Connecticut State Department of Education Division of Teaching and Learning

School Year 1996-97 Number 1

RESEARCH BULLETIN

Bureau of Research and Teacher Assessment

November 1996

EDUCATIONAL REFERENCE GROUPS, 1996

Education Reference Groups (ERGs) is a classification system in which districts that have public school students with similar socio-economic status and need are grouped together. Grouping like districts together is useful in order to make legitimate comparisons among districts.

These 1996 ERGs are the third generation of the State Department of Education's classification of school districts. In 1979, we classified districts into six types of communities. That classification system was based on population, location relative to the five large cities of the state, and location in or out of the Census Bureau's Standard Metropolitan Statistical Areas of 1970 and 1980. In 1989, the Department introduced ERGs that classified districts into seven groups according to 1980 Census measures of socioeconomic status and need. The 1996 ERGs improve on the 1989 classification by (1) restricting the data to the characteristics of children attending public school and their families, (2) updating the Census data to 1990, (3) using 1994 state data for poverty and enrollment, (4) expanding the number of groups from seven to nine to reduce the number of districts per group, (5) changing the unit of analysis, where possible, from percentage of families or people to percentage of children, and (6) making the groups sensitive to district enrollment.

Variables Used to Form 1996 ERGs

We used seven variables (income, education, occupation, poverty, family structure, home language, and district enrollment) to categorize districts into ERGs. All variables were based upon families with children attending public school.

Income - From NCES/Census data, the median family income in 1989 for families with children in public school. The original ERGs used the median family income of all families in the district.

Education - From NCES/Census data, the percentage of children attending public school with at least one parent with a Bachelor's degree or higher. The original ERGs used percentage of people in the district 18 years and older with at least a high school diploma.

Occupation - From NCES/Census data, the percentage of public school children's parents aged 16 years or older,

employed, and holding jobs in executive, managerial and professional specialty occupations. The original ERGs used the percentage of all employed people in the district 16 years and older.

Poverty - The number of all children ages 5-17 within school district boundaries who received Aid for Dependent Children in 1994-95 divided by the October 1994 district public school enrollment. In the original ERGs, the percentage of families below the national poverty level was used.

Family Structure - From NCES/Census data, the percentage of public school children living in families without a wife or husband present or in non-family households. In the original ERGs, the percentage of single-parent families was used.

Home Language - From NCES/Census data, the percentage of public school children whose families speak a language other than English at home. In the original ERGs, the percentage of families which spoke a language other than English at home was used.

District Enrollment - The 1994 school district enrollment was classified into ten groups (deciles) and then given a half-weighting in the model. This variable was not used in the original ERGs.

Methodology

An initial step in forming the new ERGs was to survey school superintendents for their comments on the existing ERGs. The September 1995 survey had several key Seventy-eight percent of superintendents findings. responding indicated their current (1989) ERG was about right, 5% wanted to move up and 17% wanted to move to a lower ERG. While most superintendents indicated that the size of their ERG was appropriate, one quarter of the superintendents in the three large ERGs indicated there were too many districts in their ERG. This led us to a planned increase in the number of groups from 7 to 9. Superintendents also indicated that we should use town/district size and percent with college degrees in our model. This directly led to a change in how education level was measured and the inclusion of district enrollment in the model.

The Census data were extracted from the School District Data Book, a CD-ROM software and database system developed by The MESA Group for the National Center for Educational Statistics. The 1994 AFDC count and 1994 district enrollment were taken from state records.

We used cluster analysis to categorize districts into groups. Cluster analysis techniques use mathematical rules of thumb used to assign districts with similar characteristics into groups. The groups that are formed are sensitive to the variables chosen and the clustering method used. We used two clustering techniques to derive our proposed ERGs. In a preliminary step, 1994 enrollment was converted to deciles to reduce its impact on the model. Next, the 7 variables were standardized for 158 districts, all except high school regional districts and the three academies. Then, they were transformed using the ACECLUS procedure, and then subjected to a Ward's hierarchical cluster analysis. Nine groups accounted for 80 percent of the variation. Using the 9 groups as the initial seed, the groupings were refined using a K-Means cluster analysis. In this analysis the 1994 enrollment deciles were weighted 0.5 so they would not overwhelm the other variables that have been shown to correlate with student achievement. The data for the high school regional districts and the academies were computed from a weighted average (based on 1994 enrollment) of the sending districts. These high school regional districts and academies were then assigned to groups by discriminant function analysis.

