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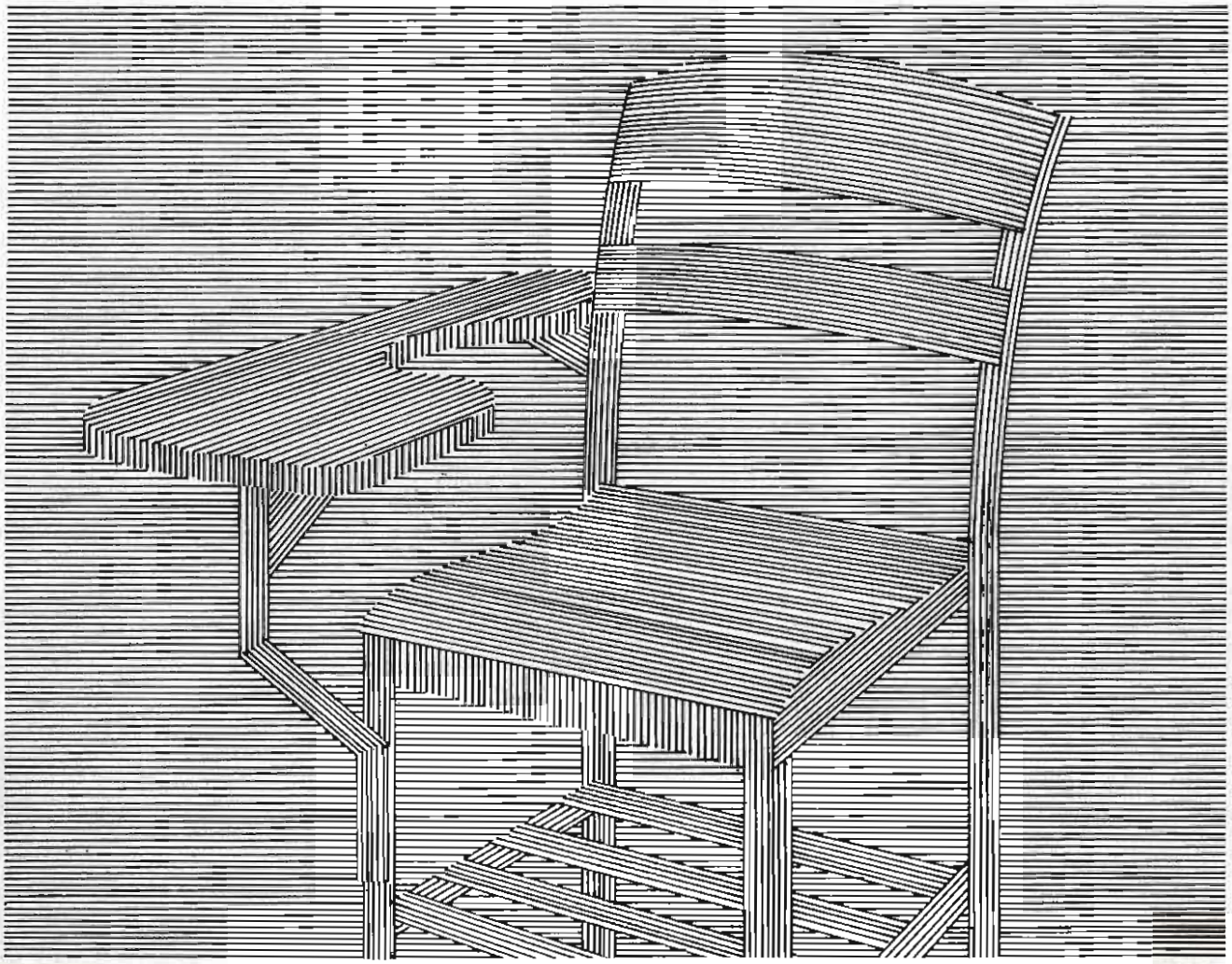

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SCHOOL ENROLLMENT IN CONNECTICUT: PAST TRENDS AND FUTURE PROSPECTS

By Kenneth Hadden, William Groff,
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INTRODUCTION

A major responsibility of local governments throughout the state is the provision of facilities and personnel for the education of young citizens. The magnitude of this task is importantly determined by the number of young people present in any particular town. The size of this youth population is itself determined by past and present fertility levels and by migration patterns of families with young children. Several recent reports on the population of Connecticut indicate that changes are occurring which have a significant impact on the school age population in Connecticut. The most significant of these changes have occurred in the fertility patterns of Connecticut residents.

The post war "baby boom" substantially increased the size of the school age population in the state, necessitating the construction of new schools and the expansion of teaching staffs in many towns. The effects of the "baby boom" are still being felt in the public school systems, but mainly in the higher grades. During the 1960's the crude birth rate in Connecticut declined from 22.3 live births per thousand population in 1960 to 16.7 live births per thousand population in 1970 (Steahr, 1973a). The effects of the declining birth rates are now being felt in lower grades within the public school systems. If the current low fertility levels persist, we may anticipate a decline in the demand for new (and, perhaps, even existing) school facilities and an increase in the size of the "reserve" teaching force.

This report, which is one of the continuing series of descriptive and analytic reports on the population of Connecticut, published by the Storrs Agriculture Experiment Station, addresses itself to two issues. First, we will look at recent trends in school enrollment for the state as a whole. And second, recognizing that there are important differences in school enrollment from town to town, we will look in detail at past trends and prospects for the immediate future in school enrollment for the 169 towns in Connecticut. It should be noted that the general subjects of school enrollment and educational attainment will be dealt with in greater detail in a subsequent bulletin.

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SCHOOL ENROLLMENT IN CONNECTICUT

School enrollment in Connecticut increased from approximately 328 thousand in 1950 to over 765 thousand in 1970 (Table 1). This increase of approximately 437 thousand students was fairly evenly divided between the two decades; 53 percent of the twenty year growth took place between 1950 and 1960, while the remaining 47 percent occurred between 1960 and 1970. The similarity between the two decades ends here. The decennial rate of increase for the 1950-1960 decade was approximately 71 percent compared to 37 percent for the 1960-1970 decade. Significant differences can also be noted when we look at the number of students enrolled by single years of school. The percent increase in school enrollment for every grade except the senior year in high school was lower for the 1960-1970 decade than for the 1950-1960. Generally, this trend is most pronounced at the lower grade levels.

Figure 1 presents measures of percentage change in school enrollment of kindergarten, primary and secondary students for the decade of the 1950's and the 1960's. Several points are apparent from this figure. First and most obvious is the fact that all three levels of school experienced growth during both decades. Second, both kindergarten and primary school enrollment grew at much lower rates during the sixties than during the preceding decade. This decrease in growth rates was primarily due to declines in fertility experienced during the 1960's and the resultant relative decline in the numbers of children entering school. In fact, the lowest percentage increase during the '60's is observed for first and second grades, which increased by 17.1 and 18.0 percent respectively. And third, secondary school enrollment actually increased more between 1960 and 1970 than it had during the earlier decade. This suggests that recent fertility declines during the 1960's in Connecticut have yet to exert an influence on high school enrollment in the state.

What are the implications of these factors?

First, during the 1970's the growth rate of secondary school enrollment should decline considerably. For example, if we assume no change due to net migration and mortality, the 124.8 thousand students enrolled in first and second grade in 1970 will be juniors and seniors in high school in 1980. Since in 1970 there were 101.2 juniors and seniors in the state, the percentage upward change in this portion of high school enrollees will be about 23 percent during the 1970's; this compares with a 58.4 percent increase in junior and senior enrollment during the sixties. In short, high school enrollment during the present decade will likely increase at about the same rate that primary enrollment increased during the sixties.

Second, the declines in the growth of kindergarten and primary school enrollment during the sixties was due to fertility declines which occurred prior to 1965-1966. Children born after that point had not yet entered school by 1970. Since fertility levels have been declining since then, it seems likely that kindergarten and primary growth rates during the '70's will be well below those observed for the 1960's.

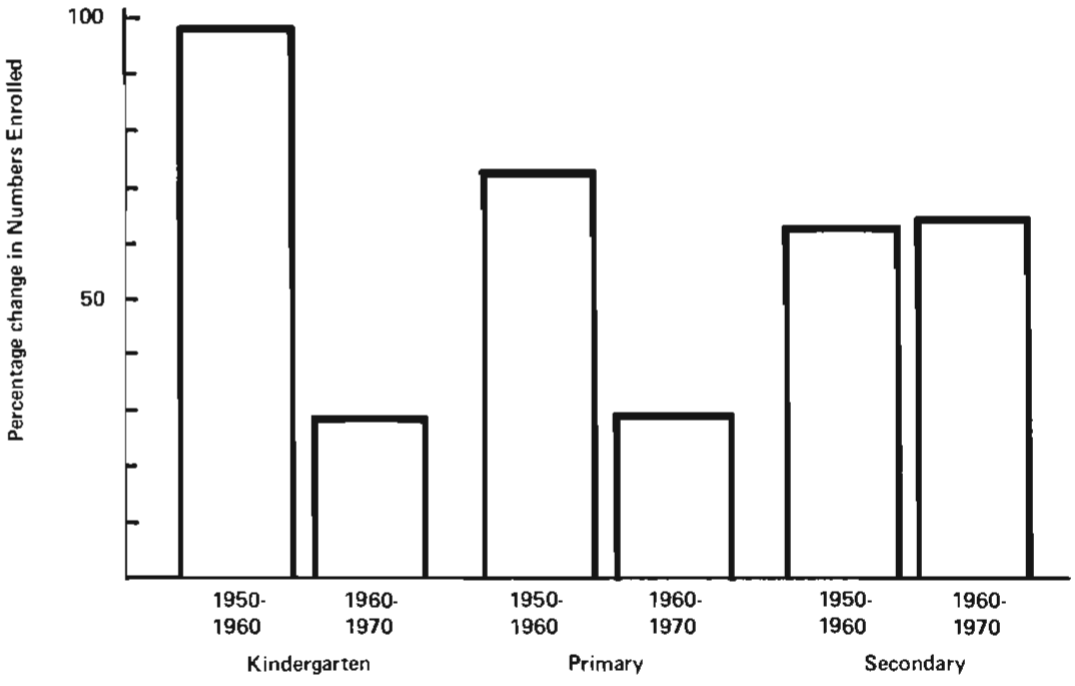
This overview suggests, then, that in the absence of fertility increases over the next few years the decade of the '70's will see

