# SCHOOL ENROLLMENT PROJECTIONS

## FOR THE

## MARCELLUS CENTRAL SCHOOL DISTRICT

#### PREPARED BY:

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**APRIL, 1998** 

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# ENROLLMENT PROJECTIONS FOR THE MARCELLUS CENTRAL SCHOOL DISTRICT

#### I. INTRODUCTION

This study has been completed as part of an agreement between the Central New York Regional Planning & Development Board and the Marcellus Central School District. Contained in this document are District wide school enrollment projections for a five-year period beginning with the 1998-1999 school year through the 2002-2003 school year. A hybrid methodology using age cohort survival and housing multiplier ratios was used to prepare these projections. Outlined below is a discussion of the database, assumptions, activities, and trends that influence the number of students enrolled in the Marcellus Central School District.

#### II. DATA BASE AND ASSUMPTIONS

The methodology used in the preparation of this projection study combines a cohort survival component and a building multiplier ratio. Supporting data includes the following:

- 1. 1990 Census of Population and Housing information indicating the number of persons and housing units located within the Marcellus Central School District;
- 2. historical school enrollment data beginning with the 1990 91 school year;
- 3. annual live birth data from the New York State Department of Health for the period 1984 1996;
- 4. building permit data to determine the number of housing units added due to new construction/rehabilitation, or deleted due to demolition, within the District for the period 1990 1997;
- 5. anticipated residential building activity in the School District through the year 2003;
- 6. interviews with local government officials and site visits to existing and planned residential developments.

During the preparation of this enrollment projection report the following three assumptions were made:

1. The District's current half-day Kindergarten program will remain in effect throughout the projection period.

- 2. There will be no significant change in the student dropout rate over the projection period.
- 3. The number of families within the Marcellus Central School District choosing alternatives to public education, including private, parochial, and home school options will remain constant during the projection period.

#### III. EVALUATION OF PREVIOUS ENROLLMENT PROJECTION FIGURES

Initial District enrollment projections were completed in June of 1995. The projected and actual enrollment figures for 1995 – 96 through 1997 – 98 are presented in Table 1.

TABLE 1.

	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
	1995 -	96		19	96 - 97		1997 -	98	
	Projected	Actual	% Diff.	Projected	Actual	% Diff.	Projected	Actual	% Diff.
К	174	190	-9	178	182	-2	167	182	-9
1	188	195	-4	198	215	-9	205	212	-3
2	178	172	3	152	155	-2	164	174	-6
3	156	165	-6	174	162	7	150	158	-5
4	156	151	3	158	175	-11	176	167	5
5	174	168	3	156	153	2	159	178	-12
6	163	160	2	175	171	2	157	153	3
7	132	133	-1	169	160	5	181	186	-3
8	178	179	-1	130	137	-5	167	155	7
9	143	153	-7	186	174	6	136	151	-11
10	148	143	3	133	141	-6	175	165	6
11	135	135	0	141	140	1	126	132	-5
12	132	129	2	133	131	2	140	135	4
Total	2,057	2073	-1	2083	2093	-1	2103	2148	-2

District-wide, the projected enrollment figures were lower than the actual enrollment figures for all verifiable years. Although the projected and actual figures varied little, the frequency of low-grade projections increased over time, as did the percent difference between low-grade projections and actual enrollment figures for that grade.

#### IV. HISTORICAL BASELINE DATA AND ANALYSIS

#### 1990 Census Data

The 1990 Census of Population and Housing provides base year data from which to review activities and trends through 1997. Census data is useful in providing the total number of housing units, and housing types, within the District. Marcellus School District officials have ensured that the School District boundaries have not changed significantly since the 1990 Census.

Population and housing data for the six towns partially or entirely within the School District boundary were obtained from the 1990 Census. These towns are Camillus,

Marcellus, Onondaga, Otisco, Skaneateles, and Spafford. 1990 Census data was also obtained for the Village of Marcellus. Original 1990 Census data for the Marcellus Central School District can be found in Appendix A. For a more detailed discussion of 1990 Census data refer to the original 1995 enrollment projection report.

Appendix B contains updated population estimates through July 1, 1996 for each District Town. Between 1990 and 1996, School District enrollment increased by 154 students, or 7.9 percent, while the total town populations increased by an estimated 8.9 percent.

#### Historical Enrollment Data

Analysis of District enrollment trends provides the foundation from which to project future enrollment. Historic enrollment data for the period 1990 – 91 through 1997 – 98 was obtained from the Marcellus School District office and is presented in Table 2. This data provides a means to track grade-to-grade survival ratios and to assess cohort survival from year to year. It should be noted that these figures represent the October 1 enrollment for each of the given school years.

The 1997 - 98 enrollment for the Marcellus Central School District was 2,148 students. With the exception of the 1994 – 95 school year, enrollment in the District has increased steadily over the past eight years. The total net enrollment increase is approximately 11 percent, or 209 students.

Analysis of aggregated enrollment data for the past eight years (Table 3) reveals annual fluctuation at the elementary level (grades K-3). The 1997 – 98 elementary enrollment of 726 students represents a net enrollment increase of approximately 6 percent (39 students) over the eight year study period. The current enrollment also represents the maximum number of elementary students enrolled over the study period. This enrollment level was also attained during the 1993 – 94 school year. Since that time, elementary enrollment has fluctuated annually.

Enrollment at the middle school level (grades 4-8) increased steadily since the 1992-93 school year. The 1997-98 middle school enrollment of 839 students represents a net increase of approximately 19 percent (136 students) over the base year enrollment of 703 students.

High school enrollment (grades 9-12) exhibits the greatest degree of stability over the study period with a net increase of only 34 students or 6 percent. The 1997-98 high school enrollment was 583 students. This represents a .5 percent decrease (3 students) from the previous year. The maximum variation between low enrollment (540 students in 1991-92) and high enrollment (586 students in 1996-97) was 8.5 percent.

Given the current trends in elementary and middle school enrollment, it can be reasonably expected that high school enrollment will increase over the next several years.

Variation in annual, aggregate enrollment figures is graphically presented in Figure 1.

