

DOCUMENT RESUME

ED 312 113

RC 017 239

AUTHOR Johnson, Frank H.
 TITLE Assigning Type of Locale Codes to the 1987-88 CCD Public School Universe.
 INSTITUTION National Center for Education Statistics (ED), Washington, DC.
 PUB DATE Mar 89
 NOTE 56p.; Paper presented at the American Educational Research Association Annual Meeting (March 31, 1989).
 AVAILABLE FROM General Surveys and Analysis Branch, Elementary and Secondary Education Statistics Division, National Center for Education Statistics, 555 New Jersey Avenue, N.W., Washington, DC 20208-5651.
 PUB TYPE Speeches/Conference Papers (150) -- Statistical Data (110)

EDRS PRICE MF01/PC03 Plus Postage.
 DESCRIPTORS Cluster Analysis; *Cluster Grouping; National Surveys; *Public Schools; Residential Patterns; Rural Schools; *School Demography; *School Location; School Statistics; *Statistical Surveys; Suburban Schools; Urban Schools
 IDENTIFIERS Common Core of Data Program; National Center for Education Statistics

ABSTRACT

This paper presents a classification system that assigns each of the 85,131 public elementary and secondary schools in the United States to one of seven locale settings. The seven mutually exclusive locale designations are: (1) large city; (2) mid-size city; (3) urban fringe of large city; (4) urban fringe of mid-size city; (5) large town; (6) small town; and (7) rural. The paper is presented in four parts. Part 1 provides an overview of the locale designations and their definitions. Results of the locale assignment process are presented by type of locale and state in table form. Part 2 analyzes the National Center for Education Statistics Common Core of Data Public School Universe by locale setting. Along with general observations about national school locales, states are clustered geographically and by wealth for school locale comparison. Part 3 is an appendix describing the methodology for assigning locale codes to the School Universe file. And Part 4 is an appendix containing tables of the results of the locale assignment. It is pointed out that code assignment is the first step in developing a uniform designation system and that several additional steps are planned or in progress to improve the designations. This paper contains nine tables.
 (Author/DHP)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED312113

Assigning Type of Locale Codes
to the 1987-88 CCD Public School Universe

Frank H. Johnson

Office of Educational Research and Improvement
National Center for Education Statistics

A Paper Presented to the
American Educational Research Association
Annual Meeting
March 31, 1989

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

The author accepts full responsibility for the analysis and
conclusions expressed in this paper, which do not reflect the
views and policies of The National Center for Education
Statistics.

BEST COPY AVAILABLE

CO17239



ACKNOWLEDGMENTS

This publication was prepared under the direction of Paul D. Planchon, Director of the Elementary and Secondary Education Statistics Division of the National Center for Education Statistics, and Suzanne E. Triplett, Chief of the General Surveys and Analysis Branch. Frank H. Johnson, OERI Education Statistician, was responsible for the text, tables and graphics, and for the design and execution of the locale assignment program. Other members of the Elementary and Secondary Education Statistics Division who have been most helpful in supplying ideas, and reviewing and critiquing the project and this text are: Helen M. Ashwick, Robert S. Burton, Lee M. Hoffman, Frank B. Morgan, and John P. Sietsema. Aaron Allred was responsible for an initial school locale assignment effort, which was expanded and improved by this project.

The Center also acknowledges the contributions of the reviewers both within and outside the Department of Education for this document. NCES wishes to thank the following reviewers: Charles Cowan, NCES Chief Statistician; Will Meyers, National Education Association; Nancy Protheroe, Educational Research Service, Paul Siegel, U.S. Bureau of the Census; Barbara Clements, Council of Chief State School Officers; and Thomas Snyder, Chief, Compilations, Projections and Special Studies Branch, CESAD.

For information regarding data contained in this report, contact Frank H. Johnson, General Surveys and Analysis Branch, Elementary and Secondary Education Statistics Division, National Center for Education Statistics, 555 New Jersey Avenue, N.W., Washington, DC 20208-5651 (area code 202-357-6618).

TABLE OF CONTENTS**Page**

Foreword	
Acknowledgments	i
Introduction	1
Overview of the Type of Locale Classification System	1
Census Bureau's Locale Information	2
Standard Metropolitan Statistical Areas (SMSA)	2
Urban and Rural Areas	2
Public School Locale Typology	4
Analysis of the CCD Public School Universe by Type of Locale	10
School Locale Clusters	14
Limitations	18
Next Steps	19
Appendix A	21
Locale Code Assignment Process	
Data Files	21
Locale Assignment Methodology	24
Appendix B	30
Tables Presenting Number of Schools and Student Membership by State and Type of Locale	

TABLE OF CONTENTS--continued

Page

FIGURES

1.	Hypothetical map illustrating Census Bureau locale designations: Central City, SMSA, and Urban and Rural Areas	3
2.	Hypothetical map illustrating NCES locale designations	5
3.	School Locale Typology	6
4.	School size by type of locale: School year 1987-88	12
5.	State Locale Clusters	17
A-1.	Initial locale assignment flow chart	27
A-2.	Locale code adjustment flow chart	29

TABLES

1.	Number and percent of students in membership in regular schools, by type of locale and State: School year 1987-88	7
2.	National total of schools and percentages, by type of locale: Regular public schools: School year 1987-88	10
3.	National student membership and percentages, by type of locale: Regular public schools: School year 1987-88	10
4.	State demographics and rankings: student membership, schools, average locale code: Regular public schools, school year 1987-88	13
5.	State clusters based on percentage of student membership in locale groupings	16
B-1.	Number and percent of all public schools by type of locale and State: School year 1987-88	31
B-2.	Number and percent of students in membership in all public schools, by type of locale and State: School year 1987-88	33

TABLE OF CONTENTS--continued

Page

TABLES

B-3.	Number and percent of regular public schools by type of locale and State: School year 1987-88	35
B-4.	States ranked by percent of student membership within each type of locale: School year 1987-88	37

INTRODUCTION

This paper presents a classification system that assigns each public elementary and secondary school in the United States to one of seven locale settings. The seven locale designations are: 1) Large City, 2) Mid-size City, 3) Urban Fringe of Large City, 4) Urban Fringe of Mid-size City, 5) Large Town, 6) Small Town and 7) Rural. These categories are intended to describe the size and metropolitan status of the place in which the school is located.

The paper is presented in four parts. Part one is an introduction with an overview of the locale designations and their definitions. Part two analyzes the National Center for Education Statistics (NCES) Common Core of Data (CCD) Public School Universe by locale setting. Part three is an appendix describing the methodology for assigning locale codes to the School Universe file. And part four is an appendix containing tables of the results of the locale assignment project.

Overview of the Type of Locale Classification System

The primary data base for the School Locale study was the 1987-88 CCD School Universe file. This file contains a record for every public elementary and secondary school in the United States and the outlying areas. The file is updated annually by data provided to NCES from State education agencies. The 1987-88 file contains records for 85,131 schools.

Locale code assignment was based on the school mailing address. The city field and the ZIP code in the school address were matched to several files created by the U.S. Bureau of the Census (Census). Information in the Census files used in assigning locale codes was 1) population and population density, 2) Standard Metropolitan Statistical Area (SMSA) codes, and 3) a Census code defining places as rural or urbanized areas. All Census data used in this project were based on the 1980 Census of Population and Housing. Please note, that mailing addresses do not necessarily indicate the geographic position of the school. This is discussed in greater detail in the limitations section (page 19) and in Appendix A.