Since there is no one "correct" classification of districts, Census data are subject to some sampling error, and districts may have changed significantly between 1990 and 1996, superintendents were given the opportunity to request a change in their proposed 1996 group. Changes were approved for nine districts that were in the top or bottom two positions within a group or whose movement would not create a new high or low for a variable within their target group. Districts moved were Bristol, Cromwell, Killingly, Mansfield, Marlborough, South Windsor, Waterford, Region 15 and Region 17.

Group Characteristics

The cluster analyses and superintendent modifications produced nine groups. These are labeled A to I to differentiate them from the 1989 ERGs which were labeled 1-7. The groups run from the very affluent, low need suburban districts of group A to the 7 high need, low SES urban areas of group I.

					1996 ERG	ť			
<u>Variable</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	F	<u>G</u>	<u>H</u>	Ī
Median Family	\$98,495*	\$66,724*	\$52,195	\$53,620	\$44,197	\$47,036	\$41,386	\$40,494	\$24,349*
Income									l
Percent with	79.7%*	62.9%*	49.2%*	42.2%*	32.1%	28.9%	15.5%	22.4%*	11.9%
Bachelor's Degree									l
Percent Managerial/	58.2%*	48.9%*	40.6%	37.5%	30.8%	30.6%	20.6%	26.3%*	18.1%
Professional									
Occupation									
Percent Children in	9.6%	12.0%	12.9%	15.9%	16.3%	20.1%	18.8%	28.9%*	51.4%*
Single-Parent									
Families									
Percent Children	0.6%	1.8%	2.2%	3.4%	3.7%	7.0%	7.2%	17.6%*	42.6%*
Receiving AFDC									
Percent Non-	6.8%	7.7%	3.4%	7.4%	3.8%	7.2%	3.4%	12.7%*	37.4%*
English									
Home Language									
1994 Average	2,309	3,795	1,093	3,122	649	4,489	1,412	5,829	13,258*
Enrollment									
Number of Districts	12	19	38	21	26	16	16	14	7

Group Characteristics of 1996 ERGs

* Value is significantly different from every other group.

Group A - This group includes 9 affluent Fairfield County districts and 3 affluent suburbs of Hartford and New Haven. The average income, education level and percentage in managerial or professional occupations are all significantly higher than any other group. This group

also has the lowest percentage of single-parent families and children receiving AFDC. It has a moderate percentage of people who do not speak English at home. The average enrollment was 2,309. **Group B** - These 19 districts are also high SES communities, but less so than Group A. Their median family income, education level, and percent in managerial or professional occupations are second only to Group A and significantly different from all other groups. The group has a similar percentage of children from single-parent families and percentage of children receiving AFDC as adjacent groups. It has the fourth highest percentage of families who do not speak English at home. Its average enrollment of 3,795 is significantly greater than Group C.

Group C - The education level, percentage in managerial or professional occupations and small enrollment differentiate these 38 smaller districts from their adjacent groups. This group has lower median family income than Group B. It has a similar percentage of children from single-parent families and percentage of children receiving AFDC as adjacent groups. This group has a very low percentage of families who do not speak English at home. The average enrollment was 1,093.

Group D - The 21 districts in this group have a similar median family income and percent in managerial or professional occupations as Group C, but the education level is lower. It has a similar percentage of children from single-parent families and percentage of children receiving AFDC as adjacent groups. The percentage of families who do not speak English at home and average enrollment are both significantly higher than the adjacent groups. The average enrollment was 3,122.

Group E - The 26 small districts in this group have a lower median family income, education level, and percentage in managerial or professional occupations than Group D. It has a similar percentage of dildren from single-parent families and percentage of children receiving AFDC as Group D. The percentage of families who do not speak English at home is lower than adjacent groups. The average enrollment of 649 is the smallest of any group.

Group F - The 16 medium-size districts in this group have a similar median family income, education level, and percent in managerial or professional occupations as Group E, but significantly higher levels than Group G. Compared to Group E, this group has a higher percentage of children from single-parent families, percentage of children receiving AFDC, and percentage of families who do not speak English at home. The average enrollment of this group was 4,489.