	TABLE 2 MARCELLUS CENTRAL SCHOOL DISTRICT ENROLLMENT											
	M	ARCELLUS					IN I					
	1990-1991 THROUGH 1997-1998*											
Grade	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98				
К	186	171	181	188	166	190	182	182				
1	194	219	194	199	219	195	215	212				
2	139	158	175	159	159	172	155	174				
3	168	137	147	180	154	165	162	158				
4	139	167	135	159	174	151	175	167				
5	141	139	173	128	162	168	153	178				
6	144	142	144	168	128	160	171	153				
7	144	147	148	146	180	133	160	186				
8	135	151	146	147	137	179	137	155				
9	173	159	147	150	159	153	174	151				
10	138	146	132	153	140	143	141	165				
11	122	120	142	131	134	135	140	132				
12	116	115	129	143	125	129	131	135				
Total	1,939	1,971	1,993	2,051	2,037	2,073	2,096	2,148				

\*Note: totals do not include ungraded Handicapped, Special Education, or BOCES students

Source: Marcellus Central School District

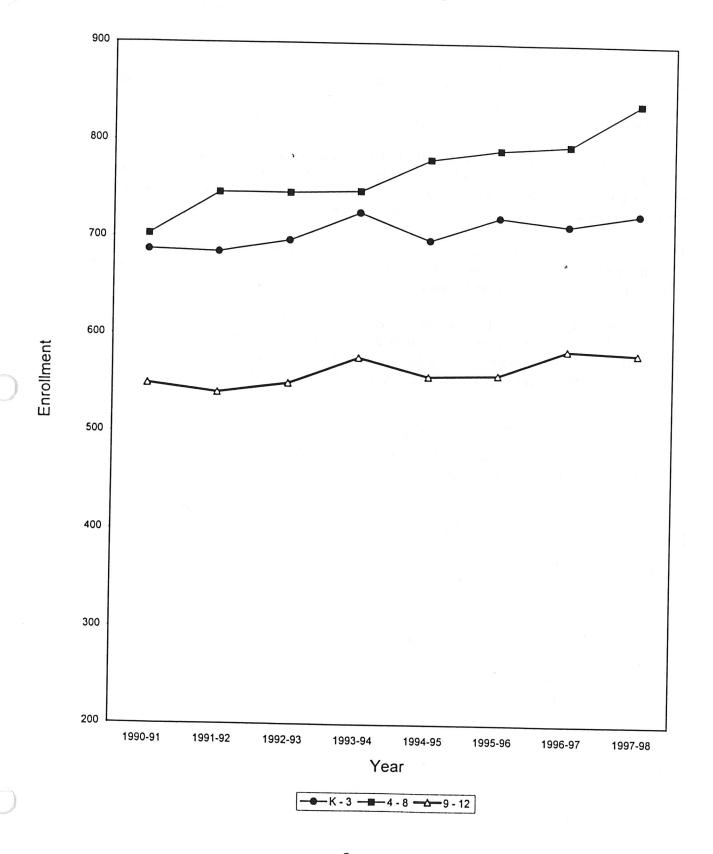
	TABLE 3											
MARCELLUS CENTRAL SCHOOL DISTRICT												
1	AGGREGATE SCHOOL ENROLLMENT											
	1990 - 1991 THROUGH 1997 - 1998*											
Grade	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98				
K - 3	687	685	697	726	698	722	714	726				
4 - 8	703	746	746	748	781	791	796	839				
9 - 12	500 500											
Total	1,939	1,971	1,993	2,051	2,037	2,073	2,096	2,148				

\*Note: totals do not include ungraded Handicapped, Special Education, or BOCES students

Source: Marcellus Central School District

Figure 1.

# Marcellus Central School District Aggregated Enrollment



#### Birth Rate Data

Live Birth Data obtained from the New York State Department of Health is used to assess the relationship between births within School District Towns and the number of children entering Kindergarten. Typically, a high number of births in a given year will result in a high number of students entering Kindergarten five or six years later. Live birth data for the Towns of Camillus, Marcellus, Onondaga, Otisco, Skaneateles and Spafford were used in the analysis of the Marcellus Central School District. This aggregation represents the towns entirely, or partially, within the District's boundary.

The total number of live births for each town has been adjusted to reflect the percentage of total town area within the School District's boundary. This generates a more accurate prediction of Kindergarten size than that obtained using the total number of births from a representative sample of towns, as done for the 1995 enrollment projection study.

Five and six year survival ratios were calculated from live birth data and Kindergarten student enrollment. It was determined that the six-year cohort figure provides the most accurate prediction of Kindergarten enrollment for the District.

Over the past eight years, the District has averaged .9463 Kindergarten students for every birth recorded six years earlier. This survival ratio, when applied to live birth data through the year 1996, provides an indication of the number of Kindergarten students that can be expected to enroll in the District through the 2002 – 2003 school year, as shown in Table 4.

		TABLE 4.										
	Number of Live Births: 1984 – 1996											
	Towns of Camillus, Marcellus, Onondaga, Otisco, Skaneateles, and Spafford											
lowi	is of Camillus, Ma	rcellus, Ollolluaga,	Number of									
Year	Number of	Year To	Kindergarten	Survival								
Of Birth	Births	Kindergarten	Students	Ratio								
1984	188	1990	186	0.9894								
1985	199	1991	171	0.9894								
1985	206	1992	181	0.8786								
1987	193	1993	188	0.9741								
	197	1994	166	0.8426								
1988	189	1995	190	1.0053								
1989	196	1996	182	0.9286								
1990	189	1997	182	0.9630								
1991	180	1998	170	0.9444								
1992	187	1999	177	0.9465								
1993	-	2000	152	0.9440								
1994	161	2001	170	0.9444								
1995	180	2002	141	0.9463								
1996*	149	2002		01, 100								

\*Note: 1996 Provisional Data - May Be Subject To Revision

BOLD NUMBERS are projected

Source: New York State Department of Health

#### **Permit Data**

A major factor that influences School District enrollment is the change in the number of housing units within the District. Residential building activity was assessed for each town within the Marcellus Central School District beginning with the base year 1990. The assessment focused on building permit records maintained by each town in the District, and on conversations with local town officials.

The results of the building permit analysis indicate that residential building activity within the Marcellus Central School District since 1990 has consisted primarily of single-family detached structures (Table 5). Between 1990 and 1997, there has been a net increase in new residential construction building permits issued within the District. During this period, permits for 237 single family units, and 12 mobile home units were issued

To better determine the impact new residential construction has had on student enrollment, a housing multiplier ratio was developed for each housing type in the District. The Housing Enrollment Multiplier is the number of students, by grade level, that have occupied each type of housing unit in the District between 1990 and 1997. For example, during the 1997 – 98 school year, based on student enrollment and the number of single family detached housing units in the District; each single family home housed approximately 0.0460 Kindergarten students. In other words, one in approximately every 21 single-family homes in the District has a child in Kindergarten this year.