Table 1: Numbers, Percentage Distribution, and Percentage Change in School Enrollment by Single Years of School, Connecticut: 1950, 1960, 1970

Grade	1950 Number	1950 Percent	1960 Number	1960 Percent	1970 Number	1970 Percent	Percent Increase 1950-60	Percent Increase 1960-70
Kindergarten	22,575	6.9	44,479	7.9	57,163	7.5	97.0	28.5
Elementary	223,055	68.0	382,721	68.3	491,412	64.2	71.6	28.4
1st	36,340	11.0	53,543	9.5	62,706	8.2	47.7	17.1
2nd	34,695	10.6	52,639	9.4	62,095	8.1	51.7	18.0
3rd	29,160	8.9	48,641	8.7	62,492	8.2	66.8	28.5
4th	25,760	7.9	45,399	8.1	60,377	7.9	76.2	33.0
5th	24,350	7.4	45,407	8.1	62,616	8.1	86.7	37.9
6th	24,860	7.6	46,058	8.2	61,889	8.1	85.3	34.4
7th	24,020	7.3	47,926	8.5	61,159	8.0	99.5	27.6
8th	23,970	7.3	43,108	7.7	58,078	7.6	79.8	34.7
High School	82,470	25.1	133,528	23.8	217,027	28.3	61.9	62.5
Freshman	20,780	6.3	35,845	6.4	59,616	7.8	72.5	66.3
Sophomore	20,280	6.2	33,794	6.0	56,202	7.3	66.6	66.3
Junior	18,140	5.5	32,123	5.7	50,992	6.7	77.1	58.7
Senior	23,270	7.1	31,766	5.7	50,217	6.5	36.5	58.1
Total	328,100	100.0	560,728	100.0	765,602	100.0	70.9	36.5

Source: U. S. Bureau of the Census, 1952, Table 63; 1962, Table 101; 1972b, Table 146.

FIGURE 1: PERCENTAGE CHANGE IN SCHOOL ENROLLMENT IN KINDERGARTEN, PRIMARY AND SECONDARY SCHOOLS, CONNECTICUT; 1950 - 1960 AND 1960 - 1970



Source: See Table I

smaller increases in school enrollment at all levels than during the 1960's; in fact, it seems entirely possible that absolute decreases in the size of kindergarten and primary school populations may occur during the 1970's.

The use of percentage changes in school enrollment is an admittedly cumbersome analytic technique, however. Alternative measures exist which permit us to deal with two related questions in a straightforward way. First, how large is the school population relative to the population which supports it? Second, is the need for school facilities likely to increase or decrease in the immediate future? The following measures have been devised by the U. S. Bureau of the Census (1967).

Index of School Load

It is the working age population in any area (e.g., state, town, etc.) which, directly or indirectly, bears the cost of educating the young. A rough index of the school load supported by the working population may be defined as:

$$\text{Index of School Load} = \frac{\text{Number of children of age 6-17}}{\text{Number of adults of age 18-64}}$$

This index is particularly useful for comparative purposes; that is, comparing an area's school load at one point in time with another point in time, or comparing school loads for various areas at a single point in time. The higher the index of school load, the more burdensome is the education of children to the local population.

This measure, it should be noted, does not deal directly with either the level of wealth or the level of educational expenditures (per pupil) in an area. In effect, the index of school load assumes these to be the same from one area to another or over time in the same area. Since, at best, these assumptions will only be approximately met, the index is a "rough" measurement of school load. An index of .25 signifies that there are 25 children enrolled in school for every 100 working age adults while an index of .50 indicates that there are 50 children enrolled in school for every 100 working age adults. An index of .50 or higher indicates that an area has an unusually large number of students being supported by working age adults.

Indices of School Need

If we can validly make some simplifying assumptions, it becomes possible to measure the degree to which changes are occurring in the demand for school facilities and personnel in any given area.

These assumptions are:

1. that mortality rates among the population under age 18 remain constant at the present very low level (cf., Steahr 1973b);
2. that the net migration rates of the population under 18 remain constant;
3. that "drop-out" rate remains low among those students who are not compelled by law to attend school (16 and 17 year olds);

4. that during the time periods under consideration school facilities and school policies remained unchanged.

Since all but the first of these assumptions may be problematic, the measures described below must also be characterized as "rough".

The index of school need for the lower grades is based on the following logic: the population which was five years old and younger in, say, 1970 will have entered school by 1975 or 1976. In effect, this group will be replacing the population which was between the ages of six and eleven, inclusive, in 1970. To the extent that the younger group is larger than the older, future need for school facilities and personnel will increase; likewise, if the younger group is smaller than the older, then school needs will be decreasing. This measure of the future lower grade school needs is defined as:

$$\text{Index of School Needs (Lower)} = \frac{\text{Number of children age 0-5}}{\text{Number of children age 6-11}}$$

If the assumptions stated above are approximately met, a measure of .85 or lower means that classroom space and teaching staff at the lower grades will be freed by 1975 or 1976; a measure of 1.20 or higher indicates that more classroom space and teachers will be needed at the lower grades.

A similar argument may be made for the upper grades as well. In this case it is the population between the ages of six and eleven, inclusive, which will replace the population twelve to seventeen years old over a 5 or 6 year period. This replacement, of course, occurs in the upper school grades. If the younger population is larger than the one it is replacing (as shown by an index greater than 1.00), then there will be an increased demand on existing personnel and facilities or, if the index is greater than 1.20, a probable need for additional personnel and/or facilities. Similarly, if the younger population is smaller than the one it is replacing (as shown by an index smaller than 1.00), then there will be a decrease in the demand for personnel and facilities serving the upper grades; an index below 0.85 indicates that it is likely that some upper grade personnel and/or facilities may no longer be needed. The measure of future upper grade school needs is:

$$\text{Index of School Needs (Upper)} = \frac{\text{Number of children age 6-11}}{\text{Number of children age 12-17}}$$

These indices of school need are based solely upon data from the U. S. Bureau of the Census decennial enumerations of the population. It should be stressed again that the validity of the above interpretations of the indices of school needs depends upon the validity of the assumptions noted earlier.

School Load and School Needs for the State

Indices of school load and school need for the state for both 1960 and 1970 are presented in Table 2; corresponding indices for the United States are also presented for comparative purposes.

The index of school load did not change appreciably from 1960 to 1970 for either the state or the nation. There was a slight increase--from .37 in 1960 to .41 in 1970--in Connecticut; this means that while 100 working age adults supported 37 school age children in 1960, the same number of adults supported 41 school age children in 1970. This increase is small and remained well below the large school load level of .50. The index for the nation also increased slightly, from .41 in 1960 to .43 in 1970. The result of these two trends is that Connecticut remained slightly below the national level of school load in 1960 and 1970.

Table 2: Indices of School Load and School Need, Connecticut and the United States: 1960 and 1970

	Index of School Load		Indices of School Need			
			Lower		Upper	
Area	1960	1970	1960	1970	1960	1970
Connecticut	.37	.41	1.16	.86	1.17	1.04
United States	.41	.43	1.12	.85	1.19	1.02

Source: U. S. Bureau of the Census, 1972a, Table 52.

Both the upper and lower grade indices of school need, on the other hand, showed substantial declines between 1960 and 1970 for both Connecticut and the United States as a whole. Figure 2 presents these indices graphically.

The decline in the indices of school need has been greatest at the lower grades. In 1960 the measures for both the state and the nation indicated that demand for lower grade facilities and personnel was still increasing because fertility had not yet leveled off and begun declining. The sharp decrease in the lower grade index of school need by 1970 (.86 for Connecticut and .85 for the United States) indicates that the fertility decline which began in the early 1960's was manifesting itself in a diminished demand for facilities and personnel in the lower grades. It appears now that by 1975 or 1976 the lower grade population for the state as a whole will be at least ten percent smaller than it was in 1970.

The decrease in the upper grade indices of school need has not been as great; nonetheless, it has been substantial. Like the lower grades, the upper grades were experiencing fairly high growth rates during the early 1960's in both Connecticut and the nation. The measures for 1970, however, indicate that the upper grade population will be about the same size in 1975 or 1976 as it was in 1970. Very little change in demand for facilities or personnel is expected during this period for the upper grades in either Connecticut or the United States.

Summary

The school population of Connecticut more than doubled between 1950 and 1970. During the 1950's the elementary grades experienced the largest

FIGURE 2: INDICES OF SCHOOL NEED, CONNECTICUT AND THE UNITED STATES; 1960 AND 1970

Source: See Table II

increases in size due primarily to the high fertility levels of the "baby boom". During the 1960's, however, the "baby boom" children were growing up and, as a consequence, the high school grades showed the largest increases in size.

