

DEMOGRAPHIC STUDY

for the

NUTLEY TOWNSHIP BOARD OF EDUCATION

Nutley, Essex County, State of New Jersey

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INTRODUCTION

Whitehall Associates was retained by the Nutley Board of Education to prepare an updated demographic study. The information in this demographic report is suitable for inclusion in any document to be forwarded to the New Jersey Department of Education for matters concerning school facilities.

OVERVIEW OF THE DISTRICT

Nutley Township is a suburban residential community covering 3.36 square miles in Essex County, New Jersey approximately twelve miles west of New York City. The Board of Education maintains seven schools in a K-12 district. Board offices are located at 375 Bloomfield Avenue in Nutley.

SPECIAL NOTE CONCERNING THE LONG RANGE FACILITY PLAN SUBMISSION:

If the normal cohort projections, as developed in the New Jersey Department of Education Long Range Facility Plan (LRFP) electronic data sheets, do not fit a particular district, the correct information may be entered manually. Such modification may be necessary due to residential development impact, a major program change or anything that would skew the normal cohort and render it invalid. The same applies to birth figures. If a reason exists to not use the birth to kindergarten ratios and some other method is used, such as a regression analysis of the kindergarten figures, the information may be entered manually. Therefore, in cases where the normal input must be overridden, the correct data will be shown in the respective tables, usually Table 3, and the data to be inserted in the LRFP program will be clearly annotated.

ENROLLMENT DATA AND PROJECTIONS

In studies for the New Jersey Department of Education, enrollment data, by grade, for the past five years is required. A five year enrollment projection based on these data and computed by the cohort survival method is required. The resulting enrollments are used as a factor in determining the adequacy of the educational facilities. Birth figures are obtained from the Center for Health Statistics of the New Jersey Department of Health and Senior Services. Enrollment figures are obtained from the annual *Fall Survey Report* pages entitled *Public School Enrollment by Grade and Race* or *Public School Enrollment by Grade and Race and Sex* which are prepared by the district. Until 1997 it was customary to use the enrollment figures from the *Application for State School Aid* (ASSA). The form was changed to report the special education students in tiers. Some, if not the majority, of these tier students were in "pull-out" programs and occupied seats in regular classrooms except for the time they were receiving additional help. Since seats must be provided for these students in their regular grade, the ASSA cannot be used for accurate student population projections. The Fall Survey Report on the other hand did not change and continues to report only those special education students in self-contained classes. The difference in special education reporting, since both of these reports are as of the same day, has caused massive confusion in the districts. Whitehall's experience has been that over fifty percent of the Fall Report special education figures since 1997 are in error. The only special education students in this report are those in self-contained classrooms.

In developing a projection of five year enrollments, the cohort-survival method has been used as a base. This method is the one required by law and expected by the New Jersey Department of Education unless

a cogent reason exists for another method to be used. The use of a different method must be explained and justified to the satisfaction of the Commissioner of Education.

The cohort-survival method acquires its name from the use of grade to grade survival figures derived from a recent history of the school district. Grade survival ratios at each level can then be computed on the basis of the recent years' known enrollment with an average survival ratio per grade determined. Ratios less than one usually reflect such factors as out-transfers, ex-migration from the school district and other such losses. A survival ratio of more than one usually reflects such factors as in-transfers and in-migration. Projections of enrollment can then be made by applying the individual grade by grade survival ratio to each grade level for future years with a base of known enrollments for the present year. In this report, projections for special education students were made by using the percent of population method. That is, the number of special education students was divided by the total school population to arrive at a percentage for each year. The past year's percentage was used to project the number of special education students reported in Table 3.

With some adaptation to local circumstances, the cohort survival method is the most accurate we have to project enrollments. In rapidly developing districts, the impact of new residential development must be taken into account. This is accomplished by using data derived from the Urban Land Institute, the Center for Urban Policy Research at Rutgers University and Whitehall's research. In East Greenwich Township's case there is proposed residential development that warrants the modification of the cohort survival projections.