Census Bureau's Locale Information

Standard Metropolitan Statistical Areas (SMSA)

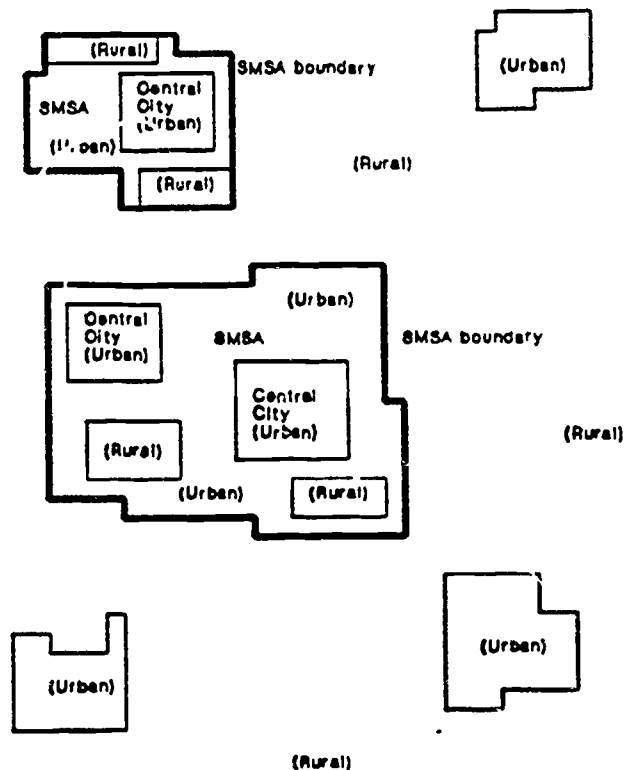
SMSA's are defined by the Office of Management and Budget (OMB). Each SMSA comprises a central city or urbanized area and one or more neighboring counties. In order to be classified as an SMSA, (a) the central city must have a population of at least 50,000, or (b) an urbanized area with a population of at least 50,000, with the entire area (including the urbanized area) having a total population of 100,000 or more inhabitants (75,000 in New England). Contiguous counties are included if they have close social and economic links with the area's population nucleus. Census assigns each of these SMSA's a unique code. At the time of the 1980 census there were 318 SMSA's in the United States.¹

¹In 1985, OMB geographically redefined these areas and dropped the word "standard" from the designation, referring to such areas as Metropolitan Statistical Areas after this time. Since most of the Census data that we are using in this project derives from 1980 and 1983 material, we will observe the older convention of referring to SMSA's.

Urban and Rural Areas

The Bureau of the Census defines urbanized areas as consisting of a central city and surrounding densely settled territory with a combined population of 50,000 or more inhabitants. Places designated as urban by Census are within these urbanized areas or in places of 2,500 or more inhabitants outside these areas. All other areas are classified as rural. The urban and rural classifications cut across the SMSA classifications. There can be both urban and rural territory within an SMSA as well as in non-SMSA areas. See figure 1.

Figure 1.--Hypothetical map illustrating Census Bureau locale designations: Central City, SMSA, and Urban and Rural areas



Locale code definitions are based on Census designations of urban and rural, and OMB designations of SMSA, central city of SMSA and non-SMSA. In addition, for the public elementary and secondary school universe, SMSA's are divided into SMSA's of large cities and SMSA's of mid-size cities. Urban places in non-SMSA areas were separated into large towns and small towns.

Public School Locale Typology

The NCES model for assigning all schools to a type of locale is represented by a typology with seven mutually exclusive locale designations. The seven types of locale are as follows:

1. Large City - Central city of an SMSA, with the city having a population greater than or equal to 400,000 or a population density greater than or equal to 6,000 people per square mile.
2. Mid-Size City - Central city of an SMSA, with the city having a population less than 400,000 and a population density less than 6,000 people per square mile.
3. Urban Fringe of Large City - Place within an SMSA of a Large Central City and defined as urban by the Census Bureau.
4. Urban Fringe of Mid-size City - Place within an SMSA of a Mid-size Central City and defined as urban by Census.
5. Large Town - Town not within an SMSA, with a population greater than or equal to 25,000.
6. Small Town - Town not within an SMSA and with a population

less than 25,000 and greater than or equal to 2,500 people.

7. Rural - A place with less than 2,500 people or a place having a ZIP Code designated rural by the Census Bureau.

A hypothetical map illustrating these seven locale designations is presented in figure 2. It is designed to correspond with the map presented in figure 1. A simplified diagram of locale assignment is presented in figure 3. The locale assignment process (along with more accurate flow charts) is described in greater detail in Appendix A.

Figure 2.--Hypothetical map illustrating NCES locale designations

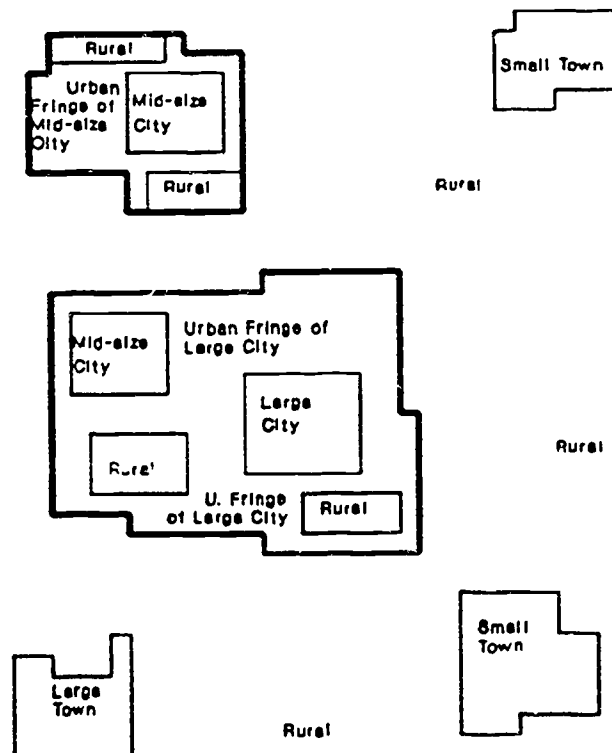
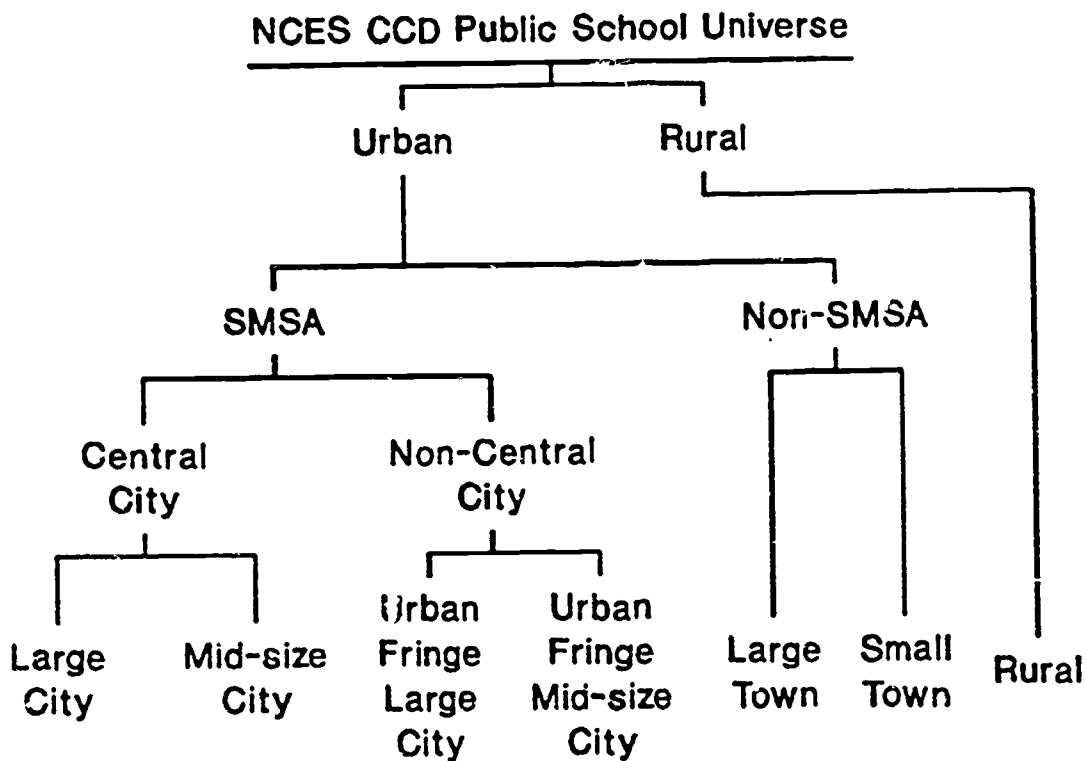


Figure 3.--School locale typology



Results of the locale assignment process are presented by type of locale and State in table 1. This table shows the number and percentage of student membership in regular public schools by State. Regular schools are defined as having one or more grade groups (pre-kindergarten - 12th grade) and with no specific focus on vocational, special or alternative education. Analysis in this report is limited to regular public schools only. Similar tables reporting the number of schools per locale by State and other results from the type of locale assignment project are presented in Appendix 3. All locale assignments were made to schools in the 50 States and the District of Columbia. Information available for the outlying areas is inadequate at this time to permit classifying schools in those areas.