The "baby boom" has been over for more than a decade now, and fertility has been declining steadily ever since. A major implication of the continuing decline in fertility is the potential decrease in the demand for educational facilities and personnel. This decrease has thus far been most apparent in the elementary grades. In 1970 the index of school needs for the lower grades for the state was .86 (down from 1.16 in 1960), indicating that by 1975-76 there will be fewer children enrolled in the lower grades than was the case in 1970. If the downward trend in fertility continues, additional decreases in the demand for educational services at the lower grades will occur.

The school needs for the upper grades grew substantially during the 1960's, as indicated by an index of 1.17 in 1960, and will not experience a decline in the first half of the 1970's. The period between 1970 and 1975 will, however, see a stabilization in the upper grade school needs; the upper grade population, if the assumptions underlying the index are reasonable, should be about the same size in mid-decade as it was in 1970. Obviously, the upper grade population will consist of children born during the high fertility 1950's until later in this decade; hence, it has been slower to respond to the post-1960 fertility declines. Just as obviously, the demand for upper grade facilities and personnel will begin declining by 1980, barring any massive migration into the state by families with high school age children.

In spite of the present and anticipated decline in school needs, one hundred adults of working age were supporting slightly more school age children in 1970 than in 1960. During the 1970's, the last of the "baby boom" children will leave school and come of working age. This, coupled with the smaller cohorts entering school now and in the recent past, will undoubtedly result in a reduction in the number of school age children supported by one hundred adults in 1980.

SCHOOL LOAD AND SCHOOL NEED IN CONNECTICUT TOWNS

Primary and secondary educational systems are highly decentralized because the populations they serve are themselves dispersed. Consequently, the conclusions reached concerning the past trends and future prospects of school enrollment for the state probably do not hold uniformly for all of the systems (towns) in the state. In this section we will assess these trends and prospects for the towns of Connecticut.

Appendix Tables I through VIII present the indices of school load and school need for 1960 and 1970 for each of Connecticut's towns; these tables are arranged on a county-by-county basis. Appendix Tables IX through XVI present the relevant age breakdowns for the computation of indices of school load and school need for these towns; these tables are also arranged on a county-by-county basis.

School Load

The indices of school load for the 169 towns in the state are

given in Appendix Tables I through VIII for 1960 and 1970. These index scores should be treated with caution since they reflect a combination of past and current fertility and age-specific net migration gains and losses which have an effect on the age structure of the population. Only a detailed town-by-town analysis of these and other factors can provide a valid explanation of the similarities and differences in the indices for the various towns and the changes that occurred between 1960 and 1970.

In 1960 the town indices ranged from a low of .20 for Preston, to a high of .58 for Hebron while the index for the state as a whole was .37. In 1970, the state index was .41 while the indices for the various towns ranged from a low of .19 for Mansfield to a high of .63 for South Windsor. The extremely low indices for the town of Mansfield (.23 in 1960 and .19 in 1970) reflect the need for caution in the interpretation of the indices of school load. One factor in the low index scores for the town of Mansfield is that the population figures included the large number of young adults who are enrolled at the University of Connecticut. Thus the working age population is inflated by the abnormally large number of young adults who are unmarried and do not contribute to the size of the school age population.

Despite these limitations the data on school load do indicate that there has been a general increase in the indices of school load between 1960 and 1970 which is partly a consequence of the "baby boom" following World War II. Only 31 towns experienced a decline in their indices over the decade while six towns experienced increases greater than .15. Preston with an increase of approximately .33 and South Windsor with an increase of .23 experienced the greatest increases.

In 1960, only seven towns had school load indices equal to or greater than .50. These were: Hebron (.58), Goshen (.54), Norfolk (.53), Weston and Hartland (.52), and Ellington and Hampton (.51). In these towns the ratio of school age children to the working age population was greater than one to two. By 1970, the number of towns with school indices of .50 or greater had increased to 42. Two towns had exceptionally high ratios: South Windsor (.63) and Ridgefield (.60).

Figure 3 indicates the locations of towns with school load ratios in 1960 or 1970 equal to or greater than .50. Towns having 50 or more school age children per 100 working age adults seem well scattered around the state. A close look at Figure 3 reveals the following:

First, none of the twelve* towns which were metropolitan centers in 1970 had high indices of school load. In fact, the average 1970 school load index for these twelve towns was about .37, below the state figure of .41. This observation is consistent with that of Hadden and Townsend (1973, pp. 9, 10) to the effect that the largest urban places in Connecticut have disproportionately small numbers of school age children. Second, many of the towns with high indices of school load are located on the periphery of a metropolitan area. This is particularly true in the southern and central sections of the state. Many of these towns are "suburban" in character and tend to have concentrations of young families with school age children. Finally, several

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* These include Bridgeport, Danbury, Norwalk, Stamford, New Haven, Waterbury, Bristol, Hartford, New Britain, Groton, New London and Norwich.

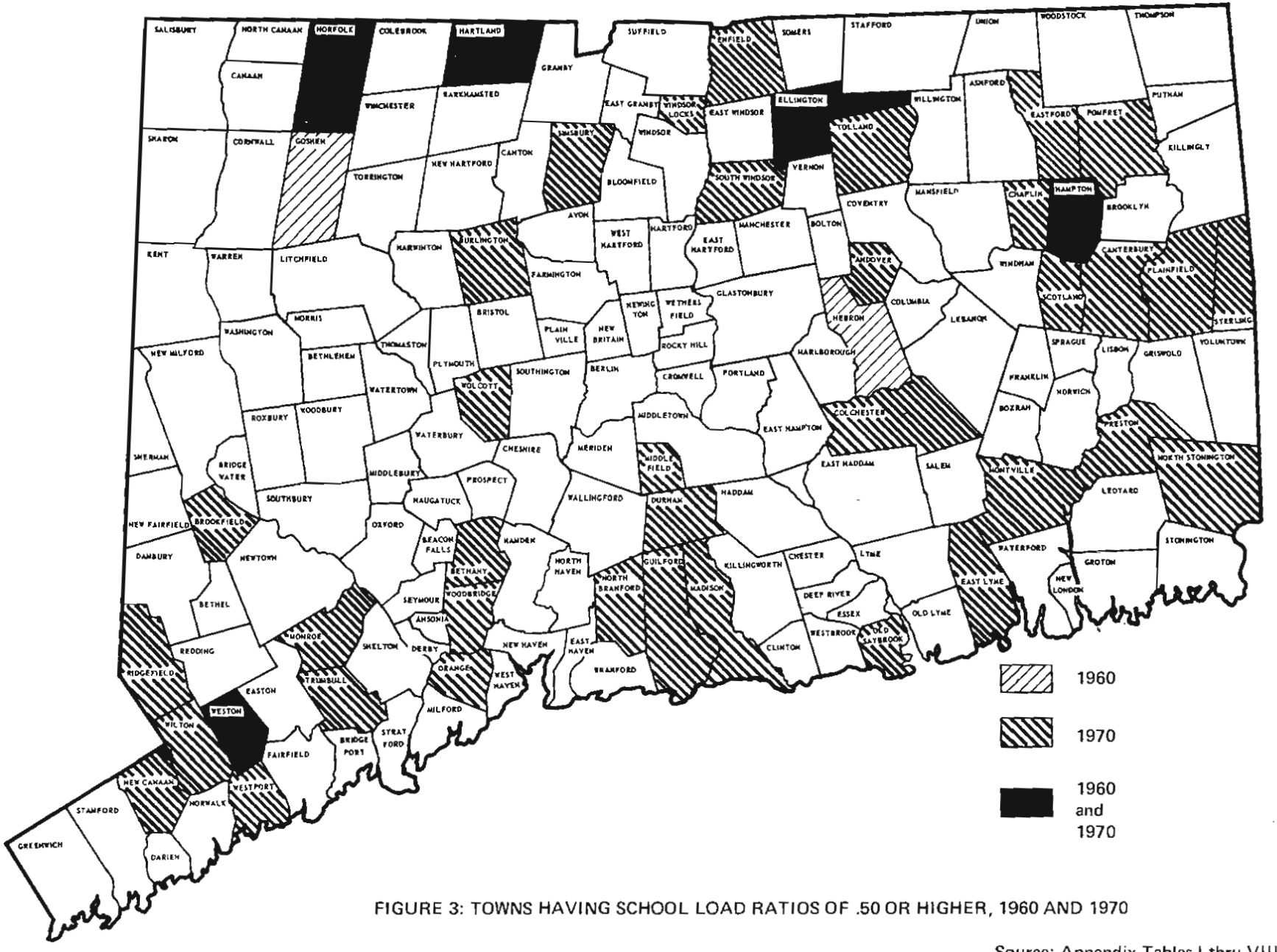

FIGURE 3: TOWNS HAVING SCHOOL LOAD RATIOS OF .50 OR HIGHER, 1960 AND 1970

Source: Appendix Tables I thru VIII

towns located in the east central section of Connecticut are not properly considered "suburban" and do not fit the above interpretation. These may be towns experiencing fairly high out-migration of young adults who have completed school.