A complete listing of the single family detached housing multipliers for the Marcellus Central School District can be found in Appendix C.

						M.H	102	105	106	106	109	110	111	112		
			EAR			APT.	258	258	258	258	286	286	286	286		
			TOTAL END OF YEAR	DUPLEX	TRIPLEX	QUADPLEX	295	295	295	295	295	295	295	295		
			TO			T.H.	51	51,	51	51	51	51	51	51		
						S.F	3,364	3,384	3,424	3,456	3,472	3,493	3,507	3,528		
		СТ				M.H	-	က	-	0	က	-	-	-		
	IITS	DISTRI	G YEAR			APT.	0	0	0	0	0	0	0	0		
TABLE 5	NUMBER OF HOUSING UNITS	MARCELLUS CENTRAL SCHOOL DISTRICT	NET CHANGE DURING YEAR	DUPLEX	TRIPLEX	QUADPLEX	0	0	0	0	0	0	0	0		
7	BER OF	S CENT	NET CH			T.H	0	0	0	0	0	0	0	0		
	NOM	CELLU				S.F	30	20	40	32	16	21	14	21		
		MAR				MH.	101	102	105	106	106	109	110	111		
								APT.	258	258	258	258	258	258	258	258
		BEGINNING OF YEAR DUPLEX TRIPLEX	TRIPLEX	QUADRLEX	295	295	295	295	295	295	295	295				
			GINNIP	BEGINNING			T.T	51	51	51	51	51	51	51	51	
			BE			S.F.	3,334	3,364	3,384	3,424	3,456	3,472	3,493	3,507		
						Year	1990	1991	1992	1993	1994	1995	1996	1997		

S.F = Singe Family
T.H = Townhouse/attached
APT. = Apartment
M.H. = Mobile Home

## V. <u>CURRENT DEVELOPMENT TRENDS</u>

## Proposed Residential Building Activity

Given the historical trends in residential construction within the Marcellus Central School District, it is estimated that a total of 83 new units of housing will be constructed in the District over the next five years. Of these units, 74 will be single family dwellings, and 9 will be mobile homes.

The annual breakdown for projected housing construction over the next five years is presented in Table 7. A discussion of recent building activity and local planning policies in each of the School District's constituent communities is presented in support of residential construction projections.

	TABLE 7										
	Р			INITO							
1	PROJECTED HOUSING UNITS  MARCELLUS CENTRAL SCHOOL DISTRICT 1998 - 2002										
1											
	Single Family	Townhouse	Duplex	Apartment	Mobile Home						
1998	14	0	0	1	38						
1999	17	0	0	2	38						
2000	17	0	0	2	38						
2001	14	0	0	2	38						
2002	12	0	0	2	38						

#### Town of Camillus

Only a small portion of the Town of Camillus is located within the Marcellus Central School District. The Camillus portion of the District includes the Hamlet of Martisco and portions of Munro Road, Lime Ledge Road, and Lyons Road.

#### Maestri Manor

The original plan for the Maestri Manor Subdivision consisted of 116 single-family building lots. The project is located off of Munro Road, just north of the Tuscarora Country Club. The development was first approved in 1990. Since 1995, a total of 6 additional lots have been developed, bringing the total number of developed lots to 24. Costs associated with excavation significantly add to the cost of constructing a home in the Maestri Manor Subdivision. The projections included in this report anticipate the development of less than one lot annually in the Maestri Manor Subdivision.

#### Twilight Acres

The Twilight Acres Subdivision was approved by the Town of Camillus in 1992, and consists of six single-family building lots. The development is located along Lyons

Road. Since 1995, one lot has been developed, bringing the total number of developed lots to three. The remaining three lots are located on the south side of Lyons Road. Each is approximately 7 to 10 acres in size. All of the remaining lots have extremely steep slopes and will require a great deal of excavation prior to development. Given these conditions, no further development is expected in the Twilight Acres subdivision over the next five years.

Information pertaining to the Town of Camillus was obtained from interviews with Town Zoning and Code Enforcement Officer, Tom Price.

#### Town of Marcellus

Approximately ninety percent of the Town of Marcellus is located in the Marcellus Central School District. Listed below are developments that will have future impact on enrollment patterns within the Marcellus Central School District.

### • Campbell Farm Subdivision

The Campbell Farm Subdivision is located between Marble and Slate Hill Roads. Since 1995, one additional lot has been developed, bringing the total number of developed lots to two. At the present time, there are no plans to develop the remaining five lots.

#### • Clark Terrace

The Clark Terrace Subdivision has been completed for several years. No additional construction is expected to take place in the development or on the adjacent vacant land.

## • Douglas Perry Subdivision

This three-lot subdivision off of Cedarvale Road has been completed. No additional development is planned.

#### Drexler Tract

The Drexler Tract is located on Frank Gay Road. This four-lot subdivision was approved in 1995. Since that time, two lots have been developed, and the remaining two lots are expected to be completed within the next three years.

#### Folkways Tract

The Folkways Tract is located off of Northwest Town Line Road and includes Browsing Lane, Deer Path, and Deer Circle. A total of 27 lots are located in the development, and one lot is vacant at this time. The vacant lot is owned by an adjacent landowner, and is not expected to be developed.

An eight-lot extension of the development received final approval by the Marcellus Planning Board and construction has begun. One lot has been developed and two more will be completed this year. These projections anticipate the development of the remaining five lots by the end of 2003.

• Gallinger Farms

Four of the eight lots in the Gallinger Farms Subdivision have been developed. The subdivision is located on the south side of Seneca Turnpike, just west of the Town Line Road intersection. No interest in additional development within the subdivision has been expressed. A landowner within the development bought 30 acres adjacent to his existing property. Development of this land is not expected.

No additional subdivision of the 100-acre parcel of land located south of the Gallinger Farms subdivision is anticipated.

• Lathrop Heights

This eight-lot subdivision located on Lathrop Drive is complete, and no additional development of the adjacent vacant land is anticipated at this time.

#### Louis Gooden Farm

A total of six lots were approved in the Louis Gooden Farm Subdivision, which is located on Route 174, just south of the Seal Road intersection. To date, three single-family lots have been developed. The remaining three lots are projected to be developed over the next three years.