Group G- The 16 districts in this group have a lower median family income, education level. and percentage in managerial or professional occupations as Group F. In fact, the education level and percentage in managerial or professional occupations are both lower than Group H. Compared to Group F, this group has a similar percentage of children from single-parent families and percentage of children receiving AFDC. The percentage of families who do not speak English at home is smaller than adjacent groups. The average enrollment of this group was 1,412.

Group H- The 14 larger districts in this group all come from former ERG 6. The median family income of this group is similar to that in Group G. However, this group's education level and percentage in managerial or professional occupations are both higher than the group immediately above it. This group's percentage of children from single-parent families, percentage of children receiving AFDC, and percentage of families who do not speak English at home were significantly higher than Group G and significantly lower than Group I. The average enrollment of this group was 5,829.

Group I - The 7 districts in this group had the lowest SES levels and highest need levels of all groups. Median family income was significantly lower than any other group. Although the education level and percentage in managerial or professional occupations were the lowest of any group, they were not statistically worse than Group G. This group's percentage of children from single-parent families, percent of children receiving AFDC, and percentage of families who do not speak English at home were significantly higher than any other group. The average enrollment of this group was 13,258.

1989					1996	ERG				
ERG	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	E	F	<u>G</u>	H	Ī	<u>Total</u>
1	12	1	0	0	0	0	0	0	0	13
2	0	17	10	2	0	0	0	0	0	29
3	0	0	16	9	9	0	0	0	0	34
4	0	1	9	7	12	6	1	0	0	36
5	0	0	3	3	5	8	12	0	0	31
6	0	0	0	0	0	2	3	14	4	23
7	0	0	0	0	0	0	0	0	3	7
Total	12	19	38	21	26	16	16	14	7	169

A Comparison of 1989 and 1996 ERGs

Comparing the 1989 and 1996 ERGs

For most districts, the classification in 1996 is similar to that in 1989. Notice that all ERG A districts were in ERG 1 in 1989 and all H districts were previously in ERG 6. There are many reasons why a district could move. First, a district could have changed relatively more than others between the 1980 and 1990 censuses. Second, we measured characteristics of the families of students attending public school instead of all families in the district. Third, the inclusion of enrollment in the model moved several districts in the middle ERGs. Fourth, the change in the definition of education level could have affected districts differently. Finally, the cluster analysis technique was different in 1996 than in 1989.

Using Educational Reference Groups

The ERGs set a context for districts to critically review their resources, student participation and student achievement. Much of the data on the Strategic School Profiles and other Department of Education publications include both statewide and ERG averages. We anticipate that this will facilitate discussion about district resources and student performance relative to other districts within the same ERG. ERGs can give policy-makers a more insightful picture than merely a comparison to the state average.

The table on pages 5-7 presents districts ordered within ERGs using a linear combination of the six demographic variables (excluding district enrollment). When interpreting level of resources or academic results within an ERG, this ordering should be considered.

Caveats

There are several cautions that must be exercised when using the ERGs. The grouping are based, in part, on 1990 Census data. If a district has undergone significant changes in population compared to other districts, the grouping may no longer be appropriate.

ERGs are based on families residing in a district, not school or neighborhood characteristics. It would be inappropriate to use this to compare schools serving only part of a district. Also, districts that serve students from other communities such as in Project Concern or through proposed school choice or magnet schools may have different characteristics than those of the families residing in their town.

Finally, while districts are ranked by SES and need in the table on pages 5-7, census data are subject to sampling error which could move a district up or down in its relative position within an ERG.