Apparently, the rate of population growth of towns between 1960 and 1970 has a pronounced effect on the level of school load in the town in 1970. Table 3 presents the average index of school load for towns classified according to their population growth rate during the 1960's. Towns which doubled in size during the decade had an average index of school load of .50 in 1970. Towns which had lower growth rates on the average had lower school load indices as well. The reasons for this relationship are straightforward. There are basically two ways in which a town's population grows: first, through a high fertility level resulting in an excess of births over deaths and, second, through attracting a sufficient number of migrants to more than offset any population

Table 3: Average Index of School Load, 1970, for Connecticut Towns, by Population Growth Rate 1960-1970

Rates of Population Growth, 1960-70	Number of Towns	Average Index of School Load, 1970
More than 100%	10	.50
50-100%	30	.47
10-50%	109	.45
Less than 10%	20	.39
TOTAL	169	.41

Source: Appendix Tables I through VIII; Groff and Reiser, 1973, Appendix A, Table 1.

lost as a result of out-migration. Clearly, a high fertility rate will increase the school load in the town within a few years. On the other hand, a high level of in-migration need not result in a high index of school load. Hadden (in press) has argued that the birth of children or the presence of young children may be an occasion for suburbanward migration; if this is the case, any town receiving a relatively large number of young families will probably experience an increase in its school load. Most other types of migration (e.g., single people, middle-aged or elderly couples) will, if anything, depress the index of school load.

In summary, it appears that one of the costs of rapid population growth may be an unfavorable ratio of school age children to working age adults. Suburban towns often must bear these costs as a consequence of either relatively high past fertility levels or a high level of in-migration of young families, or both. The pronounced decline in fertility in Connecticut during the 1960's will probably result in a general attenuation of school loads during the 1970's; although there will be exceptions, barring any strong resurgence in fertility, indices of school load will be lower for most towns in 1980 than in 1970.

School Need

The indices of school need for the individual towns for 1960 and 1970 are shown in Appendix Tables I through VIII. A rapid glance at the indices show that there has been a general trend toward a decline in both the upper and lower indices of school need. Although there is considerable variation in the indices of the various towns and the changes that occurred between 1960 and 1970, the trend toward a decline in the index scores is more pronounced in the school need index for lower grades than for upper grades. While 28 towns experienced an increase in the upper school need index, only one town (Lisbon) experienced an increase in the lower school load index over the decade. It is also evident that the decreases in the lower school need are far more pronounced than the decreases in the upper school need indices.

Table 4 indicates the number of towns which had either high or low measures of lower and upper school need in 1960 and 1970. This table confirms the earlier observation that there was a large decline in lower grade school need between 1960 and 1970 and a somewhat more moderate decline in upper grade school need during the same period.

Table 4: Number of Towns with High and Low Indices of School Needs, Connecticut: 1960 and 1970

Indices of School Need	Lower Grade School Need 1960	Lower Grade School Need 1970	Upper Grade School Need 1960	Upper Grade School Need 1970
High (1.20 or greater)	51	0	74	30
Medium (.86 to 1.19)	113	73	91	131
Low (.85 or lower)	5	96	4	8
Total	169	169	169	169

Source: Appendix Tables I through VIII.

We see from Table 4 that there were 51 towns with such high indices of lower grade school need in 1960 as to suggest that facilities and educational personnel would necessarily be increased. By 1970, no towns were so classified. On the other hand, only 5 towns had low indices of lower grade school need in 1960; by 1970, 96 towns had indices low enough to suggest that existing facilities and staffs at the lower grades were more than adequate.

The decrease in the number of towns with high indices of upper grade school need between 1960 and 1970 was pronounced, from 74 to 30, but much less so than for the lower grades. Likewise, the increase between 1960 and 1970 in the number of towns with low indices of upper grade school need was quite modest, from 4 to 8.

In short, by 1970 no Connecticut towns had rapidly growing lower grade populations while many towns actually had declining lower grade

populations. Given the assumptions described earlier, it seems that school facilities and staffs for the lower grades are either adequate or more than adequate for the coming five or six years. In 1970, there were still more towns with moderately or rapidly growing upper grade populations than with declining, but for the vast majority of towns (131) upper grade school facilities appear to be adequate to meet the needs through 1975 or 1976.

Upper Grade School Needs

As we have observed, the demand for school facilities and personnel at the upper grades has increased in a number of towns. The locations of these towns and of towns with "low" and "medium" indices of upper grade school need in 1970 are presented in Figure 4.

Towns with "low" indices are primarily located in the western portion of the state; several (New Canaan, Westport, West Hartford and Bloomfield) are located immediately adjacent to metropolitan centers, while the others are generally rural in character. New Canaan has the lowest index--.77.

Towns with "high" indices are primarily located in two belts: one extending along the western border with New York, the other beginning in Groton and extending in a northwesterly direction. The remaining "high" towns are scattered along the southern coast and on the periphery of the Hartford metropolitan area. East Granby has the highest index--1.43.

A review of the map in Figure 4 reveals no clear relationship between upper grade school index and type of town. Some of the towns with "high" indices are metropolitan, others are suburban or rural.

Under the expectation that a relationship exists between population growth and demand for upper grade school facilities and services, we have obtained measures of population change and its components, natural increase and net migration, for each town (Groff and Reiser, 1973). These measures for 1960 to 1970 are defined as follows:

$$\text{Crude Rate of Population Change (CRPC)} = \frac{\text{Population Size (1970)} - \text{Population Size (1960)}}{\text{Population Size (1960)}}$$

$$\text{Crude Rate of Natural Increase (CRNI)} = \frac{\text{Births (1960 to 1970)} - \text{Deaths (1960 to 1970)}}{\text{Population Size (1960)}}$$

$$\text{Crude Rate of Net Migration (CRNM)} = \text{CRPC} - \text{CRNI}$$

A review of these rates of population change, natural increase and net migration for towns classified according to upper grade school need indices reveals striking patterns. Table 5 indicates that towns with "high" indices of upper grade school need had experienced high rates of population growth during the sixties. The high overall growth rates derived from high rates of natural increase and of net migration.

Both components are probably implicated in the "high" indices which these towns have. Children born during the first half of the

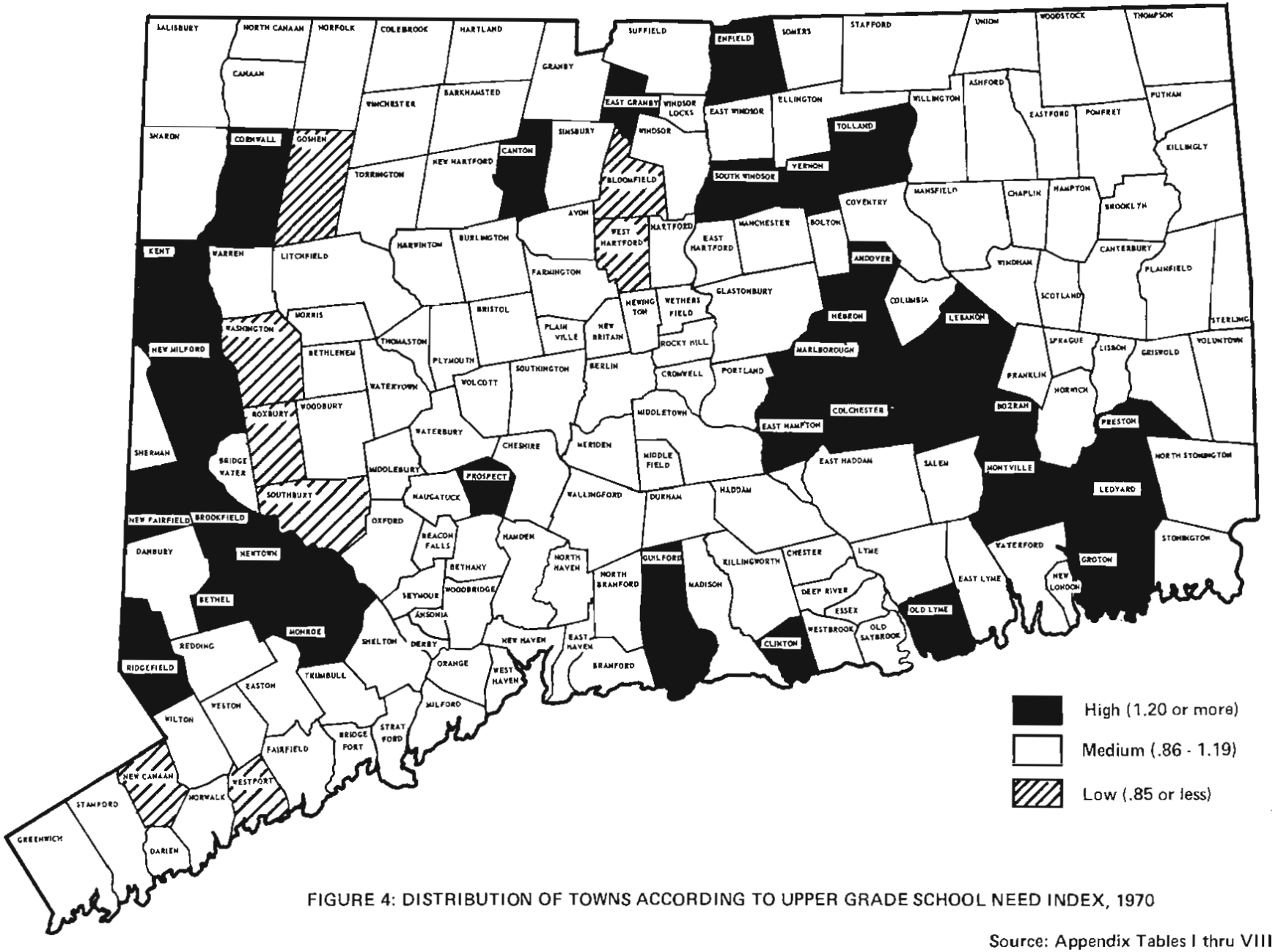

FIGURE 4: DISTRIBUTION OF TOWNS ACCORDING TO UPPER GRADE SCHOOL NEED INDEX, 1970

Source: Appendix Tables I thru VIII

sixties (when fertility levels were still comparatively high) will be entering the upper grades during the first half of the seventies; these children whose births result in a relatively high rate of natural increase also contribute to "high" level of upper grade school need. And while direct evidence is lacking, it seems probable that a high net migration rate indicates the arrival of some families with children who will be entering the upper grades during the first half of this decade.

