0.95722** | **0.97979** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Junior Senior High School | 1990-91 | $ 14,130 | 436 |
| Sulphur Springs Elementary | 1990-91 | $ 7,365 | 735 |

***16-Year Average Survival Ratio*** ***1.00806***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

# Table A32

## Schuylerville Central School District

### Enrollment and 1st-11th to 2nd-12th Survival Ratios

| Grade | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 111 | 105 | 83 | 116 | 91 | 114 | 136 | 104 | 117 | 125 | 144 | 133 | 133 | 122 | 133 | 123 | 127 |
| 1 | 96 | 110 | 109 | 102 | 114 | 106 | 123 | 145 | 118 | 114 | 144 | 149 | 132 | 136 | 130 | 139 | 131 |
| 2 | 121 | 114 | 101 | 112 | 98 | 110 | 111 | 115 | 134 | 118 | 125 | 154 | 148 | 129 | 130 | 139 | 142 |
| 3 | 100 | 121 | 108 | 100 | 101 | 103 | 115 | 95 | 124 | 121 | 109 | 117 | 147 | 134 | 122 | 127 | 133 |
| 4 | 92 | 95 | 103 | 100 | 98 | 106 | 114 | 110 | 97 | 122 | 127 | 111 | 115 | 145 | 139 | 114 | 124 |
| 5 | 101 | 97 | 92 | 116 | 93 | 97 | 118 | 122 | 108 | 104 | 123 | 131 | 116 | 116 | 145 | 145 | 121 |
| 6 | 100 | 104 | 87 | 95 | 116 | 95 | 109 | 117 | 121 | 108 | 116 | 122 | 134 | 115 | 122 | 145 | 145 |
| 7 | 106 | 107 | 112 | 103 | 113 | 133 | 102 | 112 | 111 | 132 | 110 | 118 | 122 | 136 | 114 | 127 | 151 |
| 8 | 130 | 112 | 114 | 109 | 90 | 106 | 123 | 101 | 105 | 110 | 131 | 111 | 112 | 113 | 135 | 122 | 129 |
| 9 | 132 | 125 | 108 | 107 | 115 | 83 | 108 | 126 | 100 | 111 | 113 | 124 | 115 | 116 | 123 | 138 | 111 |
| 10 | 110 | 129 | 130 | 104 | 100 | 116 | 78 | 99 | 116 | 98 | 98 | 107 | 124 | 113 | 113 | 124 | 140 |
| 11 | 118 | 101 | 133 | 123 | 93 | 94 | 108 | 81 | 91 | 119 | 95 | 96 | 113 | 120 | 106 | 109 | 114 |
| 12 | 95 | 106 | 85 | 122 | 104 | 85 | 95 | 99 | 79 | 86 | 114 | 85 | 83 | 102 | 100 | 97 | 104 |
| ungrded | 12 | 3 | 18 | 29 | | | | | | | | 10 | 14 | | 12 | | |
| Total | 1424 | 1429 | 1383 | 1438 | 1326 | 1348 | 1440 | 1426 | 1421 | 1468 | 1549 | 1568 | 1608 | 1597 | 1624 | 1649 | 1672 |
| **Survival Ratio** | | **0.99672** | **0.97783** | **1.00412** | **0.93417** | **0.99735** | **1.02785** | **0.97353** | ***0.96975*** | ***1.00327*** | **1.00318** | **0.99613** | **0.99481** | **0.96193** | **0.99126** | **0.99712** | **0.9895** |

| School with Construction | Year | Cost/Student | Enrollment |
|---|---|---|---|
| Junior Senior High School | 1990-91 | $ 10,002 | 702 |
| Elementary School | 1990-91 | $ 6,975 | 923 |

***16-Year Average Survival Ratio*** ***0.98866***

Note: The survival ratios that are underlined and in italics are for the year of construction completion and the following year