#### Haley Farm Subdivision

This subdivision is located at the intersection of Amber and Brewer Roads. Twelve of the 13 approved lots have been developed. The remaining lot is owned by an out of state resident. Development of this lot is not expected.

Information pertaining to the Town of Marcellus was obtained through interviews with Sharon Volcko, Town Planning Board, and Joyce Potucek, Deputy Town Clerk

#### Village of Marcellus

Since 1995, a total of three single-family homes have been constructed in the Village of Marcellus.

The only active subdivision within the Village is Marcellus Village Woods. The development consists of 28 single-family building lots. To date five homes have been constructed and one additional building permit has been issued. These projections assume that one home will be constructed in the Marcellus Woods Subdivision annually over the next five years.

Information pertaining to the Village of Marcellus was obtained from Gary March, Village Clerk.

### Town of Onondaga

Although only a small percentage of the Town of Onondaga's total land area is within the Marcellus Central School District boundary, 32 percent of the new single family construction that has taken place within the District since 1995 was located in the Town

of Onondaga. The availability of vacant land in the proximity of public utilities suggests new residential development within the School District will remain focused in this Town.

#### • Buxton Woods

Development in the Buxton Woods subdivision began in 1991. To date, 34 single family homes have been completed. The subdivision is located off of Cedarvale Road, just south of Kelly's Corners. Development interest in this subdivision remains very high, as indicated by ongoing construction activity. These projections assume all of the remaining vacant lots will be completed during the next five years at a rate of approximately five per year.

Cedarvale Ridge

Cedarvale Ridge is a 33-lot subdivision located off of Cedarvale Road. Section one consists of 19 one-acre lots. To date, only one lot has been developed, and one lot has been sold. At the present time, no additional development is planned. These projections assume that one new home will be constructed annually over the next five years.

Eagle's Nest

Final approval for this eight lot subdivision located on Beef Street was granted in 1995. Construction of the first single family home is expected to be completed by the end of 1998. Over the next five years, three of the remaining 4 lots are projected to be developed. Development of the remaining two lots is unlikely due to existing Niagara Mohawk easements.

Fagan's Farm

Approval for this two-lot subdivision located at Beef Street and Route 175, was granted in 1990. To date, the vacant land remains for sale.

#### • Howlett Hill Farms Extension

Although the Howlett Hill Farms Development has been completed for many years, there are adjacent parcels that may be desirable as market conditions improve. There are several vacant lots along Collin Road, which runs north off of Corporal Welch Road. One owner controls five lots consisting of over 20 acres. This land would permit access to a 180-acre tract of land owned by Hazelwood Development Inc. The 180-acre parcel is located in an agricultural district. Under current zoning regulations, residential development is restricted. No expansion of the Howlett Hill Farms Subdivision is projected within the next five years, however, the District should continue to monitor the site.

#### Kencrest Estates

Although the Kencrest Estates Subdivision was approved several years ago, there are still three vacant lots in the development. Two of the lots are owned by adjacent homeowners and are not expected to be developed. The remaining vacant lot is owned by one of the residents of the development and contains 43 acres. Although no new construction is planned, the adjacent parcel could accommodate a 20 to 30 lot extension of the Kencrest Estates development.

#### • Miller Estate

The Miller Estate is a four-lot subdivision located on the East Side of Kasson Road. The property owner's primary residence is the only home in the subdivision. It is unlikely that any further development will occur within the next five years.

#### • Pumpkin Hollow

Forty of the forty-one single-family building lots in the Pumpkin Hollow Subdivision have been completed. The remaining vacant lot is owned by an adjacent homeowner and is not expected to be developed.

A 29-acre parcel of land adjacent to the subdivision is owned by the Cedarvale Development Corporation and could accommodate an extension of the development. The enrollment projections contained in this report do not include any further construction in the Pumpkin Hollow subdivision, however, the District should continue to monitor the adjacent, vacant land.

#### Sycamore Hill

The Sycamore Hill subdivision, located on Kasson Road, was started over 10 years ago and consists of thirty single-family building lots. Five lots remain vacant. These projections anticipate the development of one lot annually through 2003.

Another potential area for future development in the Town of Onondaga portion of the Marcellus Central School District is the 110 acres of land located at the intersection of Howlett Hill and Cedarvale Roads. The vacant land is located on the northwest corner of this intersection and is owned by B.H. & J. Development Corporation. These projections assume that the owners of this parcel will begin subdivision discussion within the next five years, however, no new home construction is projected over the next five years. The proximity of existing water and sewer services will enhance this location's desirability for development as market conditions improve.

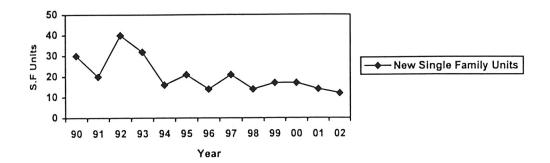
Information pertaining to the Town of Onondaga was obtained through interviews with Joanie Jawarski, Planning & Zoning Secretary, and Ronald Ryan, Building Inspector/Zoning Enforcement Officer.

## Residential Summary

The sharp fluctuations in new residential construction exhibited throughout much of the 1990's are expected to taper off considerably over the next five years, as shown in Figure 2. Given the current climate for new home sales in Onondaga County, it is expected that new home construction will slowly decline through the 2002 - 03 school year. As a result, school enrollment will be influenced more by the low birth rates of the past several years than it will by the in-migration of new families to the District.

Figure 2.

Marcellus Central School District
Historical & Anticipated Single Family Housing Units



## VI. OBSERVATIONS AND ENROLLMENT PROJECTIONS

The previous sections have been used as a source of data from which to project the future enrollment of the Marcellus Central School District. Enrollment projections have been calculated by analyzing the data in relation to historical trends within the School District, projecting the future residential building activity, and individually weighing each component.

District-wide projections through the 2002-03 school year are presented in Tables 8 and 9 on the following page. A comparison of the current school year enrollment and the projected enrollment for the 2002-03 school year is shown in Figure 3. Some of the highlights expected for the next five years are listed below.