Table 5: Average Crude Rates of Population Change, Natural Increase and Net Migration, 1960-70, for Connecticut Towns Classified According to Upper Grade School Need in 1970

Upper Grade School Need	Number of Towns	Average Crude Rate of Population Change	Average Crude Rate of Natural Increase	Average Crude Rate of Net Migration
Low	8	27.0	4.7	22.3
Medium	131	32.4	10.7	21.5
High	30	67.9	19.3	48.6
Total	169	38.1	11.9	26.2

Source: Appendix Tables I through VIII; Groff and Reiser, 1973, Appendix A, Table 1.

Similarly, towns with "low" indices of upper grade school need had relatively low rates of population growth and exceptionally low rates of natural increase during the sixties. The latter undoubtedly is largely responsible for the "low" indices of these towns. The net migration rates for "low" towns was about the same, on the average, as for "medium" towns. Unless there were substantially different age patterns of net migration for "low" as opposed to "medium" towns, it seems unlikely that net migration had much of an effect on upper grade school need for towns classified as either "low" or "medium".

Lower Grade School Need

Figure 5 reflects the earlier observation that during the early 1970's many towns had decreasing lower grade school populations. These towns are scattered throughout the state and include urban, suburban and rural areas, although there is a general tendency for the metropolitan towns (except for Stamford) not to be declining. Similarly, towns with "medium" lower grade school need indices are distributed around the state, but seem concentrated in a crescent shaped area extending from the northwest to the northeast. These towns likewise contain urban, suburban and rural areas. Based upon the previous analysis of upper grade school we would expect to find a similar pattern for the relationship between lower grade school need and the crude rates of population change, natural increase and net migration. An examination of Table 6 reveals that this is not the case. Towns with "low" indices of lower grade school need experienced higher rates of population growth and net migration than towns with medium indices. This relationship is in the opposite direction from the relationship for the average indices of upper grade school needs. However, the data in Table 6 do

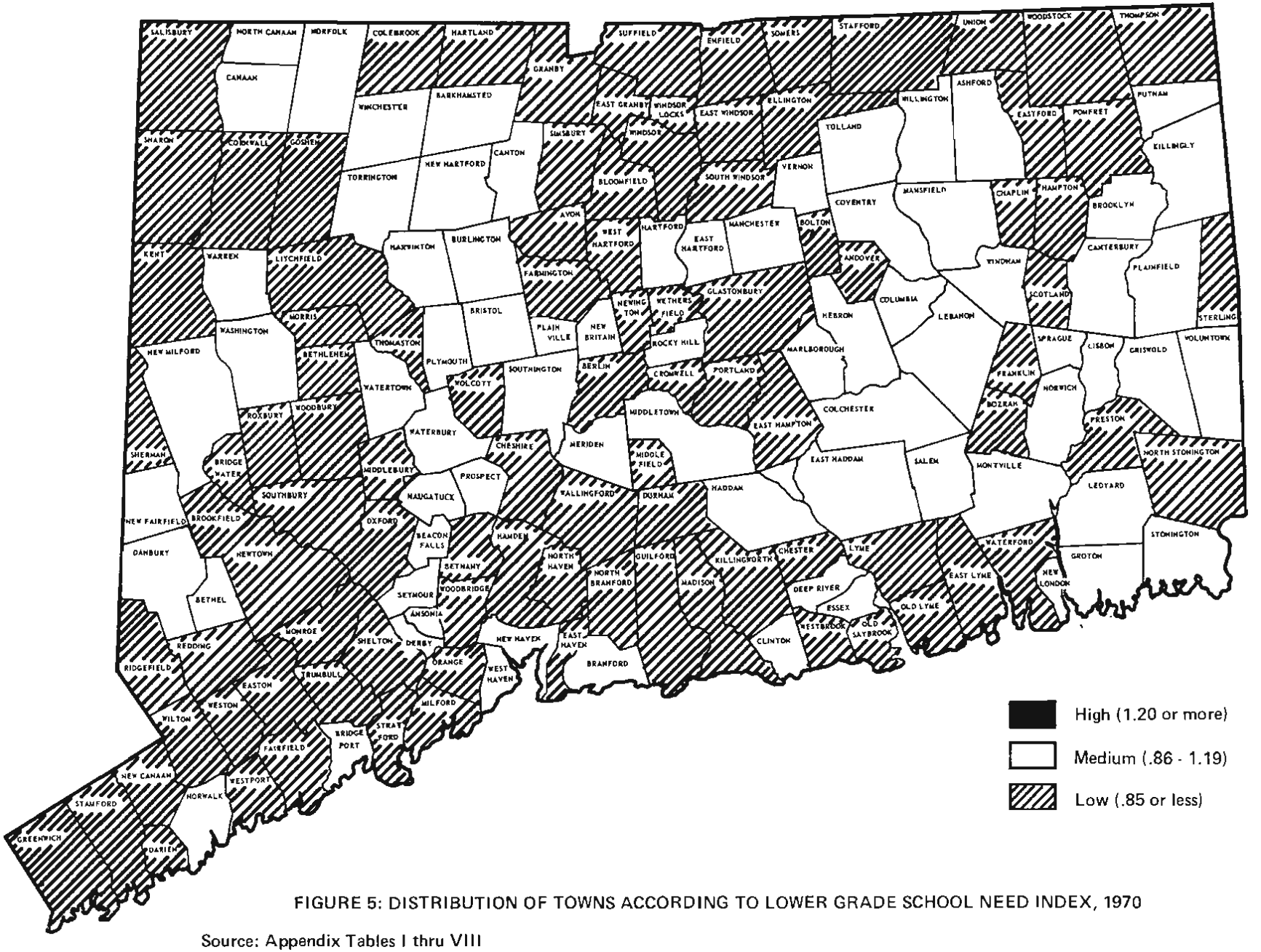

FIGURE 5: DISTRIBUTION OF TOWNS ACCORDING TO LOWER GRADE SCHOOL NEED INDEX, 1970

Source: Appendix Tables I thru VIII

indicate that average indices were in the expected direction for the crude rate of natural increase. The average crude rate of natural increase for towns with "medium" indices of lower grade school needs were higher (13.4) than towns with "low" indices of lower grade school need (10.8). It is apparent that the higher crude rate of net migration for towns with low indices of school need have offset the lower crude rate of natural increase and led to a higher crude rate of population change.

Table 6: Average Crude Rate of Population Change, Natural Increase and Net Migration, 1960-70, for Connecticut Towns Classified According to Lower Grade School Need in 1970

Lower Grade School Need	Number of Towns	Crude Rate of Population Change	Crude Rate of Natural Increase	Crude Rate of Net Migration
Low	96	41.3	10.8	30.5
Medium	73	33.9	13.4	20.5
High	0	----	----	----
Total	169	38.1	11.9	26.2

Source: Appendix Tables I through VIII; Groff and Reiser, 1973, Appendix A, Table 1.

Although only a detailed town-by-town analysis of net migration would provide an adequate explanation of the deviation from the expected pattern, it is possible to draw some tentative explanations based upon the data used in this analysis and information from other sources. The concentration of all the towns in the state in the "medium" or "low" categories of lower grade school needs seems to have had a leveling effect on all the crude rates. As a result, a shift of a relatively few towns from one category to another could significantly change the relationship. A review of town data on population change over the decade shows that four of the five towns which lost population are in the medium category of lower grade school need (Groff and Reiser, 1973). These four towns also experienced a net out-migration which was only partially offset by gains through natural increase. In effect, they would tend to lower the average crude rates of population change and net migration for the "medium" category.

It should also be noted that the crude rate of population change is the consequence of the relationship between natural increase and net migration rates. Natural increase, which is defined as the excess of births over deaths, has a greater impact at the younger ages. As the birth rate declines there is a corresponding tendency for migration to increase in importance as a factor in population change. The net migration of adults with a small number of school age children would have the tendency to increase the indices of lower and upper grade school need in the sending community and decrease the indices in the receiving community. Only a detailed analysis of age and fertility patterns of migrants could provide a definitive answer. Given the declining birth rate in Connecticut and the patterns disclosed in Tables 5 and 6 it seems possible that divergent patterns found for lower grade school needs

might be partly explained by characteristics of the migrant population (i.e., their age composition and fertility behavior).

SUMMARY AND CONCLUSIONS

The data from the 1970 census used in this report indicate that the decline in fertility during the 1960's is having a corresponding impact on the number of school-age children enrolled in elementary schools throughout the state. This decline which is reflected in the indices of lower grade school needs will continue during the first half of the 1970's unless there is a large increase of young children as a result of a net in-migration of families with school-age children. The smaller declines in the indices of upper grade school need over the decade suggest that the impact of the changing fertility patterns in the state are only beginning to affect the demand for school facilities and personnel at the upper grades. A continuation of present trends would lead to a lessening of these demands during the 1970's. Although there are considerable variations in the indices for the various towns, the overall trend is toward a decline in the demand for school facilities and personnel. As a final caution, the data should be interpreted with caution since no attempt has been made to account for other factors such as changes in classroom size, teaching practices, and support personnel.