Connecticut Education Reference Groups, 1996

	ERG = A	
Avon	Redding	Westport
Darien	Ridgefield	Wilton
Easton	Simsbury	Woodbridge
New Canaan	Weston	Region 9
	FRG – B	
Bethel	Greenwich	Newtown
Brookfield	Guilford	Orange
Cheshire	Madison	South Windsor
Fairfield	Marlborough	Trumbull
Farmington	Monroe	West Hartford
Glastonbury	New Fairfield	Region 5
Granby		
	FRG - C	
Andover	Litchfield	Woodstock
Barkhamsted	Mansfield	Region 4
Bethany	New Hartford	Region 6
Bolton	Oxford	Region 7
Bozrah	Pomfret	Region 8
Canton	Preston	Region 10
Cornwall	Salem	Region 13
Deep River	Salisbury	Region 14
East Granby	Sherman	Region 15 Decise 17
Emington	Somers	Region 17
Hebron	Westbrook	Region 19
Ledvard	Willington	Region 17
Loujuid		
	ERG = D	
Berlin	Hamden	Shelton
Branford	Newington	Southington
Clinton	New Milford	Tolland
Colchester	North Branford	Watertown
Columbia East Hampton	Old Saubrook	Windsor
East Lyme	Rocky Hill	Region 12
Last Lynne	Коску Шп	Region 12
	ERG = E	
Ashford	East Haddam	Portland
Brooklyn	Franklin	Scotland
Canaan	Hampton	Sharon
Canterbury	Hartland	Union
Colobrook	Kent	Region 1
Coventry	Leballoli	Region 16
Cromwell	Norfolk	Woodstock
croniwen	Norrolk	Academy
Eastford	North Stonington	ý
Bloomfield	EKG = F Naugatuck	Vernon
Enfield	Seymour	Wallingford
Groton	Stonington	Waterford
Manchester	Stratford	Windsor Locks
Milford	Torrington	Wolcott
Montville		
	EDG G	
Chanlin	ERG = G	Thomaston
East Haven	Planouth	Thompson
East Windsor	Sprague	Voluntown
Griswold	Stafford	Winchester
North Canaan	Sterling	Gilbert Acad.
Plainfield	0	
Anconio	ERG = H Killingly	Dutnom
Bristol	Meriden	i utilalii Stamford
Danbury	Middletown	West Haven
Derby	Norwalk	Norwich Free Acad
East Hartford	Norwich	red
Dil	ERG = I	XX7
Bridgeport	New Lordon	Windham
New Britain	New LONUOII	•• munalii