- District Enrollment is projected to fluctuate over the next 5 years resulting in a net increase of 1.5 percent.
- Kindergarten enrollment for the 1998-99 school year is projected to be 170 students. This represents a 6.5 percent decrease over the current years Kindergarten enrollment total.
- Kindergarten enrollment is projected to decrease by 22.5 percent over the next five years.
- The Kindergarten class size is expected to average 162 students over the next five years.
- Enrollment at the elementary school level (grades K 3), is projected to remain quite stable at 727 students during the 1998 99 school year before decreasing to 641 students during the 2002 03 school year. District-wide, this represents a net decrease in enrollment at the elementary level of almost 12 percent (82 students) from the 1997 98 enrollment

- Middle school enrollment (grades 4 8), is projected to increase approximately 1.5 percent over the next five years. The projected enrollment of 854 students for the 2002-03 school year represents an increase of approximately 2 percent, or 15 students, over the current middle school enrollment of 839 students.
- Middle school enrollment is projected to peak at 872 students during the 2000 01 school year. This represents an increase of approximately 4 percent over the current middle school enrollment.
- The most substantial change in enrollment is projected to occur at the high school level (grades 9 12). Over the next five years, high school enrollment is projected to increase 17.5 percent (102 students).
- The average high school enrollment over the next five years is projected to be 641 students.

	TABLE 8											
	MARCELLUS CENTRAL SCHOOL DISTRICT											
	ENROLLMENT PROJECTIONS THROUGH 2002 - 2003											
Grade	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03						
К	182	170	177	152	170	141						
1	212	211	196	204	175	196						
2	174	171	169	157	164	140						
3	158	175	171	169	157	164						
4	167	161	178	174	172	160						
5	178	167	` 161	177	173	170						
6	153	179	167	161	177	173						
7	186	159	186	174	168	184						
8	155	186	159	186	173	167						
9	151	168	200	171	199	185						
10	165	140	154	185	157	184						
11	132	154	131	144	173	148						

Note: Totals do not include ungraded Handicapped, Special Education, or BOCES students. Numbers in BOLD are projected.

150

2,199

127

2,181

128

2,169

12

Total

135

2,148

140

2,198

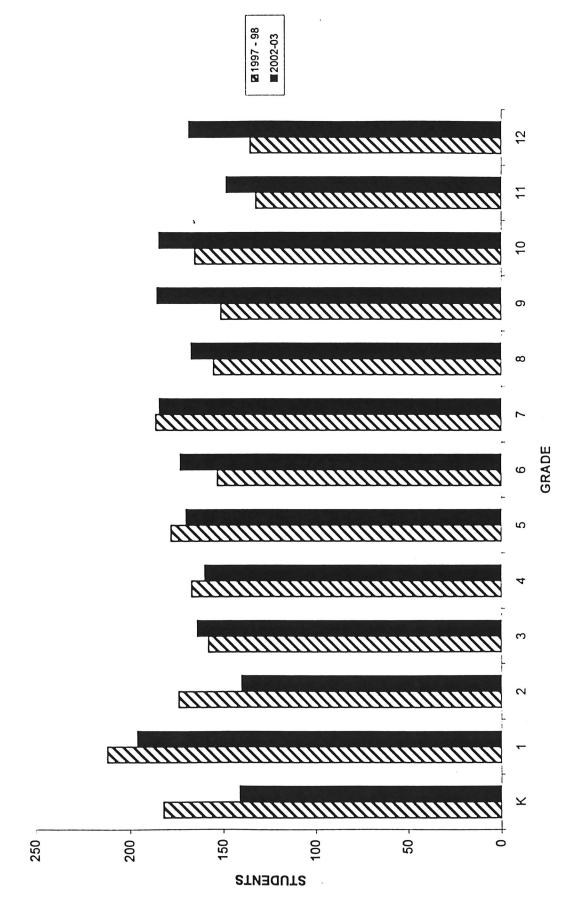
168

2,180

	TABLE 9										
AGGREGATE ENROLLMENT PROJECTIONS											
	MARCELLUS CENTRAL SCHOOL DISTRICT										
		THR	OUGH 2002 -	2003							
Grade	de 1997-98 1998-99 1999-00 2000-01 2001-02 2002-										
K - 3	726	727	713	682	666	641					
4 - 8	839	852	851	872	863	854					
9 - 12	583	590	635	627	669	685					
Total	2,148	2,169	2,199	2,181	2,198	2,180					

Note: Totals do not include ungraded Handicapped, Special Education, or BOCES students. Numbers in **BOLD** are projected.

MARCELLUS CENTRAL SCHOOL DISTRICT ENROLLMENT 1997 AND 2002



## TECHNICAL APPENDICES

The following tables provide additional quantitative components used in the preparation of the enrollment projections for the Marcellus Central School District. Prior to the preparation of the final set of projections, a qualitative evaluation of all projection sets found in this report was conducted.

## DISTRICT SUMMARY PROFILE FOR MARCELLUS CENTRAL SCHOOL

State: 36 District: 18480 Grade Range: KG-12

DISTRICT SOLUTION FROM THE TOTAL					
ntal Population hite Black	10,808 10,738 27 24	100.0 99.4 0.2 0.2	Children (Total Relevant) Male Female	2,545 1,283 1,262	100.0 50.4 49.6
American Indian, Eskimo, or Aleut Asian or Pacific Islander Other race Persons of Hispanic Origin	19 0 63	0.2 0.0 0.6	Children by Race White Black American Indian, Eskimo, or Aleut	2,524 11 0	99.2 0.4 0.0
Persons in Households Persons in Non-Household Settings	10,808 0	0.0	Asian or Pacific Islander Other race	10	0.4
Persons in Poverty in 1989	381	3.5	Children of Hispanic Origin	28	1.1
Total Housing Units Owner Occupied Renter Occupied Vacant	4,316 3,231 634 451	100.0 74.9 14.7 10.4	Children by Enrollment Status Enrolled Public Private Not Enrolled	2,241 2,048 193 304	88.1 80.5 7.6 11.9
Total Households Urban Rural	3,865, 173 3,692	100.0 4.5 95.5	Children by Urban/Rural Urban Rural	102	4.0 96.0
Median Household Income \$	38,376		Children in Won-Household Settings	0	0.0
Per Capita Income in 1989	16,721		At Risk Pre-School Children	9	0.4
Employment Status (Persons 16 years & over)	. 101	100.0	At Risk Children, Ages 6-19	24	0.9
Total Persons 16 years & over In labor force:	8,104		Children in Poverty, 1939	172	8.8
In Armed Forces Civilian: Employed	7 5,483	0.1 67.7	Dropouts Dropout Rate	21 3.63	
Unemployed Not in labor force Educational Attainment	2,396	2.7	Children by Language Spoken at Mone (Relevant Children 5 yrs & over): Speak only English	2,250	100.0 97.6 2.2
[Persons 20 years & over] Total Persons, 20 years and over 12th grade or less, no diploma	7,542 831	100.0	Spanish or Spanish Creole Other	6	0.3
ligh school graduate Some college, no degree Bachelor's or higher degree	2,205 2,373 2,130	29.3 31.5 25.2	Children by Language Spoken at home and Ability to Speak English (Relevant Children 5 yrs & overl: Speak only English	2,250	100.0
			Speak Spanish: Speak English "very well" Speak English "well" Speak English not well/not	37 0 12	1.6 0.0 0.5
			Speak Asian or Pacific Island language Speak English "very well" Speak English "well" Speak English not well/not	: 0 0	0.0 0.0 0.0
			Speak other language: Speak English "very well" Speak English "well" Speak English not well/not	3 0 3	0.1 0.0 0.1