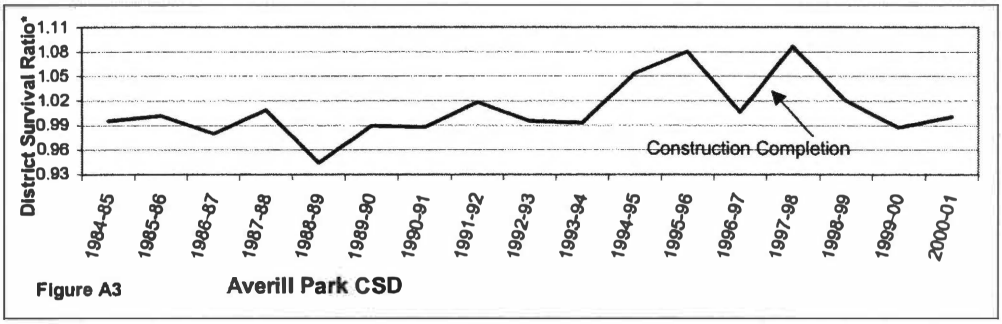


Figure A3 **Averill Park CSD**

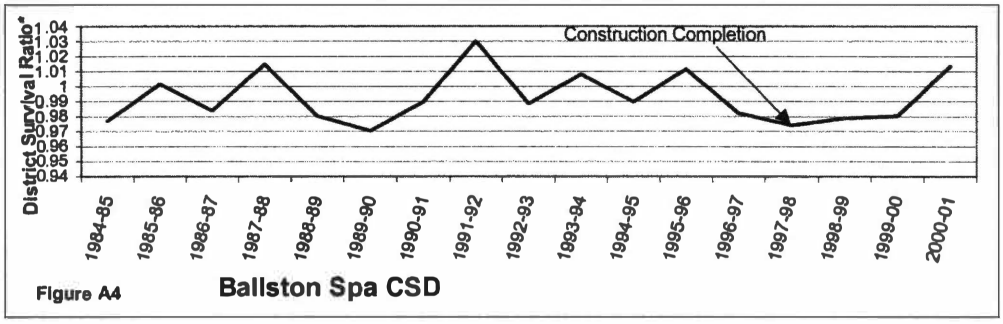


Figure A4 **Ballston Spa CSD**

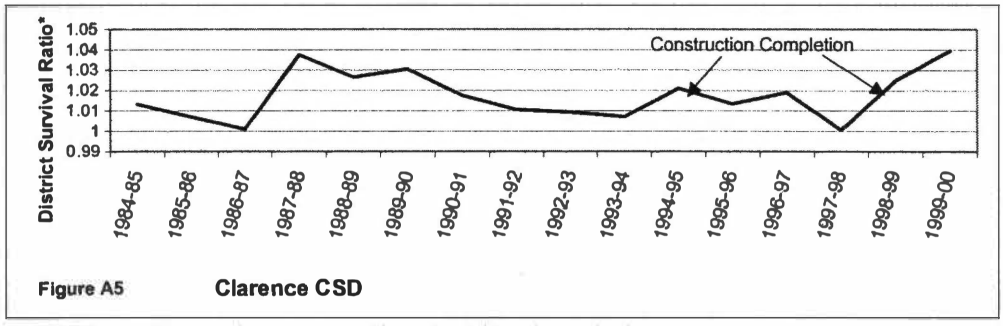


Figure A5 **Clarence CSD**

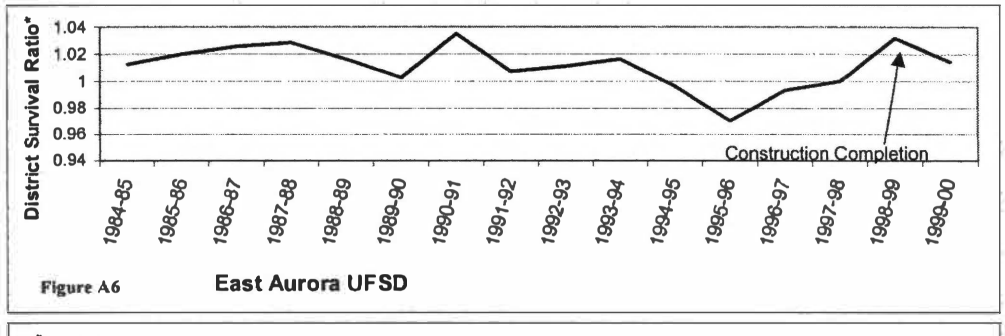


Figure A6 **East Aurora UFSD**

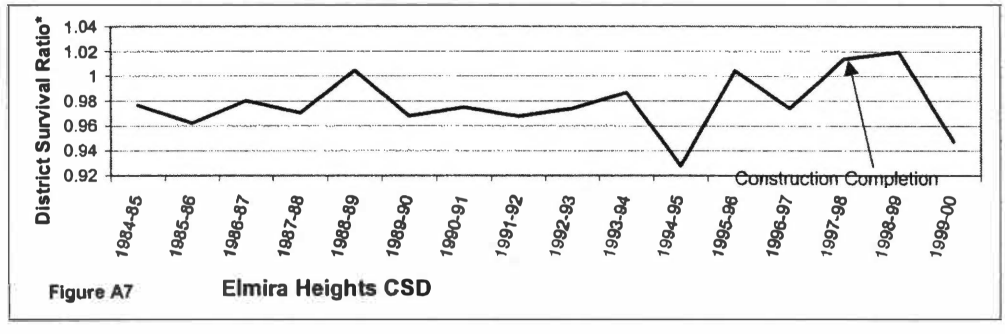


Figure A7 **Elmira Heights CSD**

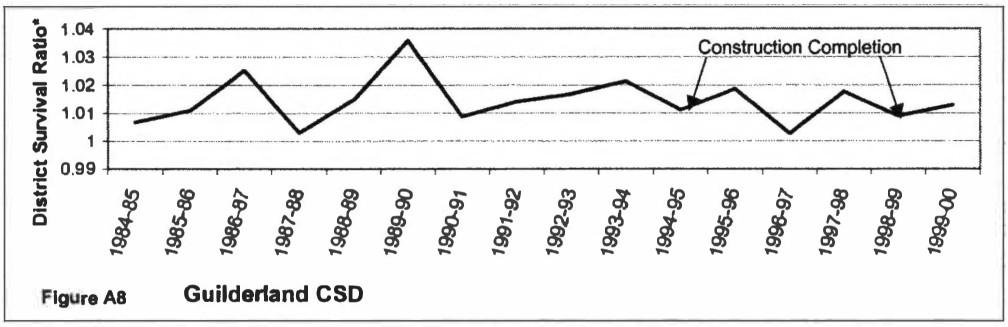