A number of tentative conclusions concerning past patterns and future prospects of demand for school facilities and personnel in Connecticut and its towns can be made based upon the present analysis.

1. Public school enrollment in Connecticut grew considerably during the fifties and sixties. Total school enrollment grew by about 71 percent between 1950 and 1960, and by about 37 percent between 1960 and 1970.

2. Both primary and secondary school enrollment in Connecticut increased substantially during the fifties. Primary enrollment increased by about 72 percent and secondary enrollment by about 62 percent between 1950 and 1960.

3. During the 1960's, the growth of secondary enrollment remained high (62 percent) while the growth of primary enrollment declined to 28 percent, well below the level of the preceding decade.

4. A major factor in the large increases in both primary and secondary enrollment was the high level of fertility (often called the "baby boom") which began in the late 1940's and continued on through the late 1950's. The decline in fertility during the sixties was largely responsible for the decrease in the growth of primary school enrollment. A secondary factor affecting the enrollment increases was the movement of some families with school age children to Connecticut.

5. Measures of school load for the state reveal that in both 1960 and 1970 one hundred working age adults supported approximately 40 school age children.

6. Measures of school load and of lower grade and upper grade school need have been obtained for all of Connecticut's towns. The

measures of school need for, say, 1970, provide an indication of the expected demand for school facilities and personnel over the following five or six years. All of these measures vary considerably from town to town. The measures of school need indicate that no town in Connecticut will experience an increase in demand for lower grade school facilities and personnel during the first half of the seventies, while over half the towns in the state will actually experience declines in demand. On the other hand, thirty towns are expected to have an increase in demand for upper grade school facilities and personnel during the first half of the seventies while only eight will experience declines.

8. Anticipated declines in lower grade school need appear to be occurring in towns which had relatively low rates of natural increase of population during the 1960's.

9. Expected increases in upper grade school need seem to be occurring in towns which had relatively high rates of overall population growth, natural increase and net migration during the 1960's.

10. While it is generally recognized that population growth carries with it a number of benefits, this analysis suggests that it also has costs: namely, an unfavorable school age child to working age adult ratio and heightened demand, often temporary, for public school facilities and personnel.

Appendix Table I: Indices of School Load and School Need, Fairfield County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.37	.42	1.12	.82	1.19	1.02
Bethel	.40	.49	1.14	.87	1.35	1.27
Bridgeport	.32	.34	1.30	1.04	1.11	1.04
Brookfield	.39	.54	1.22	.79	1.24	1.30
Danbury	.35	.40	1.17	.94	1.20	1.12
Darien	.48	.48	.85	.65	1.07	.90
Easton	.41	.48	.97	.57	.93	.96
Fairfield	.41	.42	1.00	.70	1.14	.93
Greenwich	.39	.42	.93	.72	1.12	.90
Monroe	.40	.57	1.45	.80	1.38	1.32
New Canaan	.49	.52	.81	.54	1.05	.77
New Fairfield	.42	.47	1.03	.89	1.19	1.32
Newtown	.27	.44	1.24	.82	1.31	1.26
Norwalk	.35	.41	1.23	.89	1.28	1.12
Redding	.44	.49	.99	.78	1.22	1.08
Ridgefield	.42	.60	1.10	.71	1.43	1.25
Shelton	.39	.47	1.22	.83	1.24	1.19
Sherman	.34	.43	1.34	.70	1.29	1.17
Stamford	.35	.40	1.18	.85	1.22	1.02
Stratford	.40	.38	1.01	.78	1.03	.93
Trumbull	.43	.50	1.04	.64	1.16	1.02
Weston	.52	.56	.81	.58	1.12	.96
Westport	.47	.52	.85	.57	1.20	.81
Wilton	.48	.57	.92	.59	1.10	.95

Appendix Table II: Indices of School Load and School Need, Hartford County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.37	.41	1.20	.86	1.19	1.03
Avon	.44	.48	1.07	.74	1.20	1.01
Berlin	.39	.43	1.08	.68	1.10	.86
Bloomfield	.42	.45	1.11	.79	1.44	.81
Bristol	.39	.44	1.26	.89	1.20	1.02
Burlington	.46	.50	1.35	.91	1.15	1.13
Canton	.41	.44	1.20	.95	1.05	1.24
East Granby	.37	.48	1.57	.81	1.44	1.43
East Hartford	.40	.37	1.19	.94	1.27	1.00
East Windsor	.46	.45	1.14	.72	1.14	1.14
Enfield	.39	.58	1.56	.80	1.62	1.30
Farmington	.42	.43	1.10	.83	1.23	.98
Glastonbury	.41	.48	1.21	.81	1.15	1.08
Granby	.44	.48	1.43	.85	1.17	1.13
Hartford	.28	.33	1.36	1.08	1.11	1.11
Hartland	.52	.58	1.06	.82	1.40	1.18
Manchester	.42	.38	1.05	.92	1.06	.97
Marlborough	.45	.41	1.14	1.13	1.48	1.24
New Britain	.35	.33	1.15	.95	1.14	.93
Newington	.41	.44	1.05	.82	1.28	1.01
Plainville	.39	.42	1.14	.87	1.14	1.07
Rocky Hill	.38	.30	1.02	.94	1.12	.97
Simsbury	.45	.59	1.15	.67	1.46	1.11
Southington	.42	.47	1.26	.90	1.42	1.08
South Windsor	.40	.63	1.71	.68	1.49	1.27
Suffield	.43	.45	1.04	.75	1.20	.95
West Hartford	.38	.40	.88	.62	1.05	.80
Wethersfield	.36	.40	1.03	.70	1.10	.88
Windsor	.41	.47	1.03	.69	1.20	.97
Windsor Locks	.45	.53	1.29	.75	1.47	1.06

Appendix Table III: Indices of School Load and School Need, Litchfield County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.40	.43	1.13	.86	1.11	1.00
Barkhamstead	.49	.48	.98	.87	1.02	1.10
Bethlehem	.46	.45	.94	.74	1.50	.89
Bridgewater	.40	.44	1.09	.65	1.27	1.00
Canaan	.41	.35	1.15	.97	.71	1.02
Colebrook	.40	.43	1.07	.67	1.08	1.00
Cornwall	.44	.39	1.27	.56	.90	1.24
Goshen	.54	.46	.96	.76	.89	.80
Harwinton	.48	.49	1.13	.88	1.40	.89
Kent	.41	.41	.88	.73	1.29	1.28
Litchfield	.44	.47	1.06	.72	.99	1.04
Morris	.39	.46	1.44	.85	.89	.89
New Hartford	.42	.46	1.29	.96	1.19	1.16
New Milford	.39	.43	1.22	.99	1.22	1.25
Norfolk	.53	.59	1.10	.87	1.34	1.15
North Canaan	.42	.43	1.12	.87	1.11	1.00
Plymouth	.40	.44	1.15	.92	1.23	1.00
Roxbury	.41	.46	1.07	.79	1.11	.85
Salisbury	.37	.38	.87	.70	1.04	.93
Sharon	.43	.46	.88	.68	1.07	.87
Thomaston	.41	.49	1.24	.78	1.14	1.10
Torrington	.35	.38	1.15	.89	1.05	.96
Warren	.38	.40	1.13	.93	1.07	1.02
Washington	.40	.42	1.10	.88	1.10	.83
Watertown	.43	.46	1.08	.87	.83	.99
Winchester	.40	.42	1.16	.87	1.03	.96
Woodbury	.45	.43	1.14	.85	1.11	.88

Appendix Table IV: Indices of School Load and School Need, Middlesex County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.37	.42	1.16	.86	1.14	1.08
Chester	.44	.42	.97	.83	1.19	1.03
Clinton	.39	.45	1.10	1.04	1.25	1.23
Cromwell	.44	.42	.97	.70	1.22	1.04
Deep River	.40	.41	1.08	.92	1.05	1.03
Durham	.48	.56	1.26	.76	1.42	1.12
East Haddam	.40	.39	1.18	.91	1.16	.98
East Hampton	.41	.48	1.17	.77	1.09	1.27
Essex	.38	.36	.99	.88	1.04	.92
Haddam	.40	.43	1.11	.96	1.15	1.19
Killingworth	.34	.43	1.26	.83	1.65	1.05
Middlefield	.47	.50	1.15	.80	1.32	.95
Middletown	.31	.34	1.24	.94	1.02	1.09
Old Saybrook	.41	.50	1.24	.75	1.26	.99
Portland	.40	.47	1.16	.82	1.25	.96
Westbrook	.35	.41	1.27	.78	1.32	1.09