Characteristics of Districts Ordered within ERG

District Name	Median Family Income 1989	Percent with BA Degree 1990	Percent Managers/ Profes- sional 1990	Percent AFDC 1994	Percent Single- Parent Families 1990	Pct. Non- English Home Language 1990	District Enrollment 1994
WESTON NEW CANAAN WILTON DAPLEN	\$130,831 \$114,436 \$107,637 \$113,687	93.4 83.5 83.9 84.2	ERG = A 61.6 60.3 59.6 58.2	0.2 0.9 0.2	5.9 11.7 9.0	7.6 6.2 5.5	1,612 2,897 2,996 2,957
RIDGEFIELD EASTON AVON SIMSBURY	\$96,017 \$95,412 \$82,581 \$78,158	78.9 76.0 78.9 81.6	60.1 52.1 62.1 62.8	0.3 0.4 0.5 0.7 0.5	9.7 3.2 9.0 11.9	6.7 6.7 4.1 3.3	3,837 790 2,207 4,200
WESTPORT REGION 9 WOODBRIDGE REDDING	\$93,680 \$96,665 \$75,233 \$97,608	78.9 70.6 80.1 66.6	63.0 50.9 58.2 50.0	0.9 0.8 0.7 0.6	16.3 7.7 7.2 11.0	10.9 5.9 9.3 5.3	3,661 630 847 1,069
ORANGE	\$70.145	77.2	$\mathbf{ERG} = \mathbf{B}$	0.6	5.8	6.5	1 211
REGION 5 CHESHIRE MADISON TRUMBULL NEWTOWN	\$69,130 \$65,838 \$72,434 \$74,904 \$67,662	72.8 66.7 70.1 66.8 63.0	54.9 55.4 51.5 48.7 49.4	1.0 1.0 0.6 1.3 1.4	7.1 12.0 15.6 10.8 11.8	7.4 3.3 4.3 12.2 3.1	1,844 4,496 2,834 5,207 3,821
BROOKFIELD MARLBOROUGH MONROE FARMINGTON GLASTONBURY GREENWICH NEW FAIREIEI D	\$71,175 \$59,710 \$64,964 \$63,158 \$68,179 \$80,002 \$62,747	63.4 60.9 58.4 65.5 66.8 63.3 51.4	48.9 46.4 46.5 49.8 47.6 51.2 46.6	1.4 1.8 0.9 2.0 2.3 2.6 1.3	11.4 5.8 6.5 11.6 13.6 17.5 9 5	8.8 1.4 7.4 8.2 10.2 23.2 3.6	2,527 643 3,469 3,480 5,144 7,155 2,498
GRANBY GUILFORD FAIRFIELD WEST HARTFORD BETHEL SOUTH WINDSOR	\$63,586 \$61,254 \$68,226 \$62,730 \$61,724 \$60,182	51.4 58.1 59.9 60.5 65.2 53.5 51.2	44.9 46.6 49.1 51.5 43.0 41.6	1.3 1.4 2.2 7.0 2.1 1.5	12.0 12.7 18.6 17.5 13.5 14.7	4.8 5.6 7.9 14.4 6.5 8.3	1,640 3,488 7,018 8,326 3,115 4,190
			$\mathbf{ERG} = \mathbf{C}$				
REGION 17 BETHANY REGION 10 REGION 18 SALEM OXFORD LEDYARD SALISBURY REGION 13 REGION 8 CANTON REGION 15	558,080 57,964 559,012 53,991 53,455 54,863 53,907 41,103 556,701 51,676 60,000 62,605	$\begin{array}{c} 60.1 \\ 51.9 \\ 49.0 \\ 56.3 \\ 49.2 \\ 46.6 \\ 49.7 \\ 54.7 \\ 47.3 \\ 53.6 \\ 50.8 \\ 51.1 \end{array}$	$\begin{array}{c} 43.6\\ 46.7\\ 47.0\\ 47.2\\ 