TABLE 1 lists the population of Nutley since 1930. The largest

percentage growth took place in the 1940's and then a rate of eight to nine percent for the next 20 years. In the 1970's the population began to drop significantly. The general population continued to decline for the first five years of the 1990's, but then increased sufficiently to produce a decennial increase of just under one percent.

TABLE 2 is the district's enrollment history wherein the survival ratios mentioned in the preceding paragraphs were developed. Student enrollments were taken from the annual *Fall Survey Report* pages entitled *Public School Enrollment by Grade and Race and Sex* which were prepared by the district. This method is standard and is fully acceptable by the Department of Education. Birth figures were obtained from the Center for Health Statistics, New Jersey Department of Health and Human Services.

NOTE: In this draft the preliminary enrollment figures, as of September 11, 2002, were used. They will be updated when the October 15, 2002 figures become available

The U.S. Department of Health, Center for Disease Control in Atlanta, which has the responsibility on the national level for birth statistics, changed its format for reporting births as of January 1, 1989. At that time the Center for Health Statistics, New Jersey Department of Health and Human Services engaged on a monumental program to geo-code all birth statistics. This was completed in late October, 1998 and has resulted in the most accurate birth data yet obtainable from any source. Any report submitted by Whitehall Associates after November 1, 1998 reflect these updated data. Therefore, previous reports may or may not agree with the current data.

The survival ratios we see in this table are indicative of a steady

growing enrollment history for the past five years in the lower grades. There is a consistent drop in enrollments between grades 6 and 7 and also between grades 7 and 8. There is a mild drop out rate in the high school. Of particular note here is the fact that although the actual enrollments appear to increase from grade to grade, the average birth rate is dropping. This produces a low birth to kindergarten ratio and in turn contributes an overall decline in the student population as evidenced in Table 3.

TABLE 3 is the main table and is designed to be used in conferences and meetings. It allows the participant to be able to refer to one page rather than searching through a document for more information. The back-up for Table 3 entries will be found in other the tables. All calculations are carried to eight or more decimal places. Since there cannot be fractions of a student, the district totals may vary by one or two students if added manually.

The projection of student enrollment for the next five years has been made. The total school population is expected to decrease by approximately 43 students in the next five years. The impact of new residential development will produce about 14 students. Therefore, we can assume that the overall student population will remain relatively flat, with a variation of less than one percent from year to year for four of the next five years.

The boxed area to the lower left of the table is an area of low confidence in that these children have either not been born or reported. Births in the boxed area may be shown as a regression, an average of the last seven years' births or the last known birth figure. In this case we used an average of the last seven years' births.

The general population increased less than one percent in the 1990's. Coupled with an increasing school population, as evidenced in Table 2, this is proof that the general population is getting younger and that persons of child-bearing age are moving into the town.

The line **Net Development Impact** shows, by grade, the impact residential development will have on the cohort survival projections.

TABLE 4 shows the population impact of planned and approved residential development in the district. According to the Township Building Office, Cambridge Heights is the only development in Nutley. The Cambridge Heights Development Office states that only Section 5 remains to be sold. They anticipate closings to begin in October, 2002. Since the normal cohort projections indicate a flat growth rate for the district, the entire Table 4 impact is considered and shown on the line labeled Net Development Impact in Table 3. Any net development impact must be added to the normal 07-08 projection and entered manually into the Long Range Facility Plan pages with an appropriate explanation.

TABLE 5 displays the enrollment projections by school, by grade for the year 2006-07. The ratio of students was taken from the September 11, 2001 preliminary enrollment data and applied to the 2006-07 district wide projections. This method is the one required by the state in the Long Range Facilities Plan.

Here are the answers to the five questions required by the Long Range Facility Plans.