Appendix Table V: Indices of School Load and School Need, New Haven County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.37	.40	1.16	.88	1.15	1.02
Ansonia	.35	.39	1.23	.97	1.09	1.10
Beacon Falls	.39	.43	1.18	.93	1.28	1.14
Bethany	.43	.52	1.17	.71	1.19	1.08
Branford	.36	.40	1.31	.89	1.12	.97
Cheshire	.46	.49	1.09	.84	1.27	.95
Derby	.37	.38	1.05	.88	1.20	.89
East Haven	.44	.43	1.14	.82	1.19	1.04
Guilford	.43	.52	1.17	.72	1.19	1.20
Hamden	.37	.37	.99	.72	1.11	.92
Madison	.41	.57	1.01	.72	1.20	1.18
Meriden	.37	.42	1.19	.91	1.14	.97
Middlebury	.44	.45	.88	.72	1.18	.99
Milford	.45	.47	1.12	.81	1.23	1.05
Naugatuck	.38	.40	1.17	.97	1.13	1.11
New Haven	.29	.31	1.29	1.07	1.09	1.11
North Branford	.40	.54	1.45	.80	1.66	1.18
North Haven	.46	.48	.95	.64	1.11	1.02
Orange	.42	.51	.89	.54	1.29	.93
Oxford	.47	.53	.90	.82	1.23	1.14
Prospect	.46	.49	1.17	.92	1.28	1.25
Seymour	.39	.43	1.20	.88	1.17	.98
Southbury	.42	.33	.80	.80	.82	.79
Wallingford	.40	.46	1.25	.82	1.44	1.06
Waterbury	.36	.39	1.16	.97	1.10	.97
West Haven	.36	.34	1.09	1.00	1.12	1.01
Wolcott	.46	.53	1.27	.81	1.23	1.09
Woodbridge	.46	.50	.88	.56	1.22	.87

Appendix Table VI: Indices of School Load and School Need, New London County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.37	.41	1.25	.92	1.23	1.13
Bozrah	.49	.47	1.01	.79	1.44	1.20
Colchester	.43	.50	1.40	.88	1.21	1.26
East Lyme	.41	.51	1.24	.82	1.42	1.14
Franklin	.37	.48	1.22	.74	1.31	1.15
Griswold	.42	.43	1.13	.99	1.13	1.09
Groton	.37	.43	1.46	1.01	1.36	1.35
Lebanon	.47	.48	1.07	.88	1.19	1.23
Ledyard	.44	.40	1.56	.87	1.42	1.27
Lisbon	.44	.43	.92	1.01	1.43	1.05
Lyme	.38	.38	1.04	.83	1.07	1.01
Montville	.40	.52	1.35	.88	1.33	1.28
New London	.27	.27	1.28	1.08	1.11	.97
North Stonington	.44	.58	1.15	.82	1.31	1.19
Norwich	.38	.38	1.23	1.00	1.15	1.00
Old Lyme	.41	.47	1.11	.75	1.20	1.22
Preston	.20	.53	1.04	.67	1.35	1.23
Salem	.43	.43	1.16	.88	1.01	1.08
Sprague	.43	.45	1.07	1.03	1.27	1.02
Stonington	.40	.40	1.12	.95	1.16	1.09
Voluntown	.46	.44	.99	.96	1.12	1.14
Waterford	.44	.48	1.10	.64	1.28	.96

Appendix Table VII: Indices of School Load and School Need, Tolland County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.37	.39	1.21	.90	1.22	1.15
Andover	.49	.50	1.12	.76	1.09	1.27
Bolton	.43	.46	1.07	.83	1.41	1.05
Columbia	.43	.47	1.13	.88	1.02	1.02
Coventry	.45	.46	1.08	.95	1.24	1.12
Ellington	.51	.55	1.20	.73	1.55	1.04
Hebron	.58	.49	1.20	1.07	.85	1.39
Mansfield	.23	.19	.99	.91	1.00	.91
Somers	.49	.38	1.20	.72	1.07	1.08
Stafford	.42	.45	1.07	.82	1.17	1.00
Tolland	.40	.57	1.26	.90	1.57	1.53
Union	.36	.32	1.00	.84	1.39	1.07
Vernon	.35	.45	1.52	1.00	1.35	1.27
Willington	.42	.34	1.33	.94	1.16	1.12

Appendix Table VIII: Indices of School Load and School Need, Windham County: 1960 and 1970

	School Load		School Need (Lower)		School Need (Upper)	
	1960	1970	1960	1970	1960	1970
Total	.40	.43	1.09	.88	1.13	1.09
Ashford	.47	.38	1.02	.94	1.10	1.17
Brooklyn	.38	.44	1.13	.94	1.02	1.11
Canterbury	.48	.52	.98	.87	1.18	1.13
Chaplin	.41	.50	1.17	.71	1.43	1.13
Eastford	.46	.58	1.24	.51	1.27	1.19
Hampton	.51	.53	1.05	.63	1.37	1.00
Killingly	.40	.45	1.07	.92	1.12	1.01
Plainfield	.45	.51	1.02	.89	1.25	1.15
Pomfret	.41	.51	.97	.74	1.10	1.07
Putnam	.37	.39	1.04	.88	1.05	1.02
Scotland	.46	.52	1.23	.72	1.01	1.19
Sterling	.43	.55	1.16	.75	.98	1.11
Thompson	.38	.44	1.15	.85	1.04	1.09
Windham	.36	.36	1.19	.96	1.14	1.12
Woodstock	.39	.38	1.02	.79	1.17	.96

Appendix Table IX: Fairfield County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	82,683	78,199	74,015	95,918	137,869	189,620	371,740	450,870
Bethel	1,174	1,369	1,029	1,573	1,794	2,812	4,448	5,768
Bridgeport	19,817	16,359	15,220	15,803	28,987	30,950	90,675	90,649
Brookfield	493	1,237	404	1,567	728	2,770	1,878	5,099
Danbury	4,983	5,714	4,276	6,075	7,832	11,502	22,381	28,742
Darien	2,153	1,706	2,529	2,620	4,903	5,546	10,113	11,568
Easton	370	368	383	647	794	1,319	1,957	2,743
Fairfield	5,708	4,695	5,718	6,671	10,714	13,850	26,007	33,149
Greenwich	5,884	4,837	6,358	6,729	12,015	14,218	30,656	34,134
Monroe	1,174	1,641	808	2,050	1,395	3,608	3,480	6,290
New Canaan	1,483	1,183	1,824	2,209	3,567	5,066	7,286	9,796
New Fairfield	441	892	428	998	785	1,753	1,864	3,753
Newtown	1,250	1,844	1,003	2,253	1,767	4,035	6,537	9,281
Norwalk	9,409	8,621	7,631	9,685	13,343	18,343	38,818	45,287
Redding	411	604	446	777	809	1,494	1,844	3,055
Ridgefield	1,176	2,195	1,072	3,098	1,820	5,570	4,352	9,358
Shelton	2,639	3,134	2,157	3,787	3,896	6,974	10,057	14,932
Sherman	114	126	85	181	151	336	450	789
Stamford	12,059	10,756	10,218	12,670	18,620	25,124	53,899	62,799
Stratford	5,240	4,229	5,192	5,425	10,253	11,241	25,597	29,409
Trumbull	2,726	2,818	2,622	4,390	4,877	8,695	11,443	17,555
Weston	489	666	601	1,133	1,137	2,310	2,176	4,071
Westport	2,508	2,018	2,939	3,559	5,388	7,956	11,553	15,372
Wilton	982	1,186	1,072	2,018	2,043	4,148	4,269	7,282

Appendix Table X: Hartford County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	92,801	83,437	77,656	97,043	142,966	191,569	391,297	465,428
Avon	739	820	694	1,113	1,273	2,217	2,892	4,627
Berlin	1,418	1,116	1,311	1,641	2,504	3,555	6,344	8,195
Bloomfield	2,080	1,618	1,868	2,062	3,163	4,613	7,463	10,300
Bristol	6,752	6,021	5,355	6,932	9,825	13,724	25,309	31,085
Burlington	488	532	362	585	677	1,104	1,478	2,207
Canton	655	886	544	930	1,060	1,681	2,595	3,788
East Granby	454	447	289	550	490	934	1,341	1,935
East Hartford	6,490	6,040	5,471	6,412	9,765	12,850	24,708	34,420
East Windsor	1,129	832	989	1,164	1,854	2,188	4,030	4,894
Enfield	6,259	6,194	4,026	7,773	6,515	13,750	16,817	23,714
Farmington	1,513	1,443	1,375	1,743	2,491	3,517	5,926	8,242
Glastonbury	2,118	2,286	1,754	2,826	3,275	5,442	7,946	11,468
Granby	886	733	620	858	1,148	1,618	2,638	3,407
Hartford	19,634	17,459	14,420	16,240	27,453	30,927	97,328	92,510
Hartland	170	164	161	199	276	368	526	640
Manchester	5,236	4,802	5,011	5,203	9,714	10,549	23,308	27,781
Marlborough	325	464	284	408	475	736	1,053	1,791
New Britain	10,024	7,594	8,700	8,010	16,309	16,661	47,162	49,859
Newington	2,374	2,672	2,265	3,265	4,032	6,488	9,964	14,920
Plainville	1,765	1,808	1,546	2,081	2,901	4,028	7,436	9,517
Rocky Hill	826	943	809	1,000	1,529	2,033	4,076	6,764
Simsbury	1,667	1,921	1,444	2,870	2,433	5,450	5,412	9,188
Southington	3,803	3,751	3,026	4,179	5,157	8,050	12,313	17,209
South Windsor	2,035	1,917	1,189	2,817	1,985	5,030	4,983	7,952
Suffield	892	817	858	1,088	1,568	2,233	3,624	4,959
West Hartford	6,140	4,269	6,953	6,842	13,559	15,359	35,586	38,063
Wethersfield	2,337	2,041	2,266	2,900	4,326	6,185	12,081	15,379
Windsor	2,520	1,994	2,453	2,906	4,499	5,912	10,989	12,651
Windsor Locks	2,072	1,673	1,613	2,246	2,710	4,367	5,969	8,187