41.3\\ 46.3\\ 43.7\\ 52.5\\ 42.1\\ 39.5\\ 40.0\\ 38.6\end{array}$	$\begin{array}{c} 0.8\\ 0.4\\ 1.0\\ 0.9\\ 1.2\\ 1.4\\ 1.9\\ 2.6\\ 1.8\\ 3.0\\ 2.1\\ 1.2\end{array}$	$\begin{array}{c} 8.6\\ 9.9\\ 11.1\\ 14.4\\ 7.8\\ 10.6\\ 7.9\\ 12.5\\ 11.2\\ 8.4\\ 13.4\\ 14.4\end{array}$	$5.7 \\ 6.8 \\ 4.1 \\ 4.0 \\ 0.0 \\ 1.7 \\ 4.5 \\ 0.0 \\ 2.4 \\ 2.4 \\ 2.9 \\ 5.2 \\$	2,049 490 2,265 1,398 512 1,309 3,181 440 1,760 1,161 1,339 3,425
BARKHAMSTED SUFFIELD NEW HARTFORD SHERMAN CORNWALL EAST GRANBY BOLTON MANSFIELD ANDOVER SOMERS ESSEX HEBRON WESTBROOK WOODSTOCK	\$60,557 \$58,975 \$52,718 \$67,535 \$45,625 \$52,301 \$51,421 \$45,117 \$44,450 \$56,320 \$48,173 \$48,011 \$46,139 \$50,470	$50.9 \\ 48.6 \\ 46.3 \\ 44.5 \\ 55.1 \\ 49.6 \\ 45.5 \\ 69.7 \\ 47.2 \\ 41.8 \\ 53.3 \\ 50.3 \\ 60.2 \\ 40.1 \\ $	$\begin{array}{c} 33.6\\ 42.1\\ 40.6\\ 30.6\\ 40.5\\ 39.6\\ 43.8\\ 52.4\\ 33.8\\ 38.0\\ 51.7\\ 36.2\\ 37.3\\ 41.0\\ \end{array}$	$ \begin{array}{c} 1.9\\ 2.0\\ 0.9\\ 1.0\\ 0.9\\ 2.7\\ 1.4\\ 5.7\\ 2.2\\ 2.5\\ 1.3\\ 1.7\\ 4.7\\ 2.3\\ \end{array} $	$10.4 \\ 13.8 \\ 11.4 \\ 9.2 \\ 14.2 \\ 12.2 \\ 11.5 \\ 20.6 \\ 4.7 \\ 11.8 \\ 27.2 \\ 11.2 \\ 14.4 \\ 12.2 \\ 12.2 \\ 14.4 \\ 14.4 \\ 12.2 \\ 14.4 \\ 14.4 \\ 12.2 \\ 14.4 \\ 14.4 \\ 12.2 \\ 14.4 \\ 14.4 \\ 12.2 \\ 14.4 \\ 14$	$ \begin{array}{c} 1.6\\ 6.2\\ 2.2\\ 6.3\\ 0.0\\ 0.9\\ 10.0\\ 16.8\\ 0.8\\ 2.6\\ 0.0\\ 3.0\\ 2.8\\ 3.3\\ \end{array} $	344 1,920 617 330 159 756 831 1,291 282 1,456 498 924 796 869
PRESTON BOZRAH REGION 14 REGION 7 ELLINGTON LITCHFIELD DEEP RIVER REGION 19 REGION 6 REGION 4 WILLINGTON	\$54,068 \$51,345 \$51,860 \$52,240 \$52,616 \$53,164 \$43,478 \$43,478 \$445,873 \$50,895 \$48,151 \$42,586	$\begin{array}{r} 34.9\\ 40.8\\ 44.3\\ 46.6\\ 41.8\\ 44.2\\ 49.9\\ 56.6\\ 45.3\\ 46.2\\ 47.2\end{array}$	40.8 37.1 41.5 37.4 33.1 34.9 34.2 44.9 34.6 39.3 36.9	1.8 2.9 1.3 2.6 1.8 2.1 3.9 6.9 2.0 4.9 3.2	$12.5 \\ 10.7 \\ 17.6 \\ 13.7 \\ 9.7 \\ 12.5 \\ 10.9 \\ 18.3 \\ 13.9 \\ 16.7 \\ 17.5 \\ 17.5 \\ 10.7 \\ 17.5 \\ 10.7 \\ 17.5 \\ 10.7 \\ 1$	$\begin{array}{c} 2.1 \\ 0.0 \\ 1.9 \\ 3.7 \\ 1.5 \\ 4.9 \\ 0.0 \\ 9.7 \\ 5.1 \\ 0.0 \\ 0.0 \end{array}$	5122491,9509152,0081,2043939351,033774663