It is possible for States to have schools in the Urban Fringe of Large Cities, without having any schools in Large Cities. This occurs

Table 1.--Number and percent of students in membership, by type of locale and State: Regular public schools: School year 1987-88

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students
United States	5,207,999	13.20	6,641,670	16.84	6,631,211	16.81	4,746,902	12.04	968,097	2.45	8,735,802	22.15	6,510,125	16.51	39,441,806
Alabama	0	0.00	155,866	21.46	0	0.00	195,396	26.91	9,043	1.25	184,023	25.34	181,857	25.04	726,185
Alaska	0	0.00	31,359	30.01	0	0.00	9,196	8.80	0	0.00	30,199	28.90	33,751	32.30	104,505
Arizona	141,135	24.08	170,676	29.12	77,662	13.25	23,001	3.92	26,209	4.47	109,732	18.72	37,608	6.42	586,023
Arkansas	0	0.00	85,697	19.51	8,371	1.92	17,346	3.97	15,128	3.46	174,293	39.88	136,201	31.16	437,036
California	954,324	21.52	713,599	16.09	1,480,053	33.37	485,628	10.95	70,051	1.58	521,160	11.75	210,766	4.75	4,435,581
Colorado	61,226	11.04	107,046	19.30	182,326	32.88	22,145	3.99	32,437	5.95	74,299	13.40	75,077	13.54	554,556
Connecticut	60,852	13.65	74,248	16.65	74,045	16.60	65,613	14.71	27,371	6.14	128,044	28.71	15,785	3.54	445,958
Delaware	0	0.00	13,884	15.40	0	0.00	33,695	37.38	0	0.00	13,372	14.83	29,193	32.38	90,144
D. of Columbia	82,675	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	82,675
Florida	250,013	15.19	307,277	18.67	127,059	7.72	634,955	38.58	4,107	0.25	205,364	12.48	117,036	7.11	1,645,811
Georgia	73,085	6.66	157,862	14.38	259,099	23.61	72,114	6.57	12,035	1.10	336,365	30.65	186,911	17.03	1,097,471
Hawaii	0	0.00	53,819	32.41	0	0.00	82,035	9.39	0	0.00	6,071	3.66	24,155	14.54	166,080
Idaho	0	0.00	25,561	12.11	0	0.00	14,299	6.77	36,225	17.16	72,004	34.11	63,006	29.85	211,095
Illinois	398,713	22.53	204,976	11.58	588,848	33.26	79,746	4.50	24,140	1.36	266,464	15.05	207,188	11.70	1,770,175
Indiana	52,595	5.48	212,291	22.14	90,829	9.47	118,922	12.40	34,301	3.58	262,881	27.41	187,105	19.51	958,924
Iowa	0	0.00	128,006	26.77	0	0.00	26,177	5.47	34,872	7.29	137,327	28.72	151,756	31.74	478,138
Kansas	0	0.00	103,735	24.78	47,426	11.33	3,361	0.80	31,752	7.59	122,051	29.16	110,250	26.34	418,575
Kentucky	0	0.00	108,516	16.94	0	0.00	92,270	14.41	34,825	5.44	202,805	31.66	202,111	31.55	640,527
Louisiana	80,907	10.48	173,092	22.42	64,772	8.39	78,849	10.21	22,588	2.93	207,654	26.90	144,033	18.66	771,895
Maine	0	0.00	23,411	11.85	0	0.00	17,242	8.73	0	0.00	102,403	51.84	54,467	27.58	197,523
Maryland	100,330	14.96	16,793	2.50	388,823	57.97	12,240	1.82	11,426	1.70	50,968	7.60	90,203	13.45	670,783
Massachusetts	59,223	7.50	180,836	22.91	188,944	23.94	64,934	8.23	24,107	3.05	239,492	30.34	31,772	4.03	789,308
Michigan	172,746	11.06	221,350	14.17	358,707	22.96	146,862	9.40	22,554	1.44	414,280	26.52	225,783	14.45	1,562,282
Minnesota	41,866	5.90	45,341	6.39	215,287	30.35	5,507	0.78	10,794	1.52	170,363	24.02	220,128	31.04	709,286
Mississippi	0	0.00	58,880	11.97	9,525	1.94	47,682	9.70	40,543	8.24	183,814	37.38	151,286	30.77	491,730
Missouri	59,770	7.49	42,425	5.31	260,926	32.69	15,300	1.92	22,145	2.77	188,464	23.61	209,236	26.21	798,266
Montana	0	0.00	30,192	19.84	0	0.00	1,146	0.75	5,636	3.70	56,457	36.90	59,063	38.81	152,194
Nebraska	0	0.00	79,261	29.62	0	0.00	21,705	8.11	8,212	3.07	66,636	24.90	91,748	34.29	267,562
Nevada	0	0.00	89,201	53.77	0	0.00	18,044	10.88	5,588	3.37	16,375	9.87	36,680	22.11	165,888
New Hampshire	0	0.00	34,918	22.12	0	0.00	7,103	4.50	6,118	3.88	81,308	51.51	28,391	17.99	157,838
New Jersey	114,831	10.73	81,118	7.58	415,736	38.92	208,916	19.51	12,168	1.14	171,616	16.03	65,268	6.10	1,070,653
New Mexico	0	0.00	82,009	28.59	0	0.00	32,897	11.47	42,453	14.80	90,583	31.58	38,878	13.55	286,820
New York	995,654	39.19	80,697	3.18	275,445	10.84	477,548	18.80	42,435	1.67	432,140	17.01	236,483	9.31	2,540,402

Table 1.--Number and percent of students in membership, by type of locale and State: Regular public schools: School year 1987-88--Continued

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total Students
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	
North Carolina	0	0.00	272,200	25.16	0	0.00	147,803	13.66	36,495	3.37	307,698	28.44	317,719	29.37	1,081,915
North Dakota	0	0.00	29,004	24.04	0	0.00	172	0.14	8,781	7.28	20,511	17.00	62,205	51.55	120,673
Ohio	131,304	7.40	359,307	20.24	210,667	11.87	309,675	17.45	50,338	2.84	325,747	18.35	387,925	21.86	1,774,963
Oklahoma	68,708	12.81	90,134	15.50	48,475	8.34	24,978	4.30	31,826	5.47	165,856	28.52	151,565	26.06	581,542
Oregon	0	0.00	111,241	24.53	0	0.00	112,388	24.79	14,212	3.13	141,438	31.19	74,124	16.35	453,403
Pennsylvania	212,095	13.16	125,903	7.81	336,310	20.87	130,294	8.08	32,073	1.99	511,144	31.71	253,946	16.38	1,611,765
Rhode Island	21,488	16.13	16,168	12.13	50,756	38.09	8,687	6.52	4,750	3.56	25,368	18.99	6,083	4.77	133,240
South Carolina	0	0.00	97,792	15.99	0	0.00	159,910	26.14	0	0.00	221,793	36.26	132,239	21.62	611,734
South Dakota	0	0.00	11,493	9.80	0	0.00	2,727	2.33	3,606	3.07	38,491	32.82	60,955	51.98	117,272
Tennessee	176,822	21.56	92,974	11.34	50,065	6.10	88,892	10.84	34,188	4.17	215,884	26.52	161,361	19.67	820,186
Texas	778,324	24.29	765,710	23.90	400,628	12.50	122,649	3.83	39,663	1.24	688,771	21.50	408,373	12.75	3,204,118
Utah	0	0.00	102,508	24.87	0	0.00	176,163	42.74	5,918	1.44	60,474	14.67	67,112	16.28	412,175
Vermont	0	0.00	3,543	3.87	0	0.00	736	0.80	0	0.00	52,920	57.75	34,432	37.58	91,631
Virginia	0	0.00	288,998	29.64	177,668	18.22	114,672	11.76	3,377	0.35	145,828	14.96	244,535	25.08	975,078
Washington	54,774	7.18	169,111	22.17	147,984	19.40	110,791	14.52	12,528	1.64	145,898	19.13	121,686	15.95	762,772
West Virginia	0	0.00	45,954	13.42	0	0.00	46,197	13.49	8,790	2.57	91,515	26.72	149,987	43.80	342,443
Wisconsin	64,439	8.40	154,127	20.10	93,775	12.23	44,861	5.85	12,289	1.60	204,610	26.68	192,821	25.14	766,922
Wyoming	0	0.00	11,561	11.79	0	0.00	13,433	13.70	0	0.00	53,209	54.25	19,882	20.27	98,085

Based on school mailing address and student membership in the 1987-88 Common Core of Data "Public Elementary/Secondary School Universe" file, NCES, U.S. Department of Education.

when a Large City exists near the border of one State, and the surrounding SMSA (urban fringe) crosses the border into another State that does not have a Large City.