Appendix Table XI: Litchfield County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	15,457	14,815	13,738	17,130	26,072	34,182	64,943	79,035
Barkhamstead	178	250	181	286	358	546	730	1,132
Bethlehem	202	164	216	221	360	469	777	1,047
Bridgewater	113	98	104	151	186	302	462	684
Canaan	83	87	72	90	173	178	421	507
Colebrook	97	84	91	125	174	249	434	580
Cornwall	141	79	111	139	235	251	531	641
Goshen	170	155	164	152	349	343	642	754
Harwinton	556	487	493	555	844	1,176	1,743	2,388
Kent	177	179	201	246	356	438	874	1,079
Litchfield	764	688	718	950	1,438	1,866	3,267	3,973
Morris	167	163	116	190	248	403	641	871
New Hartford	459	508	356	528	655	985	1,552	2,121
New Milford	1,161	1,919	954	1,932	1,733	3,481	4,501	7,940
Norfolk	287	271	260	310	453	580	849	992
North Canaan	369	305	330	349	628	697	1,478	1,636
Plymouth	1,259	1,167	1,092	1,268	1,973	2,540	4,912	5,718
Roxbury	111	113	103	143	196	311	483	679
Salisbury	292	244	336	349	660	723	1,806	1,896
Sharon	218	183	248	270	478	581	1,107	1,267
Thomaston	836	663	676	847	1,268	1,619	3,101	3,332
Torrington	3,510	2,980	3,050	3,351	5,962	6,857	17,166	18,043
Warren	69	82	61	88	118	174	308	432
Washington	318	279	288	316	551	699	1,376	1,664
Watertown	2,038	2,046	1,884	2,344	3,496	4,705	8,076	10,319
Winchester	1,334	1,090	1,151	1,259	2,267	2,577	5,667	6,147
Woodbury	548	571	482	671	913	1,432	2,027	3,312

Appendix Table XII: Middlesex County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	11,332	11,996	9,760	13,901	18,308	26,776	49,409	64,546
Chester	287	287	295	344	543	679	1,245	1,608
Clinton	538	1,430	490	1,370	893	2,485	2,269	5,536
Cromwell	879	634	909	900	1,654	1,767	3,765	4,262
Deep River	350	383	324	417	630	820	1,593	2,022
Durham	535	531	440	701	750	1,327	1,570	2,378
East Haddam	482	464	409	509	767	1,029	1,941	2,663
East Hampton	714	785	609	1,022	1,170	1,829	2,833	3,840
Essex	414	400	417	456	817	954	2,143	2,687
Haddam	448	608	401	633	750	1,167	1,885	2,721
Killingworth	166	245	132	297	212	581	620	1,364
Middlefield	529	442	459	555	806	1,141	1,707	2,287
Middletown	3,801	3,681	3,055	3,915	6,057	7,521	19,572	22,060
Old Saybrook	793	825	642	1,102	1,149	2,212	2,812	4,455
Portland	1,060	926	913	1,125	1,644	2,293	4,137	4,846
Westbrook	336	355	265	455	466	871	1,317	2,129

Appendix Table XIII: New Haven County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	84,762	75,668	72,998	85,820	136,435	169,682	373,586	423,902
Ansonia	2,528	2,351	2,052	2,415	3,944	4,617	11,131	11,891
Beacon Falls	417	424	352	454	628	854	1,611	1,970
Bethany	363	411	309	578	569	1,112	1,311	2,123
Branford	2,346	2,057	1,791	2,314	3,384	4,697	9,356	11,795
Cheshire	2,016	2,016	1,843	2,510	3,290	5,158	7,144	10,512
Derby	1,699	1,161	1,366	1,318	2,501	2,801	6,747	7,317
East Haven	3,158	2,570	2,778	3,155	5,106	6,204	11,703	14,472
Guilford	1,136	1,297	967	1,809	1,781	3,312	4,161	6,425
Hamden	4,577	3,731	4,629	5,185	8,790	10,830	23,514	28,926
Madison	544	1,110	537	1,545	985	2,850	2,414	5,009
Meriden	6,782	5,863	5,695	6,424	10,704	13,033	28,804	31,030
Middlebury	553	490	626	685	1,156	1,376	2,655	3,060
Milford	6,194	5,482	5,555	6,747	10,061	13,196	22,467	28,330
Naugatuck	2,484	2,628	2,224	2,722	4,185	5,184	10,923	12,972
New Haven	17,424	14,098	13,512	13,184	25,950	25,098	90,950	81,571
North Branford	1,320	1,358	909	1,697	1,455	3,140	3,635	5,822
North Haven	1,982	1,930	2,097	3,024	3,992	5,991	8,763	12,611
Orange	1,025	1,019	1,147	1,878	2,033	3,894	4,889	7,640
Oxford	411	506	457	614	828	1,151	1,762	2,470
Prospect	707	888	605	969	1,079	1,743	2,335	3,541
Seymour	1,400	1,365	1,165	1,546	2,165	3,123	5,569	7,267
Southbury	468	539	587	678	1,303	1,542	3,083	4,701
Wallingford	4,782	3,850	3,836	4,683	6,506	9,118	16,130	19,669
Waterbury	13,137	11,097	11,321	11,454	21,632	23,252	60,305	60,142
West Haven	5,150	5,359	4,716	5,370	8,915	10,687	24,637	31,486
Wolcott	1,521	1,504	1,197	1,852	2,174	3,551	4,723	6,758
Woodbridge	638	564	725	1,010	1,319	2,168	2,864	4,372

Appendix Table XIV: New London County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	26,261	26,299	20,988	28,596	38,095	53,847	103,770	130,254
Bozrah	234	228	232	290	393	532	808	1,129
Colchester	767	844	546	954	996	1,710	2,329	3,418
East Lyme	1,085	1,340	876	1,637	1,491	3,074	3,629	6,061
Franklin	140	139	115	189	203	354	550	737
Griswold	890	946	785	957	1,478	1,835	3,485	4,234
Groton	5,193	5,401	3,569	5,354	6,202	9,322	16,900	21,773
Lebanon	346	481	323	548	595	995	1,267	2,063
Ledyard	1,118	1,750	715	2,006	1,220	3,581	2,797	8,874
Lisbon	263	353	287	348	488	681	1,102	1,573
Lyme	130	127	125	153	244	304	637	803
Montville	1,308	2,161	968	2,444	1,694	4,354	4,190	8,396
New London	3,812	2,791	2,988	2,591	5,693	5,268	21,123	19,865
North Stonington	297	494	259	605	459	1,114	1,050	1,930
Norwich	5,228	4,453	4,246	4,438	7,944	8,897	20,892	23,217
Old Lyme	410	512	368	683	674	1,245	1,639	2,674
Preston	376	381	363	572	632	1,036	3,112	1,942
Salem	125	163	108	185	215	357	499	822
Sprague	337	361	314	350	563	695	1,315	1,548
Stonington	1,820	1,761	1,624	1,846	3,023	3,538	7,606	8,831
Voluntown	130	175	131	183	248	343	535	780
Waterford	2,252	1,438	2,046	2,263	3,640	4,612	8,305	9,594

Appendix Table XV: Tolland County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	9,611	11,650	7,933	12,919	14,461	24,148	39,561	61,530
Andover	266	243	237	321	455	574	936	1,140
Bolton	436	406	408	489	697	954	1,622	2,089
Columbia	289	358	255	406	505	806	1,180	1,714
Coventry	933	1,041	866	1,097	1,562	2,073	3,450	4,551
Ellington	955	831	827	1,144	1,362	2,244	2,673	4,118
Hebron	271	615	225	577	490	993	844	2,034
Mansfield	1,193	1,232	1,203	1,351	2,401	2,829	10,483	15,204
Somers	543	608	451	848	872	1,630	1,792	4,311
Stafford	965	880	904	1,069	1,678	2,140	4,026	4,780
Tolland	495	1,249	392	1,387	641	2,292	1,598	4,005
Union	46	36	46	43	79	83	222	258
Vernon	2,862	3,757	1,881	3,768	3,276	6,736	9,316	15,060
Willington	317	394	238	419	443	794	1,056	2,316

Appendix Table XVI: Windham County Age Distributions, 1960 and 1970

	Ages 0-5		Ages 6-11		Ages 6-17		Ages 18-64	
	1960	1970	1960	1970	1960	1970	1960	1970
Total	8,593	9,132	7,858	10,380	14,809	19,939	37,446	46,277
Ashford	174	247	171	263	326	488	698	1,292
Brooklyn	388	582	343	622	679	1,181	1,801	2,681
Canterbury	239	330	245	381	452	717	940	1,380
Chaplin	191	169	162	238	275	448	665	893
Eastford	118	76	95	148	170	272	369	467
Hampton	138	96	136	153	234	306	459	582
Killingly	1,394	1,512	1,299	1,637	2,457	3,260	6,205	7,312
Plainfield	1,184	1,500	1,157	1,681	2,087	3,145	4,654	6,164
Pomfret	239	257	246	348	470	672	1,155	1,309
Putnam	930	816	896	928	1,747	1,840	4,708	4,708
Scotland	101	114	82	159	163	278	357	537
Sterling	181	206	156	274	316	520	730	954
Thompson	775	818	672	963	1,319	1,847	3,441	4,158
Windham	2,162	2,040	1,825	2,116	3,423	4,009	9,503	11,301
Woodstock	379	369	373	469	691	956	1,761	2,540

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