POMFRET	\$45,962	49.6	36.6	2.6	20.4	2.9	477

Characteristics of Districts Ordered within ERG (Cont'd)

District Name	Median Family Income 1989	Percent with BA Degree 1990	Percent Managers/ Profes- sional 1990	Percent AFDC 1994	Percent Single- Parent Families 1990	Pct. Non- English Home Language 1990	District Enrollment 1994
TOLLAND WETHERSFIELD NEW MILFORD WINDSOR EAST LYME CLUTCON	\$57,640 \$54,288 \$55,563 \$56,912 \$51,008 \$52,250	49.8 50.1 45.0 47.3 45.1	ERG = D 42.5 43.1 36.5 43.2 43.0 26 5	1.0 3.8 3.9 5.9 1.5	15.9 17.2 12.4 16.5 19.5	6.1 10.9 5.2 10.2 5.5	2,245 3,019 4,528 4,392 2,701 2,230
ROCKY HILL SOUTHINGTON REGION 12 COLCHESTER EAST HAMPTON NORTH HAVEN OLD SAYBROOK	\$55,350 \$58,836 \$55,640 \$51,963 \$49,407 \$51,645 \$54,425 \$55,346 \$55,346	44.5 43.5 38.7 48.3 39.9 43.3 40.5 43.9	36.5 36.6 37.1 39.9 35.2 35.4 32.6 37.0	3.5 2.6 4.0 2.2 3.8 2.5 2.1 3.6	15.4 15.1 12.0 19.4 8.9 15.4 12.4 20.1	$ \begin{array}{c} 4.8 \\ 11.5 \\ 7.1 \\ 7.2 \\ 5.0 \\ 2.9 \\ 6.6 \\ 3.6 \\ \end{array} $	2,259 2,168 6,363 997 2,262 1,943 3,257 1,267
BERLIN SHELTON WATERTOWN NORTH BRANFORD COLUMBIA HAMDEN BRANFORD NEWINGTON	\$54,856 \$53,661 \$52,181 \$50,810 \$52,290 \$50,765 \$50,375 \$55,065	$ \begin{array}{r} 33.0\\ 38.5\\ 37.9\\ 30.6\\ 40.5\\ 45.3\\ 39.1\\ 40.7 \end{array} $	36.5 35.1 38.1 32.5 38.1 36.9 35.8 35.8	$ \begin{array}{r} 1.9\\ 4.1\\ 4.0\\ 2.2\\ 1.3\\ 8.8\\ 5.8\\ 2.7\\ \end{array} $	13.4 13.6 17.4 10.9 25.3 17.1 17.4 21.6	$ \begin{array}{c} 11.1\\ 11.4\\ 6.7\\ 5.8\\ 5.3\\ 8.4\\ 5.5\\ 14.8 \end{array} $	$\begin{array}{r} 2,965\\ 5,210\\ 3,430\\ 2,279\\ 629\\ 6,173\\ 3,562\\ 3,925\end{array}$
			ERG = E				
REGION 16 CHESTER ASHFORD COVENTRY WOODSTOCK ACAD. LEBANON COLEBROOK CROMWELL	\$51,130 \$55,000 \$52,353 \$47,428 \$46,354 \$47,299 \$49,063 \$55,503	38.3 30.3 33.3 35.5 37.0 30.5 45.3 35.0	28.6 28.5 35.0 30.6 37.2 27.3 31.0 32.0	$2.8 \\ 4.0 \\ 6.0 \\ 2.9 \\ 4.2 \\ 2.9 \\ 2.6 \\ 3.8$	$10.5 \\ 10.1 \\ 13.2 \\ 12.0 \\ 16.3 \\ 9.8 \\ 21.4 \\ 14.9$	$2.8 \\ 0.0 \\ 2.8 \\ 2.7 \\ 4.4 \\ 0.0 \\ 3.5 \\ 14.8$	$1,707 \\ 349 \\ 518 \\ 1,862 \\ 766 \\ 1,420 \\ 139 \\ 1,754$
SCOTLAND REGION 1 CANTERBURY HARTLAND NORTH STONINGTON FRANKLIN EAST HADDAM KENT NORFOLK LISBON	\$31,607 \$41,075 \$43,715 \$46,250 \$47,727 \$46,908 \$45,559 \$44,602 \$34,432 \$41,406	31.836.722.428.234.124.025.142.939.323.5	25.3 33.6 28.3 30.0 25.9 31.6 30.1 31.3 39.7 30.5	1.4 3.8 2.6 1.6 1.1 1.0 3.3 3.0 2.0 3.9	$3.9 \\ 17.4 \\ 8.2 \\ 17.8 \\ 16.3 \\ 16.3 \\ 14.3 \\ 23.6 \\ 22.7 \\ 15.2 \\$	$ \begin{array}{r} 1.6\\ 1.2\\ 3.0\\ 0.0\\ 6.2\\ 4.9\\ 3.2\\ 5.6\\ 14.0\\ 0.0\\ \end{array} $	1654867273109122031,221291180535
PORTLAND CANAAN UNION EASTFORD BROOKLYN SHARON REGION 11 HAMPTON	\$51,075 \$46,484 \$39,792 \$39,125 \$41,995 \$32,470 \$36,389 \$34,375	31.8 48.6 28.6 21.6 24.9 29.7 26.8 29.5	26.7 24.5 30.7 33.0 32.4 37.5 25.7 33.3	5.4 16.5 3.0 2.8 5.1 1.3 5.5 4.7	18.9 14.3 21.8 17.6 19.1 28.0 16.1 24.5	7.1 0.0 0.0 7.0 6.8 0.0 2.2 4.8	1,223 135 73 148 929 296 340 176
WATERFORD WALLINGFORD STONINGTON WOLCOTT STRATFORD	\$46,320 \$49,431 \$43,887 \$50,175 \$50,526	29.4 33.1 34.6 25.5 31.6	ERG = F 38.2 29.0 30.9 31.5 28.9	3.3 5.1 6.6 2.8 7.9	17.6 14.8 16.9 21.3 18.8	4.4 8.2 8.0 9.3 6.5	2,596 6,729 2,209 2,717 6,537
MILFORD WINDSOR LOCKS SEYMOUR MONTVILLE ENFIELD BLOOMFIELD VEPNON	\$49,694 \$50,290 \$46,140 \$45,657 \$48,108 \$56,292 \$47,640	30.4 22.3 27.1 25.1 26.5 32.5 32.5	28.3 33.1 29.5 28.5 27.8 34.3 21.8	6.2 5.9 5.5 4.1 6.6 10.7	20.1 18.7 18.2 19.3 18.6 28.0 24.0	4.1 9.9 6.6 5.4 5.0 8.5 7.1	6,789 1,779 2,464 2,794 6,645 2,448 4,223
MANCHESTER TORRINGTON GROTON NAUGATUCK	\$45,259 \$43,171 \$34,449 \$45,623	34.9 25.9 21.7 22.4	31.8 34.9 28.7 28.3 26.7	11.4 12.6 9.2 6.9 7.3	24.9 26.5 20.4 16.5 21.6	5.9 6.7 6.3 12.9	4,225 7,509 4,762 6,120 5,505