Another special situation exists in instances where there are two central cities in a single SMSA, and one of the central cities is designated a Large City and the other a Mid-size City. In such cases, all urban areas within the SMSA (excluding the central cities) are coded as Urban Fringe of a Large City.

ANALYSIS OF THE CCD PUBLIC SCHOOL UNIVERSE BY TYPE OF LOCALE

United States regular public school and membership totals and percentages by type of locale are presented in tables 2 and 3 below.

Table 2.--National total of schools and percentages by type of locale: Regular public schools: School year 1987-88

Large City	Mid-size City	Urban Fringe Large City	Urban Fringe Mid-size City	Large Town	Small Town	Rural
6,997 (9%)	11,092 (14%)	10,696 (13%)	7,701 (10%)	1,828 (2%)	18,659 (23%)	22,319 (28%)

Table 3.--National student membership and percentage by type of locale: Regular public schools: School year 1987-88

(In thousands of students)						
Large City	Mid-size City	Urban Fringe Large City	Urban Fringe Mid-size City	Large Town	Small Town	Rural
5,208 (13%)	6,642 (17%)	6,631 (17%)	4,747 (12%)	968 (2%)	8,736 (22%)	6,510 (16%)

United States totals for each locale category show that the largest percentage of schools (28 percent) are in rural areas, followed by Small Towns (23 percent.) Fifty-three percent of all

public elementary and secondary schools are in large towns, small towns and rural areas--the areas outside the large population centers.

Total student membership across schools is highest in small towns (22 percent) followed closely by mid-size cities and urban fringe of large cities (17 percent each.) Nearly 60 percent of all students are served by schools located in the large population centers: central cities and their urban fringe. The remaining 40 percent of the students attend schools in large towns, small towns and rural areas.

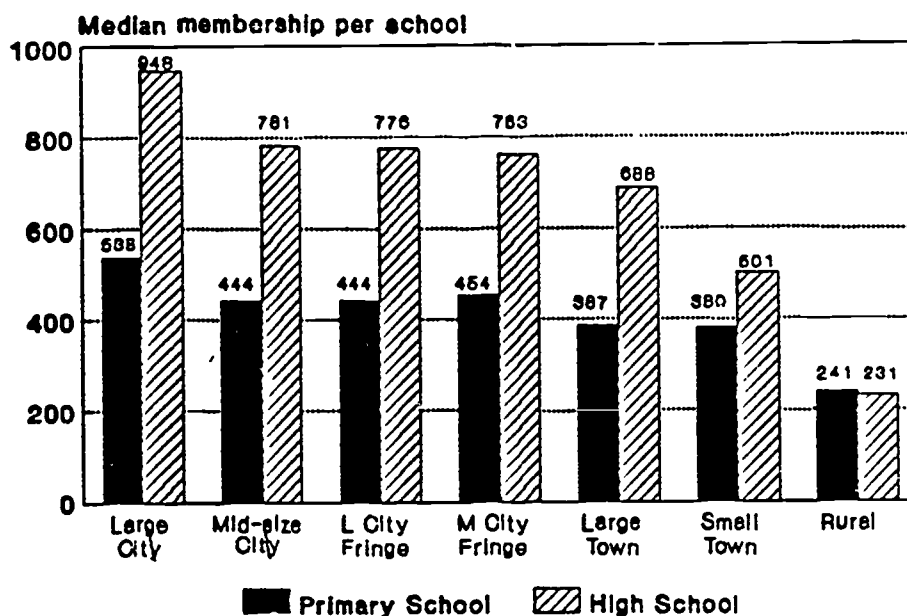
The apparent discrepancy between most schools being outside the large population centers, and most students attending schools within the large population centers is resolved by looking at school sizes in each of the locales. Figure 3 illustrates that schools tend to be larger (in terms of student membership) in urbanized areas than in rural areas. Primary schools in figure 3 are defined as containing any of grades pk-6 with no grades higher than grade 6, and high schools as schools containing any of grades 7-12, with no pk-6 grades. (Combined schools were deleted from the analysis presented in this table.)

Using the data presented in table 1, and the State rankings based on that table in Appendix B (table B-4) it is possible to make the following observations:

Twenty two States and the District of Columbia have more than half of their students attending schools in SMSA's--the nation's most urban areas (locale codes Large City to Urban Fringe of Mid-size City). The remaining 28 States have more than half of their students attending non-SMSA schools (Large Town, Small Town, and Rural locales).

Only Washington, D.C. and New York State have more than 25 percent of their students attending Large City schools.

Figure 4.--School size by locale type: Regular public schools: School year 1987-88



Twenty four States have 25 percent or more students enrolled in schools in the two urban fringe locales. Eight States have more than 25 percent of their students in Large City Urban Fringes, and seven States have 25 percent or more students in Mid-size City Urban Fringes.

More States (30) have at least 25 percent of their students attending schools in small towns than attending schools in any other type of locale. Nearly all States have a substantial portion of their students attending Small Town and Rural schools, 23 States have 50 percent or more of their students in these categories, and 37 States have more than a third of their students attending schools in these locales.

Table 4 presents land area, population, and student membership and school counts by State. States are then presented in order of rank by various demographic and locale code statistics. The "average locale

Table 4.--State demographics and rankings: student membership, schools, and average locale code: Regular public schools: School year 1987-88