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MARCELLUS CSD
C/O-SUPRTNDNT-PAUL E BRISTOL
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MARCELLUS N Y 13108

	DISTRICT DETAILED PROFILE FOR MARCELLUS	CENTRAL	SCHOOL	State: 36 District: 18480 Grade Range: Ko	C-12	
	Total Housing Units	4,316	100.0	Educational Attainment		
1	Owner Occupied Hedian Value	3,231 93,364		(Persons 20 years and over) Total Persons, 20 years and over	7,542	100.0
1	Renter Occupied  Median Gross Rent  \$	634	14.7	12th grade or less, no diploma: Male	438	5.8
	Median Gross Rent \$ Unweighted Sample Count 100-Percent Count	1,141	26.4 99.6	Female High school graduate:	393	5.8 5.2
		10,808	100.0	Male Female	955 1,253	12.7 16.6
	Total Persons Unweighted Sample Count of Persons	2,725	25.2	Some college, no degree:	-	
	100-Percent Count of Persons	10,741		Male Female	1,127 1,246	14.9 16.5
	Total Households Urban, Inside Urbanized Areas	3,865 173	100.0 4.5	Bachelor's or higher degree: Male	1,122	14.9
	Urban, Outside Urbanized Areas Rural, Farm	0 44	0.0	Female	1,008	13.4
	Rural, Nonfarm	3,648	94.4	Children (Total Relevant):	2,545	100.0
	Metro-In Central City Metro-Not in Central City, Urban	173	4.5	Male	1,283	50.4
	Metro-Not in Central City, Rural Cutside Metro, Urban	3,692	0.0	Female	1,262	49.6
	Cutside Metro, Rural	0	0.0	Children by Race (Total Relevant)		
	Median Household Income \$ Per Capita Income in 1989 \$	38,376 16,721		White Black	2,524	99.2 0.4
		1,561	100.0	American Indian, Eskimo, or Aleut Asian or Pacific Islander	0 10	0.0
	1-person	55	0.0	Other race Children of Hispanic Origin	0 28	0.0
	2-person 3-person	440	28.2	(Total Relevant)	23	
	6-person 5-person	591 345	37.9 22.1	Children by Race		
	6-person 7 or more persons	113	7.2 1.1	(Total Relevant - Enrolled): White	2,241	23.1 27.2
	•	10.808	100.0	Black American Indian, Eskimo, or Aleut	11	0.4 0.0
	Persons by Race Unite Black	10,738	99.4	Asian or Pacific Islander Other race	10	0.4
	American Indian, Eskimo, or Aleut Asian or Pacific Islander	24	0.2	Children of Mispanic Origin (Total Relevant - Enrolled)	23	1.1
	Other race	•	0.2			
	Persons of Hispanic Grigin	62	0.6	Children by Race (Total Relevant-Enrolled Public):	2,048	80.5
	Persons in Group Guarters Institutionalized persons:	0	0.0	White Black	2,027	79.6
	Correctional institutions Nursing homes	0	0.0	American Indian, Eskimo, or Aleut Asian or Pacific Islander	0 10	0.0 0.4
	Hental (Psychiatric) hospitals Juvenile institutions	0	0.0	Other race Children of Hispanic Origin	0 25	0.0
	Other institutions	ő	0.0	(Total Relevant - Enrolled Public)		
	Other persons in group quarters: College dormitories	0	0.0	Children by Race	107	7.6
	Military quarters Emergency shelters for homeless	0	0.0	(Total Relevant-Enrolled Private): White	193 193	7.5
	Visible in street locations Other noninstitutional	0	0.0 0.0	Black American Indian, Eskimo, or Aleut	0	0.0 0.0
	Households with	3,865	100.0	Asian or Pacific Islander Other race	0	0.0 0.0
	Public Assistance Income in 1989	97	2.5	Children of Hispanic Origin [Total Relevant - Enrolled Private]	0	0.0
	No Public Assistance Income 1989	3,719	70.2			
	Employment Status (Persons 16 yrs & over - Total Persons 16 Years & Over	8,104	100.0	Children by Race [Total Relevant - Not Enrolled]:	304 304	11.9
	Male: In labor force:			White Black	0	0.0
	·In Armed Forces Civilian:	5	0.1	American Indian, Eskimo, or Aleut Asian or Pacific Islander	0	0.0
	Employed Unemployed	2,975	36.7 1.7	Other race Children of Hispanic Origin	0	0.0 0.0
	Not in labor force	818	10.1	(Total Relevant - Not Enrolled)		
	Female: In labor force:	•	0.0	Children by Urban/Rural (Total Relevant) Urban:	102	100.0
	In Armed Forces Civilian:	2 500	0.0	Inside urbanized area:	72	70.6
	Employed Unemployed	2,508	30.9	Male Female	. 30	29.4
	Not in labor force	1,578	19.5	Outside urbanized area: Male	0	0.0
9	Poverty Status in 1989 - [Persons for whom poverty status determ	nined)		Female Rural:	2,443	100.0
	Total Persons Income in 1989 above poverty level:	10,792	100.0	Farm: Male	11	0.5
)	Male	5,146	47.7 48.8	Female Nonfarm:	8	0.3
	Female Income in 1989 below poverty level:	5,265		Male Female	1,200	49.1 50.1
	Male Female	202 179	1.9 1.7	1 Clima Co	. , :	