Q1. *If historic enrollments are not based on Fall Reports, explain what data is used and why.*

A1. All enrollments are from the Fall Reports

Q2. *Birth data is projected for the following school years:*

A2. 2005-06, 2006-07 and 2007-08

Q3. *Projected birth data is based on the following assumption:*

A3. Projections are made by linear regression, an average of the last 7 years' live births or the last known birth figure.

Q4. *Self-contained special education (SE) projections are based on the following assumptions:*

A4. Percent of population of the last school year.

Q5. *Pre-Kindergarten (PK) projections for three and four year olds are based on the following assumptions:*

A5. Pre-kindergarten for three and four year olds are based on actual figures since the programs were established or are assumed to be the same as the kindergarten figure in order to consider the "Universe".

EXPLANATION OF THE TABLES

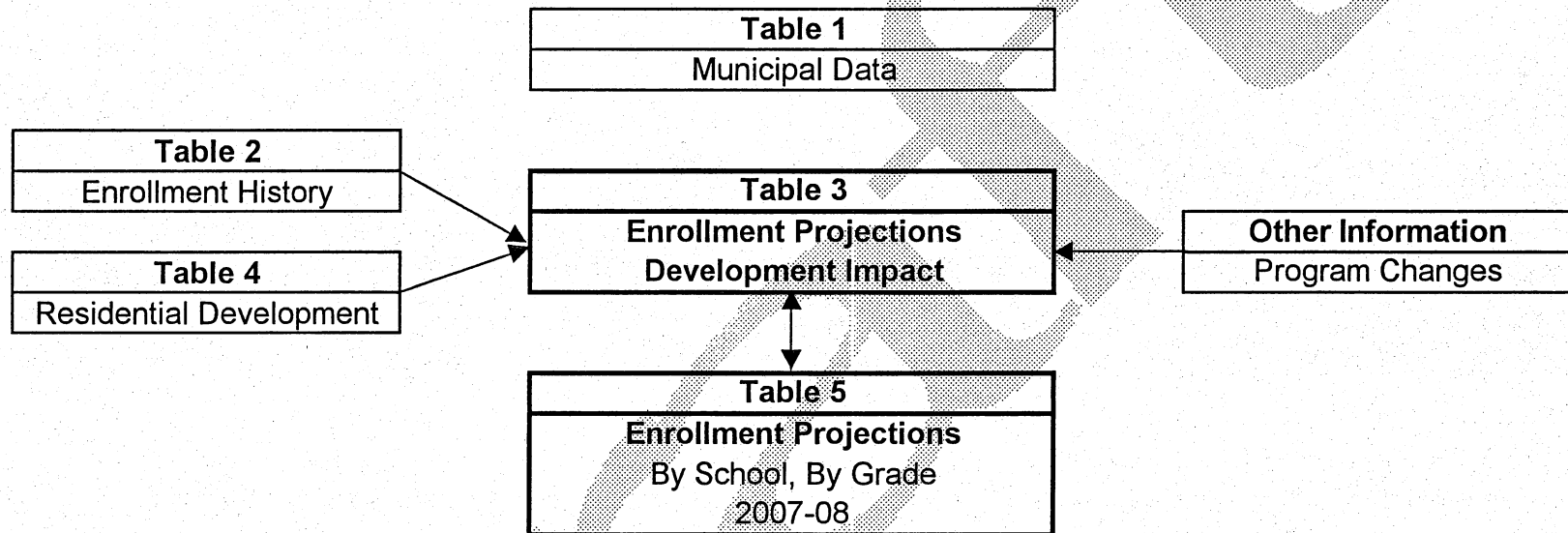


Table 3 is the main table and is designed to be used in conferences and meetings. It allows the participant to be able to refer to one page rather than searching through a document for information. Back-up data for Table 3 entries will be found in other tables as indicated above.

All calculations are carried to eight or more decimal places. Since there cannot be fractions of a student, the district totals may vary by one or two students if added manually.