Figure A8 **Guilderland CSD**

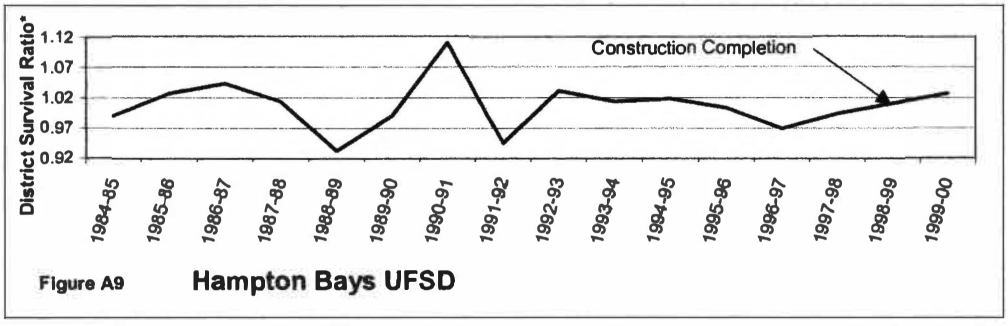


Figure A9 **Hampton Bays UFSD**

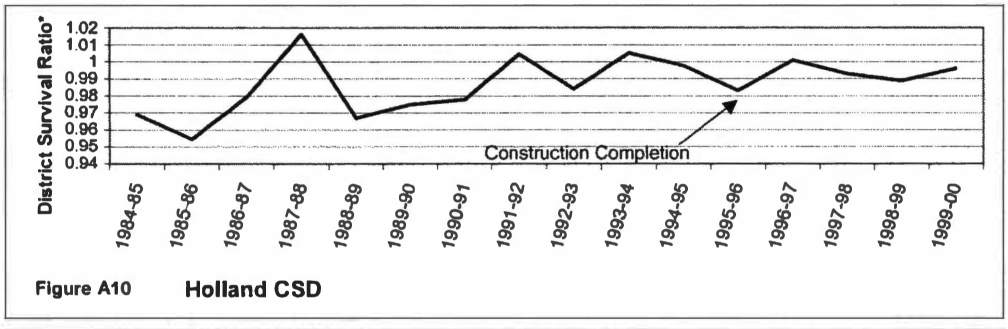


Figure A10 **Holland CSD**

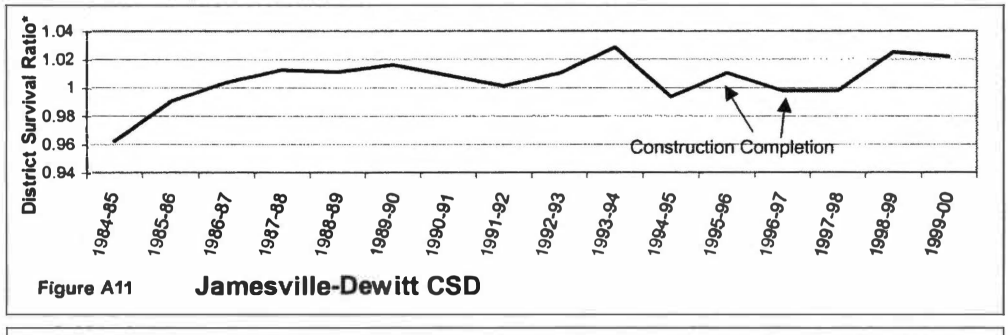


Figure A11 **Jamesville-Dewitt CSD**

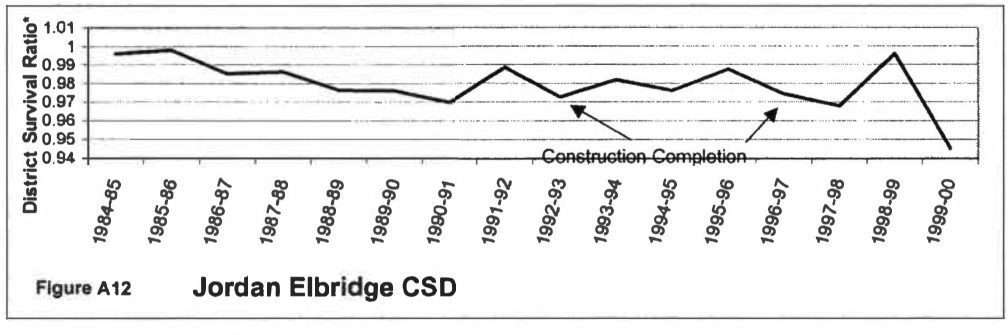


Figure A12 **Jordan Elbridge CSD**

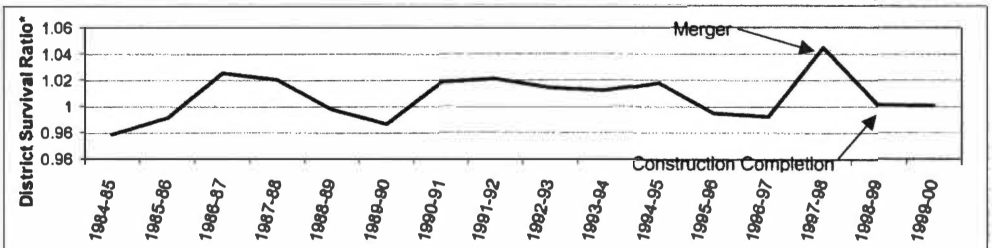


Figure A13 **Katonah Lewisboro UFSD**