DISTRICT DETAILED PROFILE FOR MARCELLUS CEN	ITRAL S	SCHOOL	State: 36 District: 18480 Grade Range:	KG-12	
At Risk Pre-School Children	9	100.0	Total Persons, less than 20 years	3,266	
tchildren less than 6 years living with mother, mother not high school graduate and single, divorced, or separated, and is below payerty level in 1989;  - Child less than 4 years:			Persons for whom poverty status is determined, less than 20 years: Under l year 1 year	3,250 127 223	100.0
Child enrolled in school:			2 years	195	6.9
Mother speaks only English	0	0.0	3 years	147	6.0 4.5
Mother speaks other language:	-		4 years	146	4.5
Speak English "very well"	0	0.0	5 years	214	6.6
Speak English "well"	0	0.0	6 years	171	5.3
Speak English not well/not	0	0.0	7 years	169	5.2
Child not enrolled in school:			8 years	194	6.0
Mother speaks only English	0	0.0	9 years	151	4.6
Mother speaks other language:	_		10 years	208	6.4
Speak English "very well"	0	0.0	11 years	111	3.4
Speak English "well"	0	0.0	12 years	123	3.8
Speak English not well/not	0	0.0	13 years	187	5.8
Child 4 or 5 years:			14 years	135	4.2
Child enrolled in school:	, 3.	33.3	15 years 16 years	187 125	5.8 3.8
Mother speaks only English	,	33.3	17 years	134	4.1
Mother speaks other language: Speak English "very well"	0	0.0	18 years	163	5.0
Speak English "well"	ŏ	0.0	19 years	140	4.3
Speak English not well/not	ŏ	0.0	/		4.5
Child not enrolled in school:			Persons in Poverty Universe in 1989	172	100.0
Mother speaks only English	6	66.7	(Persons for whom poverty status is		
Mother speaks other language:			determined, less than 20 years)		
Speak English "very well"	0	0.0	Under l year	8	4.7
Speak English "well"	0	0.0	1 year	2	1.2
Speak English not well/not	0	0.0	Z years	11	6
	2.		3 years	2 5	1.2
At Risk School Age Children	24	100.0	4 years	22	2.9
(Children 6 to 19 years living with			5 years	15	12.8
mother, mother not high school graduate			6 years	13	8.7 2.3
and single, divorced, or separated,			7 years 8 years	13	7.6
and is below poverty level in 1989)			9 years	14	8.1
Child 6 to 19 years: Child enrolled in school:			10 years	10	5.8
Mather speaks only English	24	100.0	11 years	0	0.0
Mother speaks other language:	_		12 years	Ž	1.2
Speak English "very well"	0	0.0	13 years	4	2.3
Speak English "well"	0	0.0	14 years	4	2.3
Speak English not well/not	0	0.0	15 years	13	7.6
Child not enrolled in school:	_	1 1	16 years	3	1.7
Mother speaks only English	0	0.0	17 years	3	1.7
Mother speaks other language:	•	0.0	18 years	21 16	12.2 9.3
Speak English "very well"	0	0.0 0.0	19 years	10	7.5
Speak English "well" Speak English not well/not	ŏ	0.0	Dropout Analysis		
speak engitish not settyiot	•	0.0	Persons 16-19 years in Households		
			Not Enrolled in School and		
			Not High School Graduate:	21	
			Persons 14-17 years in Households	579	
			Persons 14-17 years in Grp Gtrs	. 0	
			Dropout Rate	3.63	

				3000 0 =	
Children by Language Spoken at Home (Relevant Children 5 yrs & over):  eak only English erman Tiddish	2,250 2,195 0 0	100.0 97.6 0.0 0.0	Children by Race by Sex by Hispanic Origin (Total Relevant) Total Relevant Children White: Hale:	2,545	100.0
Other West Germanic language Scandinavian Greek	0	0.0 0.0 0.0	Not of Hispanic Origin Hispanic Origin Female:	1,256	49.4 0.3
Indic Italian French or French Creole Portuguese or Portuguese Creole	0 0 3 0	0.0 0.0 0.1 0.0	Not of Hispanic Origin Hispanic Origin Black: Male:	1,240	48.7 0.8
Spanish or Spanish Creole Polish Russian	49 0 0	2.2 0.0 0.0	Not of Hispanic Origin Hispanic Origin Female:	9 0	0.4
South Slavic Other Slavic language Other Indo-European language Arabic	0 0 0 3	0.0 0.0 0.0 0.1	Not of Hispanic Origin Hispanic Origin American Indian, Eskimo, or Aleut: Male:	2	0.1
Tagalog Chinese Hungarian	0	, , 0.0 0.0	Not of Hispanic Origin Hispanic Origin Female:	0	0.0
Japanese Mon-Khmer	0	0.0	Not of Hispanic Origin Hispanic Origin	0	0.0
Korean Native North American languages Vietnamese	0	0.0 0.0 0.0	Asian or Pacific Islander: Male: Not of Hispanic Origin	10	0.4
Other and unspecified languages Children by Language Spoken at Hone	0	0.0	Hispanic Origin Female: Not of Hispanic Origin	0	0.0
and Ability to Speak English (Relevant Children 5 yrs & over); Male:	2,250	100.0	Hispanic Origin Other race: Male:	0	0.0
Speak only English Speak Spanish: Speak English "very well"	1,133	50.4 0.5	Not of Hispanic Origin Hispanic Origin Female:	0	0.0 0.0
Speak English "well" Speak English not well/not Speak Asian or Pac Isl language:	0	0.0	Not of Hispanic Origin Hispanic Origin	0	0.0
Speak English "very well" Speak English "well" Speak English not well/not peak other language:	0	0.0 0.0 0.0	Children by Household Type and Relationship by Sex (Total Relevant) Total Relevant Children In family households:	2,545	100.0
Speak English "very well" Speak English "well" Speak English not well/not	0 3	0.0 0.0 0.1	Householder or spouse; Male Female	0	0.0
Female: Speak only English Speak Spanish:	1,062	47.2	Child: - Natural-born or adopted: - Male	1,213	47.7
Speak English "very well" Speak English "well" Speak English not well/not	25 0 9	1.1 0.0 0.4	Female Step: Male	1,187	46.6
Speak Asian or Pac Isl language Speak English "very well" Speak English "well"	0	0.0	female Grandchild: Male	29 29	1.1
Speak English not well/not Speak other language:	ō	0.0	female Other relatives:	29	1.1
Speak English "very well" Speak English "well" Speak English not well/not	0 0 3	0.1 0.0 0.0	Male Female Nonrelatives:	0	0.0
Children in Group Quarters (Total Relevant)	0	0.0	Male Female In nonfamily households:	12	0.5
Institutionalized persons: Correctional institutions Nursing homes	0	0.0	Householder:   Male   Female	3	0.1
Mental (Psychiatric) hospiaals Juvenile institutions Other institutions	0 0 0	0.0 0.0 0.0	Nonrelatives: Male Female	0 13	0.0
Other persons in group quarters: College dormitories Military quarters	0	0.0	In group quarters: Male Female	0	0.0
Emergency shelters for homeless Visible in street locations Other noninstitutional	0	0.0 0.0 0.0		·	
Children by Poverty Status in 1989 (Total Relevant) Total Relevant Children Income in 1989 above poverty level:	2,529	100.0			
Male Female	1,193 1,203	47.2 47.6			
tome in 1989 below poverty level: Hale Female	81 52	3.2			