State	Post office abbrev	Land area square miles	Population	Student membership	Schools	States ranked by various demographic and locale code statistics					
						Schools per Sq Mi	Students per Sq Mi	Average Locale Code	Percent Urban Pupils	Percent Urban Schools	
United States		3,539,289	226,545,805	39,441,806	79,292	US 0.0020	US 11.14	US 4.66	US 83.49	US 71.85	
Alabama	AL	50,767	3,893,888	726,185	1,285	DC 2.6349	DC 1,312.30	DC 1.00	DC 100.00	DC 100.00	
Alaska	AK	570,833	401,851	104,505	420	NJ 0.2855	NJ 143.37	RI 3.49	CT 96.46	RI 96.21	
Arizona	AZ	113,508	2,718,215	586,023	933	RI 0.2749	RI 126.29	CA 3.50	MA 95.97	CT 94.66	
Arkansas	AR	52,078	2,286,435	437,036	1,112	MA 0.2218	MA 100.88	MD 3.63	RI 95.43	MA 93.83	
California	CA	156,299	23,667,902	4,435,581	6,890	CT 0.1884	CT 91.53	FL 3.72	CA 95.25	NJ 93.15	
Colorado	CO	103,595	2,889,964	554,556	1,269	MD 0.1150	MD 68.19	NJ 3.75	NJ 93.90	FL 90.32	
Connecticut	CT	4,872	3,107,575	445,958	918	OH 0.0878	NY 53.62	NY 3.81	AZ 93.58	CA 89.97	
Delaware	DE	1,932	594,338	90,144	144	NY 0.0814	DE 46.66	AZ 3.87	FL 92.89	NY 86.41	
D. of Columbia	DC	63	638,333	82,675	166	DE 0.0745	OH 43.29	HI 3.93	NY 90.69	MD 83.29	
Florida	FL	54,153	9,746,324	1,645,811	2,046	IL 0.0712	PA 35.91	MA 3.99	IL 88.30	AZ 83.28	
Georgia	GA	58,056	5,463,105	1,097,471	1,711	PA 0.0704	IL 31.81	CT 3.99	TX 87.25	HI 81.94	
Hawaii	HI	6,425	964,691	166,080	227	MI 0.0572	FL 30.39	TX 4.22	MD 86.55	MI 80.14	
Idaho	ID	82,412	943,935	211,095	549	IN 0.0512	CA 28.38	IL 4.26	CO 86.46	GA 79.37	
Illinois	IL	55,645	11,426,518	1,770,175	3,963	NH 0.0484	MI 27.43	CO 4.44	NM 86.45	PA 78.85	
Indiana	IN	35,932	5,490,224	958,924	1,839	CA 0.0441	IN 26.69	WA 4.45	MI 85.55	TX 75.64	
Iowa	IA	55,965	2,913,808	478,138	1,610	WV 0.0420	HI 25.85	MI 4.47	HI 85.46	IN 74.44	
Kansas	KS	81,778	2,363,679	418,575	1,459	VA 0.0414	VA 24.56	GA 4.53	WA 84.05	IL 74.21	
Kentucky	KY	39,669	3,660,777	640,527	1,323	NC 0.0390	NC 22.15	TN 4.54	UT 83.72	LA 73.69	
Louisiana	LA	44,521	4,205,900	771,895	1,494	FL 0.0378	SC 20.25	OH 4.64	OR 83.65	TN 73.47	
Maine	ME	30,995	1,124,660	197,523	696	TN 0.0365	TN 19.93	UT 4.68	PA 83.62	UT 73.39	
Maryland	MD	9,837	4,216,975	670,783	1,131	WI 0.0362	GA 18.90	WV 4.68	GA 82.97	WA 73.02	
Massachusetts	MA	7,824	5,737,037	789,308	1,735	VT 0.0355	NH 17.55	PA 4.69	NH 82.01	OH 71.71	
Michigan	MI	56,954	9,262,078	1,562,282	3,258	HI 0.0353	LA 17.34	LA 4.69	LA 81.34	AL 71.13	
Minnesota	MN	79,548	4,075,970	709,286	1,504	SC 0.0338	KY 16.15	VA 4.70	IN 80.49	SC 70.42	
Mississippi	MS	47,233	2,520,638	491,730	857	LA 0.0336	AL 14.30	IN 4.77	TN 80.33	CO 70.29	
Missouri	MO	68,945	4,916,686	798,266	2,011	KY 0.0334	WV 14.20	AL 4.97	WY 79.73	OR 69.64	
Montana	MT	145,388	786,690	152,194	773	GA 0.0295	WI 14.09	DE 5.11	SC 78.38	NM 69.05	
Nebraska	NE	76,644	1,569,825	267,562	1,518	MO 0.0292	TX 12.23	WI 5.15	OH 78.14	MS 66.39	
Nevada	NV	109,894	800,493	165,888	296	IA 0.0288	MO 11.58	OR 5.16	NV 77.89	NH 66.21	
New Hampshire	NH	8,993	920,610	157,838	435	OK 0.0266	WA 11.47	MO 5.18	AL 74.96	VA 65.94	
New Jersey	NJ	7,468	7,364,823	1,070,653	2,132	AL 0.0253	MS 10.41	NC 5.23	VA 74.92	NC 64.58	
New Mexico	NM	121,335	1,302,894	286,820	643	WA 0.0244	VT 9.88	SC 5.29	WI 74.86	DE 63.89	
New York	NY	47,377	17,558,072	2,540,402	3,856	ME 0.0225	MN 8.92	NM 5.31	OK 73.94	NV 61.82	
North Carolina	NC	48,843	5,881,766	1,081,915	1,903	AR 0.0214	IA 8.54	OK 5.46	MO 73.79	WI 61.28	
North Dakota	ND	69,300	652,717	120,673	646	TX 0.0212	OK 8.47	MN 5.49	KS 73.66	MO 58.83	
Ohio	OH	41,004	10,797,630	1,774,963	3,602	NE 0.0198	AR 8.39	MS 5.60	ME 72.42	KY 58.81	
Oklahoma	OK	68,655	3,025,290	581,542	1,826	MN 0.0189	ME 6.37	KS 5.60	NC 70.63	WY 57.33	
Oregon	OR	96,184	2,633,105	453,403	1,209	MS 0.0181	CO 5.35	KY 5.61	ID 70.15	ME 56.18	
Pennsylvania	PA	44,888	11,863,895	1,611,765	3,158	KS 0.0178	AZ 5.16	NH 5.67	MS 69.23	OK 55.37	
Rhode Island	RI	1,055	947,154	133,240	290	OR 0.0126	KS 5.12	WV 5.74	MN 68.96	KS 53.87	
South Carolina	SC	30,203	3,121,820	611,734	1,021	CO 0.0122	UT 5.02	IA 5.75	AR 68.84	AR 53.87	
South Dakota	SD	75,952	690,768	117,272	771	SD 0.0102	OR 4.71	AR 5.75	KY 68.45	ID 51.73	
Tennessee	TN	41,155	4,591,120	820,186	1,504	ND 0.0093	NE 3.49	WY 5.95	IA 68.26	MN 50.86	
Texas	TX	262,017	14,229,191	3,204,118	5,550	AZ 0.0082	ID 2.56	IO 5.96	AK 67.70	IA 50.12	
Utah	UT	82,073	1,461,037	412,175	654	UT 0.0080	NM 2.36	AK 5.98	DE 67.62	WV 48.72	
Vermont	VT	9,273	511,456	91,631	329	ID 0.0067	ND 1.74	ME 6.03	NE 65.71	VT 43.47	
Virginia	VA	39,704	5,346,818	975,078	1,644	MT 0.0053	SD 1.54	NE 6.10	VT 62.42	MT 40.36	
Washington	WA	66,511	4,132,156	762,772	1,620	NM 0.0053	NV 1.51	HT 6.24	MT 61.19	AK 39.76	
West Virginia	WV	24,119	1,949,644	342,443	1,012	WY 0.0039	MT 1.05	ND 6.32	WV 56.20	NE 39.72	
Wisconsin	WI	54,426	4,705,767	766,922	1,968	NV 0.0027	WY 1.01	VT 6.43	ND 48.45	ND 24.30	
Wyoming	WY	96,989	469,557	98,085	382	AK 0.0007	AK 0.18	SD 6.61	SD 48.02	SD 23.61	



Based on school mailing addresses and student membership from the 1987-88 Common Core of Data "Public Elementary/Secondary School Universe" file, NCES, U.S. Department of Education. Land area and population from the Census Bureau 1980 census.

code" assumes a continuum from Large Central City ("1") to Rural ("7") and is averaged over schools. The locale code numbers are only rankings and have no interval measurement properties, however the average does give an indication of the general urbanicity of all schools in a given state. Urban areas referred to in the last two entries on the right agree with Census defined urban areas (places with populations greater than or equal to 2,500 inhabitants) and contain school locale codes Large City to Small Town. The table is presented as a means of comparison between States along various urbanicity measurements.

Many of the changes in State rankings between students per square mile and percent urban students can be explained by the fact that in many States with low population density, most of the people live in urbanized areas.

School Locale Clusters

In order to compare statistics and programs across States, it is useful to make comparisons among similar States. In the past States have been clustered into geographic regions for comparisons. Recently, clustering has included grouping States according to relative wealth measures. The school locale clustering scheme is an attempt to group States together on the basis of predominant school locale classifications within each State.

Using the student membership per locale data reported in Table 1, States have been grouped into seven locale clusters. Grouping States involved a three step process, as follows:

Step 1. The seven locale settings were condensed into four locale groupings: City, Urban Fringe, Town and Rural. Large City and Mid-size City locale categories were combined to form the City grouping. The Urban Fringe grouping was composed of the two Urban Fringe locales. Large Town and Small Town

categories were combined to form the Town grouping. The Rural locale category formed the Rural grouping by itself.

Step 2. States were assigned to one of 15 locale group combinations on the basis of where the greatest percentage of their student membership went to school within each grouping (City, Urban Fringe, Town, and Rural). Alabama, for example, with 21 percent in the City grouping, 27 percent in the Urban Fringe grouping, 27 percent in the Town grouping and 25 percent in the Rural grouping was assigned to the City-Urban Fringe-Town-Rural combination because its membership was more or less evenly distributed across all four groupings.

Step 3. Locale group combinations with less than four States were re-assigned to other group combinations, and further adjustments were made with the aim of reducing the standard deviation among the group percentages within each combination. The resulting seven combinations then became the locale clusters.

The locale clusters with their States, average percent of student membership and standard deviation for each locale grouping are presented in table 5. A map of the United States with each State coded by its cluster assignment is presented in figure 4.