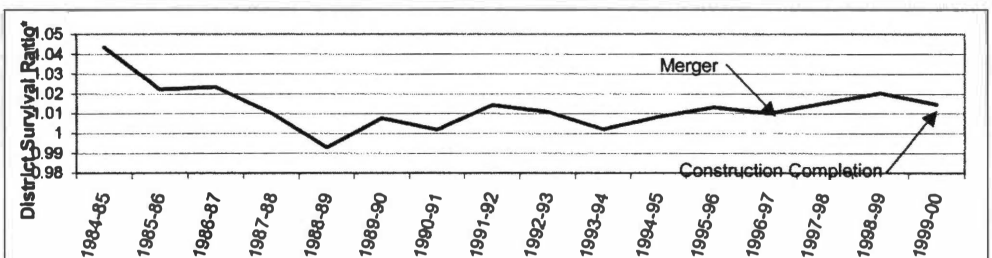


Figure A14 **Monroe Woodbury CSD**

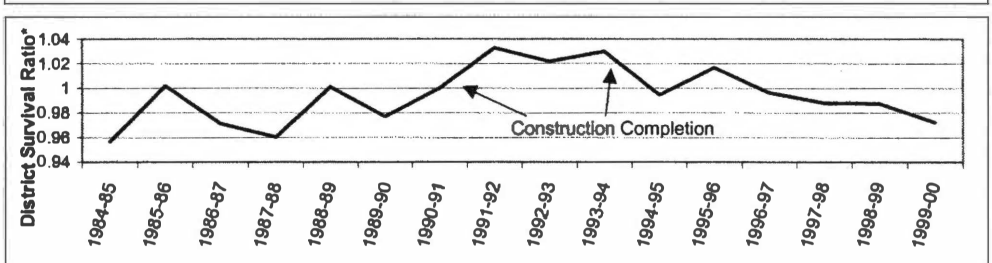


Figure A15 **Nyack UFSD**


Figure A16 **Saquoit Valley CSD**

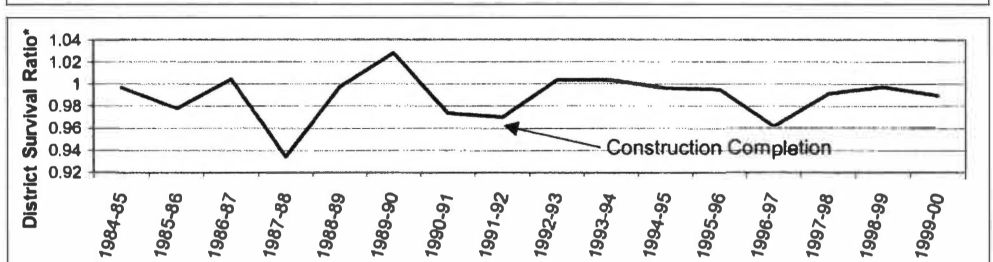


Figure A17 **Schylerville CSD**

# VITA

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Leif is currently a Senior Planner with the Capital District Regional Planning Commission in Albany, New York.