APPENDIX B

# TOWN POPULATION COMPARISONS MARCELLUS CENTRAL SCHOOL DISTRICT

	% Change							% Change		
	1980	1990	1980-	1991	1992	1993	1994	1995	1996	1990-
Town	Population F	Population	1990	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	1996
Camillus, Town	24333	23,625	-2.91	23,975	24,159	14,303	24,255	24,196	24,089	1.96
Marcellus, Town	6180	6,465	4.61	6,532	6,570	6,593	6,566	6,581	6,561	1.48
Marcellus, Village	1870	1,840	-1.60	1,833	1,833	1,825	1,804	1,829	1,828	-0.65
Onondaga, Town	17824	18,396	3.21	18,829	19,133	19,370	19,452	19,515	19,459	5.78
Otisco, Town	2112	2,255	6.77	2,248	2,255	2,270	2,270	2,269	2,263	0.35
Skaneateles, Town	7795	7,526	-3.45	7,596	7,627	7,648	7,611	7,580	7,534	0.11
Spafford, Town	1596	1,675	4.95	1,680	1,686	1,686	1,677	1,672	1,672	-0.18
Onondaga County	463920	468,973	1.09	472,338	473,844	474,762	472,318	469,540	466,675	-0.49

Source: 1980 and 1990 Census of Population and Housing.

Annual Popualtion Estimates, 1990 To 1996 For NYS Governmental Units, U.S Census Bureau and NYS Data Center, 1997. Note: Village of Marcellus total included in the Town of Marcellus total.

#### APPENDIX C

## MARCELLUS CENTRAL SCHOOL DISTRICT

## GRADE TO GRADE SINGLE FAMILY HOUSING MULTIPLIERS

## 1990 - 91 THROUGH 1997 - 98

Grade	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
K	.05008	.04518	.04787	.04935	.04282	.04838	.04622	.04608
1	.05278	.05945	.05200	.05257	.05787	.04966	.05460	.05368
2	.03599	.04161	.04609	.04117	.04050	.04380	.03936	.04406
3	.04499	.03507	.03782	.04702	.03935	.04202	.04114	.04001
4	.03599	.04429	.03457	.04117	.04484	.03845	.04444	.04229
5	.03689	.03567	.04550	.03183	.04166	.04278	.03886	.04507
6	.03749	.03686	.03723	.04351	.03153	.04074	.04343	.03874
7	.03839	.03864	.03900	.03796	.04716	.03387	.04063	.04710
8	.03629	.04072	.03871	.03884	.03559	.04558	.03479	.03925
9	.04739	.04310	.03930	.03942	.04195	.03896	.04419	.03824
10	.03809	.03983	.03546	.04147	.03732	.03642	.03581	.04178
11	.03329	.03240	.03871	.03475	.03559	.03438	.03555	.03342
12	.03149	.03091	.03486	.03855	.03269	.03285	.03327	.003418

APPENDIX D

PROJECTED SINGLE-FAMILY HOUSING MULTIPLIERS BY GRADE

MARCELLUS CENTRAL SCHOOL DISTRICT

GRADE	1998-99	1999-00	2000-01	2001-02	2002-03
K	0.0415	0.0424	0.0367	0.0411	0.0341
1	0.0518	0.0473	0.0494	0.0423	0.0475
2	0.0420	0.0410	0.0382	0.0391	0.0343
3	0.0430	0.0415	0.0414	0.0377	0.0394
4	0.0396	0.0432	0.0426	0.0418	0.0388
5	0.0410	0.0390	0.0433	0.0420	0.0418
6	0.0440	0.0405	0.0394	0.0430	0.0424
7	0.0390	0.0451	0.0426	0.0408	0.0451
8	0.0457	0.0386	0.0455	0.0420	0.0410
9	0.0413	0.0485	0.0418	0.0483	0.0454
10	0.0343	0.0373	0.0453	0.0382	0.0451
11	0.0379	0.0317	0.0352	0.0420	0.0363
12	0.0315	0.0364	0.0311	0.0340	0.0412

## APPENDIX E

## GRADE TO GRADE COHORT SURVIVAL RATIOS

The following grade to grade survival ratios were used in the preparation of School District projections. An explanation of the birth to Kindergarten survival ratio can be found in Appendix F.

Kindergarten to Grade 1	1.1535
Grade 1 to Grade 2	0.8020
Grade 2 to Grade 3	0.9972
Grade 3 to Grade 4	1.0198
Grade 4 to Grade 5	0.9948
Grade 5 to Grade 6	1.0013
Grade 6 to Grade 7	1.0399
Grade 7 to Grade 8	0.9965
Grade 8 to Grade 9	1.0750
Grade 9 to Grade 10	0.9301
Grade 10 to Grade 11	0.9473
Grade 11 to Grade 12	0.9696

#### APPENDIX F

#### BIRTH TO KINDERGARTEN SURVIVAL RATIO

As stated in the text on page 6, a six-year survival ratio appears to be a good indicator of future Kindergarten enrollment for the Marcellus Central School District. A birth to Kindergarten survival ratio of .9463 was used in the generation of the projection figures. The resulting number of students was coupled with the anticipated growth from new residential construction activity to generate final enrollment projections through the 2002–03 school year.