TABLE 1
NUTLEY TOWNSHIP
MUNICIPAL POPULATION TRENDS

LAND AREA = 3.36 Sq. Mi.

YEAR	POPULATION	INCREASE	% INCREASE
1930	20,572		
		1,382	6.718%
1940	21,954		
		5,038	22.948%
1950	26,992		
		2,521	9.340%
1960	29,513		
		2,400	8.132%
1970	31,913		
		-2,915	-9.134%
1980	28,998		
		-1,899	-6.549%
1990	27,099		
		263	0.971%
2000	27,362		

SOURCE: U.S. Census Bureau

TABLE 2
NUTLEY BOARD OF EDUCATION
STUDENT ENROLLMENT HISTORY

SCHOOL YEAR	BIRTHS 5 YEARS EARLIER		K	1	2	3	4	5	6	7	8	9	10	11	12	SP ED	DISTRICT TOTAL
98-99	309	0.83	255	341	301	321	328	344	308	309	276	256	275	258	221	148	3941
			1.15	0.96	1.01	1.02	1.03	1.00	0.97	0.97	1.00	1.03	0.99	1.02			
99-00	313	0.79	246	293	327	304	327	338	343	298	300	276	264	273	262	150	4001
			1.09	1.06	1.02	1.01	1.03	1.02	1.00	1.01	1.06	0.99	0.95	1.00			
00-01	321	0.82	262	269	311	335	306	337	345	343	301	318	272	251	273	130	4053
			1.20	1.00	0.99	1.01	1.03	1.01	0.98	1.00	1.03	1.00	1.01	1.03			
01-02	306	0.86	262	314	269	309	338	316	340	338	342	309	319	275	258	121	4110
			1.15	1.03	1.04	1.03	1.01	1.03	1.00	0.99	0.98	1.00	1.02	1.02			
02-03	293	0.88	257	301	323	281	318	342	325	339	334	334	308	326	281	153	4222
AVERAGE SURVIVAL RATIO		0.83	1.15	1.01	1.02	1.02	1.03	1.01	0.99	0.99	1.02	1.00	0.99	1.02			

- NOTE: 1. The New Jersey Department of Health attributes 176 births to Nutley in 1997 (02-03 school year). This is in error. The Nutley Health Department shows 259 births for 1997. Since the municipal figures are consistently about 35 less than the state, Whitehall added 34 to the 259 and uses a figure of 293 births for 1997 (02-03 school year).
2. Enrollments for school year 02-03 are preliminary as of September 11, 2002

TABLE 3
NUTLEY BOARD OF EDUCATION
STUDENT ENROLLMENT PROJECTIONS

SCHOOL YEAR	BIRTHS 5 YEARS EARLIER		K	1	2	3	4	5	6	7	8	9	10	11	12	SP ED	TOTAL K-5	TOTAL 6-8	TOTAL 9-12	DISTRICT TOTAL
02-03	293	0.83	257	301	323	281	318	342	325	339	334	334	308	326	281	153	1,822	998	1,249	4,222
03-04	311		259	295	305	329	285	326	347	320	336	339	335	306	331	155	1,799	1,003	1,312	4,269
04-05	265		221	297	299	310	334	293	331	342	318	341	341	333	311	153	1,753	991	1,327	4,224
05-06	303		252	253	301	304	315	343	297	326	339	323	343	339	339	153	1,768	962	1,343	4,226
06-07	303		252	289	256	306	309	323	348	293	324	344	324	341	344	152	1,736	964	1,354	4,206
07-08	303		252	289	293	261	311	317	328	343	290	329	346	322	346	151	1,723	961	1,343	4,179
Net Development Impact			1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	3	4	14
06-07 Total Enrollment			253	290	294	262	312	318	329	344	291	330	347	323	347	152	1729	964	1347	4193

- NOTES:
1. Births in the boxed area are an average of the last seven years' live births. Students in those year groups have either not been born or reported to date.
 2. The New Jersey Department of Health attributes 176 births to Nutley in 1997 (02-03 school year). This is in error. The Nutley Health Department shows 259 births for 1997. Since the municipal figures are consistently about 35 less than the state, Whitehall added 34 to the 259 and uses a figure of 293 births for 1997 (02-03 school year).
 3. All calculations are carried to eight or more decimal places. Since there cannot be fractions of a student, the district totals may vary by one or two students if added manually.
 4. The line **06-07 Total Enrollment** must be entered manually into the Long Range Facility Plan worksheet along with the explanation that the normal cohort did not consider the residential development impact.