Characteristics of Districts Ordered within ERG (Cont'd)

District Name	Median Family Income 1989	Percent with BA Degree 1990	Percent Managers/ Profes- sional 1990	Percent AFDC 1994	Percent Single- Parent Families 1990	Pct. Non- English Home Language 1990	District Enrollment 1994
			ERG = G				
PLYMOUTH EAST WINDSOR THOMASTON NORTH CANAAN CHAPLIN	\$44,577 \$44,462 \$45,594 \$40,938 \$41,042	18.6 15.0 21.2 10.2 21.6	19.2 23.5 21.8 16.4 21.2	6.3 7.2 4.3 0.9 3.7	10.3 13.8 20.2 12.4 19.5	5.6 2.9 2.0 1.1 1.0	1,9251,4311,163449216
VOLUNTOWN	\$39,457	12.0	22.7	6.4	15.0	1.1	302
THOMPSON	\$39,103	22.5	21.4	7.4	18.6	3.3	1,445
GILBERT ACADEMY	\$42,839	19.3	21.9	12.6	21.8	2.9	513
EAST HAVEN	\$43,142	17.5	20.1	8.1	17.5	6.0	3,722
PLAINVILLE	\$44,704	18.3	20.6	6.1	22.8	8.8	2,524
STAFFORD	\$42,762	13.9	19.9	7.8	19.7	2.8	1,930
STERI ING	\$38,742 \$36,250	14.0	22.5	8.4 4 4	23.4	1.5	2,007
PLAINFIELD	\$36,694	10.2	20.6	10.0	22.0	5.1	2,901
SPRAGUE	\$38,549	3.9	6.8	10.2	17.1	4.4	364
			ERG = H				
DANBURY	\$47,250	35.8	33.7	14.0	21.9	22.0	8,745
BRISTOL	\$44,588 \$46,080	21.4	23.5	12.1	21.7	8.9	8,337
NORWALK	\$48,320	28.8	30.6	14.7	28.3	25.9	10,182
NORWICH FREE ACAD.	\$36,700	23.9	28.8	19.3	27.8	4.4	1,774
DERBY	\$37,864	20.1	25.6	16.2	25.7	11.0	1,391
MIDDLETOWN	\$39,935	25.8	30.6	17.9	32.4	10.7	4,556
WEST HAVEN	\$47,000	13.1	20.7	14.0	25.0	4.1	5,038
PUTNAM	\$32,281	18.4	26.1	16.1	35.7	2.7	1,432
NORWICH	\$32,009	23.4	28.4	20.0	35.4	5.6	4,318
EAST HARTFORD	\$41,992	16.9	22.5	21.4	29.6	14.4	6,626
MERIDEN	\$40,410 \$39,630	17.4	22.2	19.8 26.1	33.2 31.0	9.5	2,349
	437,030	15.0	22.9	20.1	51.0	21.2	0,220
			ERG = I				
WINDHAM	\$26,465	17.4	27.2	30.1	44.0	30.9	3,443
WATERBURY	\$30,705	10.3	17.2	36.8	38.7	31.9	14,220
NEW BRITAIN NEW LONDON	\$27,241 \$25,163	15.4	19.6	41.7	45.2 48.5	46.5	8,743
NEW HAVEN	\$21,185	13.8	21.2	47.8	61.7	25.5	18,483
BRIDGEPORT	\$22,924	5.9	12.1	42.0	53.7	46.5	20,878
HARTFORD	\$16,763	6.6	15.7	60.0	68.3	50.9	24,104

This Research Bulletin was prepared by Peter Prowda and Judy Thompson. This project relied on a technical advisory committee of Gil Andrada (Department of Education), Del Eberhardt (Greenwich), Thanos Patelis (Stamford), Diane Shea (Farmington) and Mary Yakimowski (Meriden). For further information contact Dr. Prowda at the Connecticut State Department of Education, P.O. Box 2219, Hartford, CT 06145-2219 or by phone at (860) 566-7585.