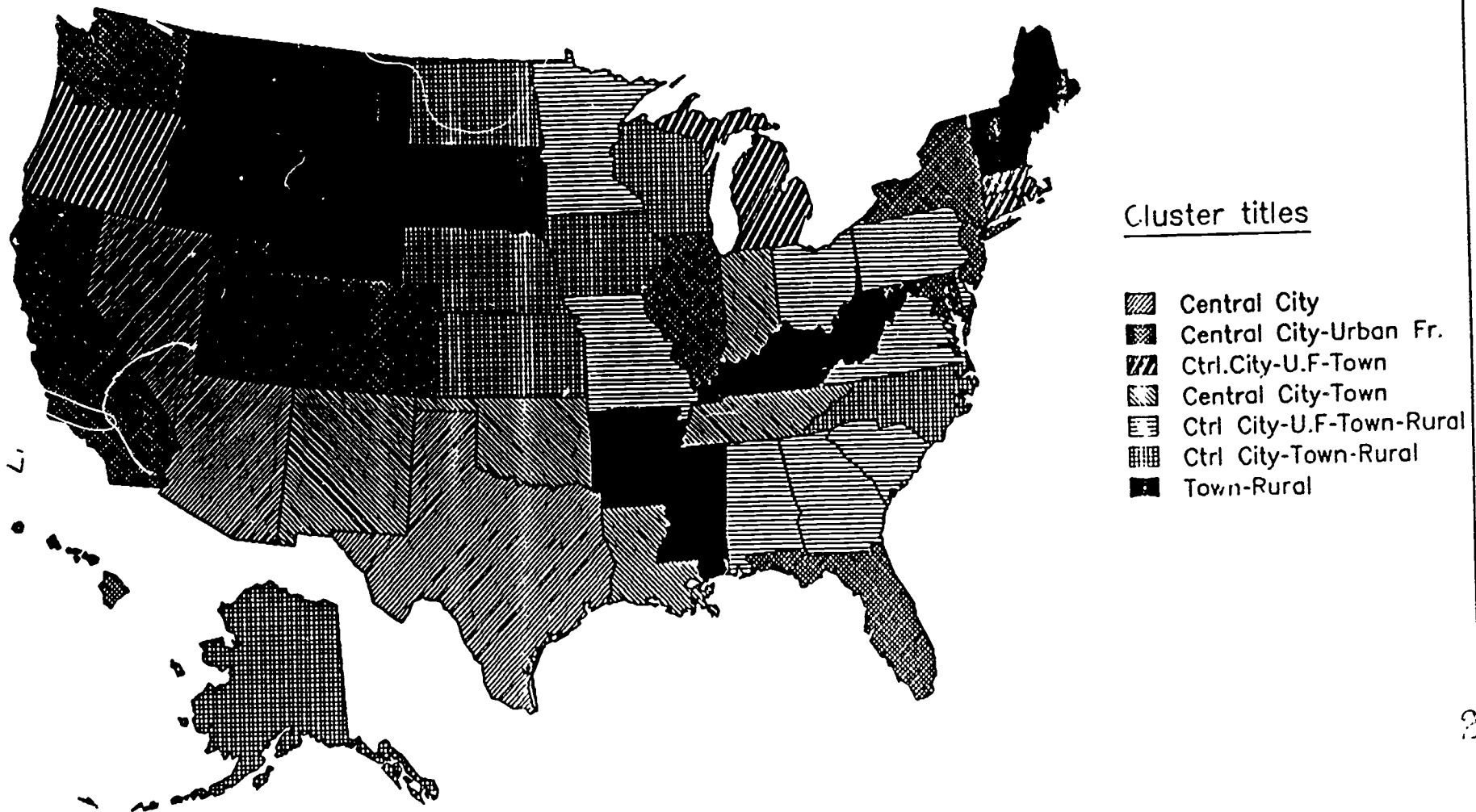
The most striking thing about these clusters are the States which end up being grouped together. The idea that the District of Columbia would be similar to Arizona or Nevada, or that Utah would have the some of the same characteristics as New York and Hawaii appears strange at first glance. However, in looking at these clusters it is important to remember that we are looking at states linked together on the basis of the type of locale(s) where the majority its schools are located, and not the geographic or strict demographic similarities.

The City Cluster contains three States (Arizona, Nevada and Texas) and the District of Columbia. The District has all of its








Table 5.--State clusters based on percentage of student membership in locale groupings

UNITED STATES (50 States and the District of Columbia)				
	City	Urban Fringe ^a	Town	Rural
Mean % Student Membership	26.7	22.6	29	21.6
Standard Deviation	14.6	15.3	12.9	11.8
CITY CLUSTER (3 States and the District of Columbia) Arizona, District of Columbia, Nevada and Texas				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	63.8	11.1	14.8	10.3
Standard Deviation	21.0	6.8	9.4	8.2
CITY-URBAN FRINGE CLUSTER (10 States) California, Colorado, Florida, Hawaii, Illinois, Maryland, New Jersey, New York, Utah and Washington				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	30.1	43.9	14.7	11.3
Standard Deviation	7.5	9.4	4.9	4.0
CITY-URBAN FRINGE-TOWN CLUSTER (5 States) Connecticut, Massachusetts, Michigan, Oregon and Rhode Island				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	27.7	33.0	30.6	8.6
Standard Deviation	2.5	6.4	4.7	5.6
CITY-TOWN CLUSTER (5 States) Indiana, Louisiana, New Mexico, Oklahoma and Tennessee				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	29.9	16.3	34.3	19.5
Standard Deviation	2.5	3.8	6.2	4.0
CITY-URBAN FRINGE-TOWN-RURAL CLUSTER (9 States) Alabama, Delaware, Georgia, Minnesota, Missouri, Ohio, Pennsylvania, South Carolina and Virginia				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	19.7	30.5	25.7	24.1
Standard Deviation	5.8	3.3	7.1	5.2
CITY-TOWN-RURAL CLUSTER (7 States) Alaska, Iowa, Kansas, Nebraska, North Carolina, North Dakota, and Wisconsin				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	27.0	9.5	30.6	33.0
Standard Deviation	2.2	5.4	4.2	8.2
TOWN-RURAL CLUSTER (11 States) Arkansas, Idaho, Kentucky, Maine, Mississippi, Montana, New Hampshire, South Dakota, Vermont, West Virginia and Wyoming				
	City	Urban Fringe	Town	Rural
Mean % Student Membership	13.9	7.5	45.7	32.8
Standard Deviation	5.0	5.0	8.8	9.4

Figure 5.--State clusters based on school locales



Cluster titles

-  Central City
-  Central City-Urban Fr.
-  Ctrl.City-U.F-Town
-  Central City-Town
-  Ctrl City-U.F-Town-Rural
-  Ctrl City-Town-Rural
-  Town-Rural

students attending city schools. The other three States have large sparsely populated land areas and concentrations of people in central cities. More than half their students attend city schools. (Note: the standard deviation for the City Cluster is high because of the unusual case of the District of Columbia with 100% of its students attending city schools. If D.C is dropped from this cluster the mean for City is 51.7 and the standard deviation is 2.5.)

The City-Urban Fringe Cluster contains ten States (California, Colorado, Florida, Hawaii, Illinois, Maryland, New Jersey, New York, Utah, and Washington). This cluster is the largest in terms of student membership, more than one-third (36 percent) of all public school students in the United States attend schools in these States. These States have the largest number of Large Cities of any cluster (25 of the 52 Large Cities) and have extensive urban fringes surrounding these cities. Nearly three quarters (74 percent) of its students attend schools in SMSA's.

The City-Urban Fringe-Town Cluster contains five States (Connecticut, Massachusetts, Michigan, Oregon, and Rhode Island). These States have a relatively even mix of schools across the three types of urban areas (central cities to small towns). States in this cluster tend to have central cities surrounded by extensive urban fringe areas with the rest of the area dotted with small towns. Less than 10% of the students in this cluster attend rural schools.

The City-Town Cluster also contains five States (Indiana, Louisiana, New Mexico, Oklahoma, and Tennessee). This cluster consists of States with nearly two-thirds of their population residing in cities and towns. The remaining population is found spread out in the rural areas and in the fringe areas surrounding the cities.

The City-Urban Fringe-Town-Rural Cluster consists of States whose population is evenly distributed among the four locale groupings. Nine States are in this cluster (Alabama, Delaware, Georgia, Minnesota, Missouri, Ohio, Pennsylvania, South Carolina, and

Virginia).

The City-Town-Rural Cluster is made up of seven States (Alaska, Iowa, Kansas, Nebraska, North Carolina, North Dakota and Wisconsin). These States have smaller cities with less densely populated urban fringes than other clusters. Sixty percent of the students in this cluster attend schools outside SMSA's. This cluster contains the highest percent of students attending rural schools (nearly one-third).

The Town-Rural Cluster contains 11 States (Arkansas, Idaho, Kentucky, Maine, Mississippi, Montana, New Hampshire, South Dakota, Vermont, West Virginia, and Wyoming). This cluster has the largest number of States in it and the smallest number of students of any cluster. Four out of five students in this cluster attend schools outside the metropolitan areas. Nearly one-third of the students attend rural schools.