TABLE 4
NUTLEY RESIDENTIAL DEVELOPMENT
STUDENT IMPACT

DEVELOPMENT	TYPE	NUMBER OF UNITS	NUMBER OF BEDROOMS	REMARKS	TOTAL PERSONS	TOTAL STUDENTS
Cambridge Heights Section 5	townhouse	104	2		216	14
TOTALS					216	14

NOTES:

1. According to the Township Building Office, Cambridge Heights is the only development in Nutley. The Cambridge Heights Development Office states that only Section 5 remains to be sold. They anticipate closings to begin in October, 2002.
2. All calculations are carried to eight or more decimal places. Since there cannot be fractions of a student, the district totals may vary by one or two students if added manually.
3. Since the normal cohort projections indicate a negative growth rate for the district, the entire Table 4 impact is considered and shown on the line labeled Net Development Impact in Table 3.
4. Any net development impact must be added to the normal 07-08 projection and entered manually into the Long Range Facility Plan pages with an appropriate explanation.

TABLE 5
NUTLEY BOARD OF EDUCATION
SEPTEMBER 11, 2002 PRELIMINARY ENROLLMENTS - BY SCHOOL, BY GRADE

SCHOOL	K	1	2	3	4	5	6	7	8	9	10	11	12	SUB -TOTAL	SP ED	TOTAL
Nutley H.S.	0	0	0	0	0	0	0	0	0	334	308	326	281	1249	65	1314
Franklin M.S.	0	0	0	0	0	0	0	339	334	0	0	0	0	673	24	697
Lincoln E.S.	53	61	59	74	46	75	66	0	0	0	0	0	0	434	51	485
Radcliffe E.S.	41	56	66	39	56	64	55	0	0	0	0	0	0	377	0	377
Spring Garden E.S.	60	58	57	50	80	78	68	0	0	0	0	0	0	451	13	464
Washington E.S.	45	56	58	46	71	63	61	0	0	0	0	0	0	400	0	400
Yantacaw E.S.	58	70	83	72	65	62	75	0	0	0	0	0	0	485	0	485
TOTAL	257	301	323	281	318	342	325	339	334	334	308	326	281	4069	153	4222

PROJECTED STUDENT ENROLLMENT BY SCHOOL, BY GRADE FOR 2007-08

SCHOOL	K	1	2	3	4	5	6	7	8	9	10	11	12	SUB -TOTAL	SP ED	TOTAL
Nutley H.S.	0	0	0	0	0	0	0	0	0	330	347	323	347	1347	65	1412
Franklin M.S.	0	0	0	0	0	0	0	344	291	0	0	0	0	635	24	659
Lincoln E.S.	52	59	54	69	45	70	67	0	0	0	0	0	0	415	51	466
Radcliffe E.S.	40	54	60	36	55	60	56	0	0	0	0	0	0	361	0	361
Spring Garden E.S.	59	56	52	47	78	73	69	0	0	0	0	0	0	433	13	446
Washington E.S.	44	54	53	43	70	59	62	0	0	0	0	0	0	384	0	384
Yantacaw E.S.	57	68	76	67	64	58	76	0	0	0	0	0	0	465	0	465
TOTAL	253	290	294	262	312	318	329	344	291	330	347	323	347	4041	152	4193

Table 3 Projections	253	290	294	262	312	318	329	344	291	330	347	323	347	4041	152	4193
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