Limitations

This study is limited by the following factors:

- Locale assignment was based on school mailing addresses and not the actual site address. Some school districts and even States list the address of the local education agency as the school address for every school in the agency.
- Locale code assignments depended on matching school addressees to Census data based on city and place names. Mailing addresses generally follow post office mail distribution boundaries, whereas places used in Census listings are legally recognized entities. The post office mail distribution boundaries and the Census (legal) boundaries are not always in agreement. In addition, spelling and abbreviation conventions for places may differ from State to State and even within States, making it

✓ difficult to match places on the computer. As a result, the school addresses of some schools could not be matched to any of the Census files and locale codes had to be assigned by default procedures explained in Appendix A.

- The school mailing addresses have undergone one extensive edit to correct addresses and are currently being edited again to detect and correct inaccurate addresses. Subsequent use of the school locale model will reflect the improved editing of addresses.
- Some schools may be missing. A study is being undertaken with each State to ensure complete coverage

Next Steps

Assigning the locale codes to the public elementary and secondary schools in this country was the initial step in developing a comparable and uniform designation system. Several additional steps are in progress or are planned to improve the designations. They are as followed:

- School locale designations will be made a regular part of the CCD School Universe file.
- NCES regularly collects from State education agencies mailing addresses for local school districts and schools for release to the public, and has requested that State agencies provide separate site address files to be used by NCES for the purpose of assigning locale types to schools.
- The school locale assignments will be updated when more current data are available from the Bureau of the Census.

Finally, State education agencies are being requested to verify

the individual school assignments based on their knowledge of school locations. This verification process is expected to be an ongoing process by NCES and State agencies.

21

APPENDIX A

THE LOCALE CODE ASSIGNMENT PROCESS

Locale code assignment was based on U.S. Bureau of the Census (Census) data defining geographical places, listing their populations and population densities, coding them with respect to Standard Metropolitan Statistical Areas (SMSA's) and designating them as rural or urbanized areas. All Census data used in this project were based on the 1980 Census. The National Center for Education Statistics (NCES), Common Core of Data (CCD) 1987-88 School Universe file was merged with Census files, matching cities in the address field of the school file with place names on the Census files.

It should be noted that place names may have different meanings to different people and organizations. The Census Bureau only recognizes political entities as places (Except in Hawaii, where the Census Bureau has identified "Census Designated Places"). Places as used by the U.S. Postal Service are Post Offices for distribution of the mail. Boundaries for mail distribution do not necessarily adhere to the boundaries of cities, counties or other jurisdictions.

Data Files

The primary data file was the 1987-88 CCD "Public Elementary/Secondary School Universe" file, which contains 85,131 records, one for each public school in the United States and its outlying areas. This file is created annually by NCES from State

supplied data. The city name, ZIP code, and school district identification number (LEAID) fields from this file were used in the locale assignment operation. Due to the limitations of the Census files for the outlying territories, locale codes were assigned to the 50 states and the District of Columbia.

The Census data files, each followed by a descriptor in parentheses, and the data elements which were used in the project, are listed below:

- 1983 County City Data Book (Place)
Census place name, State, population, population density
- Geographic Identification Code Scheme, 1983 (GIC)
Census place name, State, size code, SMSA code
- MARF5 Zip Code Equivalency File, 1983 (MARF5)
Census place name, State, ZIP code, urban/rural designation

All of the Census files required a great deal of manipulation to perform merges based on the place name field. The place name fields in the Census files have several pieces of additional information which had to be carefully removed so as not to effect any changes in the place name. This additional information was inconsistent across the three Census files used in the project.

In addition to the preceding three Census files, the following three files were used in the locale code assignment process:

- OMB Listing of Central Cities
- The U.S. Postal Service 1987 National Five-digit ZIP Code and Post Office Directory

- NCES Large Central City Listing

The 1985 OMB listing of Central Cities of SMSA's was used to identify central cities of SMSA's. This file contains more SMSA's than existed in 1980, so that central cities of SMSA's had to match both this file and the GIC file.

The U.S. Postal Service 1987 National Five-Digit ZIP Code and Post Office Directory was used to determine schools with city names in the addresses, but with ZIP codes identifying them as being outside the city limits.

A file containing the cities defined as "Large Central Cities" was created containing the city name, SMSA code and State code. These cities were chosen by plotting all of the central cities by population and population density and then selecting out a large grouping of cities, whose borders were defined as population of 400,000 and population density of 6,000 people per square mile. This left 52 cities each having a population greater than or equal to 400,000 or a population density greater than or equal to 6,000. These cities are listed below.

Atlanta, GA	Fort Lauderdale, FL	Minneapolis, MN
Baltimore, MD	Fort Worth, TX	Nashville, TN
Berkeley, CA	Hartford, CT	New Haven, CT
Boston, MA	Hialeah, CT	New Orleans, LA
Bridgeport, CT	Houston, TX	New York City, NY
Buffalo, NY	Indianapolis, IN	Newark, NJ
Chicago, IL	Jacksonville, FL	Oakland, CA
Cleveland, OH	Jersey City, NJ	Oklahoma City, OK
Columbus, OH	Kansas City, MO	Paterson, NJ
Dallas, TX	Long Beach, CA	Philadelphia, PA
Denver, CO	Los Angeles, CA	Phoenix, AZ
Detroit, MI	Memphis, TN	Pittsburgh, PA
El Paso, TX	Miami, FL	Providence, RI
Elizabeth, NJ	Milwaukee, WI	Rochester, NY

Saint Louis, MO
San Antonio, TX
San Diego, CA
San Francisco, CA

San Jose, CA
Santa Ana, CA
Seattle, WA

Syracuse, NY
Washington, DC
Yonkers, NY

Locale Assignment Methodology

Below is a description of the methodology used in assigning locale codes to the school universe file. A flow chart of the major steps of the process is presented in figure A-1.

First, place and city names in all files were manipulated to attain a common spelling and abbreviation convention so that they could be matched and merged on the basis of the city in the mailing address field. Spelling and abbreviation conventions for places differ from State to State and even within States. In addition, accepted local definitions of place, mailing address designations, and Census recognized boundaries are not always in agreement. As a result, the school address of some schools could not be matched to the Census files. The MARF5 Zip Code file was often used to assist in matching schools with the other two Census files.

The primary data file was the CCD School Universe file which contains 85,131 school records. The schools from the outlying territories were extracted from the Universe file, leaving 83,248 school records for the 50 States and the District of Columbia. The school file was first merged with the MARF5 ZIP Code file (matching on the ZIP code fields). Ninety-three percent of the schools were matched to this file (77,429 of 83,248). Successive merges to other files were merged first on the city name from the school address in the CCD file, and if unmatched, then tried again using the place name from the MARF5 ZIP Code file. Following the merge with the MARF5 ZIP Code file, the CCD file was matched and merged with the GIC Identification file. Forty-seven percent or 38,865 of 83,248 schools were matched with the GIC file. Unmatched schools from this operation

were then matched and merged with the Place file. Fifty percent of these unmatched schools were matched to the Place file (22,265 of 44,264). This left 22,118 schools, or 27 percent of the schools matched to neither the GIC file nor the Place file. These schools were coded Rural or Small Town depending upon the urban/rural code found on the MARFS ZIP code file.

Following the merging operation, locale codes were assigned to schools based on the city name in the school's address field meeting the following criteria:

1. Large City - Schools in cities matched to both the GIC file and the Large Central City file we created for this project.
2. Mid-size City - Schools in cities matched to both the GIC file and OMB listing of central cities, and not matched to the Large Central City file.
3. Urban Fringe of Large City - Schools in cities matched to the GIC file, not matched to the OMB listing of central cities and found to have the same SMSA code as cities coded Large City above.
4. Urban Fringe of Mid-size Central City - Schools in cities matched to the GIC file and not found on the OMB listing of central cities nor having the same SMSA code as cities listed on the Large Central Cities file.
5. Large Town - Schools in places not matched to the GIC file, but found on the Place file to have a population greater than or equal to 25,000.
6. Small Town - Schools in places not matched to the GIC file, but meet either of the following two conditions, 1) found on the Place file to have a population greater than or

equal to 2,500 and less than 25,000, or 2) not matched to the Place file, yet found on the MARF5 file to be urban.

7. Rural - Schools in places not matched on the GIC file and meet any one of three criteria, 1) found on the Place file to have a population less than 2,500, 2) not matched to the Place file and found on the MARF5 file to have a rural code, 3) not matched to any file at all.

Defaults and contrary information were decided in the following manner:

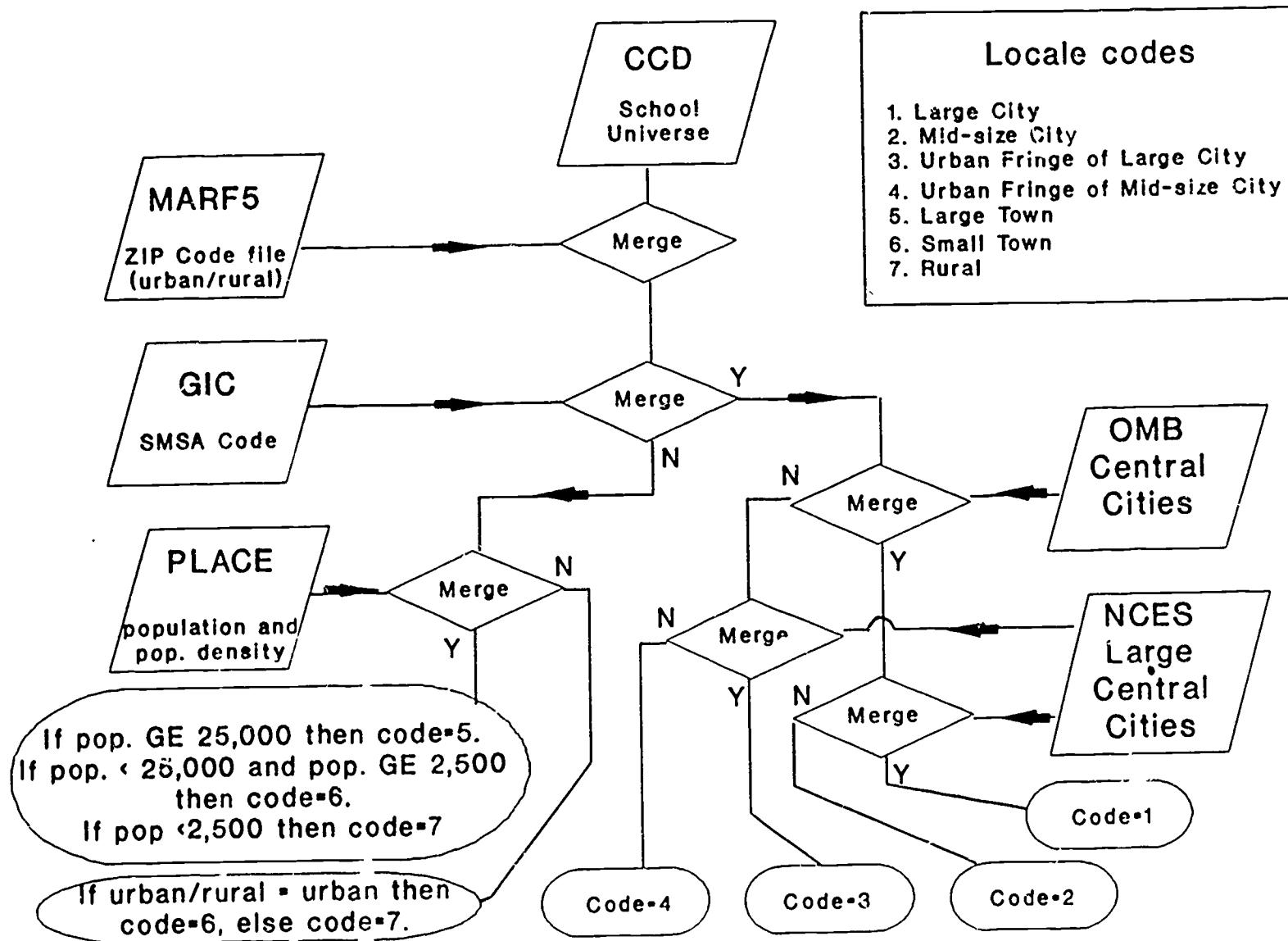
- Schools that could not be matched to any file were coded as rural.
- Places matched to the ZIP Code file indicating urban, but unmatched to the either the GIC or County City Databook files, were coded as Small Town.
- Schools in places matched to the ZIP code file indicating rural, matched to the Place file indicating a population greater than 2,500 inhabitants, and unmatched to the GIC file, were coded Large Town or Small Town depending on the data in the Place file.

These default coding procedures were decided upon after looking at 50 randomly selected schools in each of the three problem areas and determining by local education agency location, maps, and personal knowledge that the majority of them were most likely to be classified as the above procedures dictate.

A flow chart illustrating this locale code assignment process is presented as Figure A-1.

After this initial locale assignment procedure the entire file was checked and locale codes adjusted using the following methods:

Figure A-1. Initial locale assignment chart



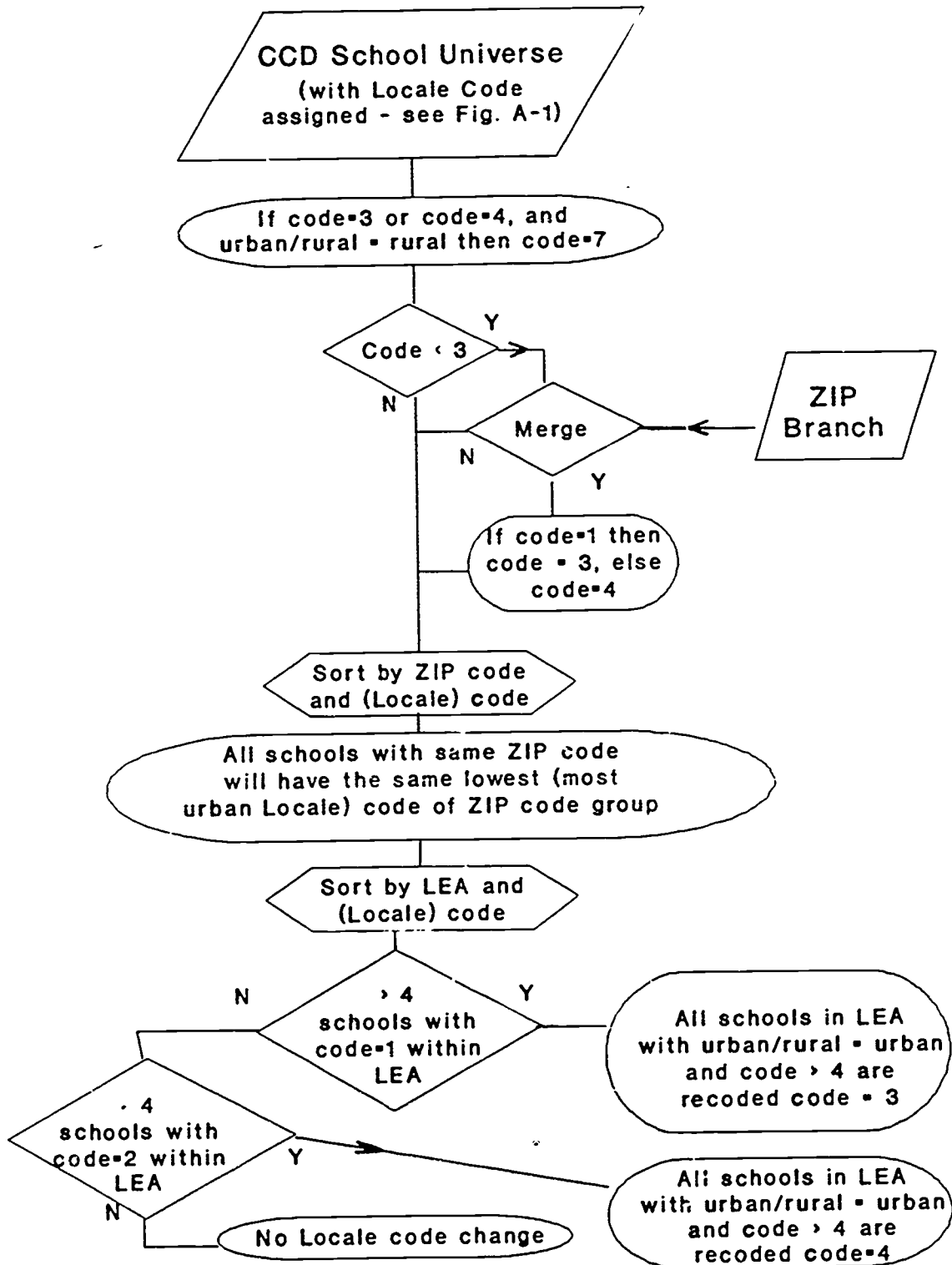
- Schools matched to the ZIP Code file and coded rural by Census were coded by NCES in the following manner:
 1. If matched to the OMB Central City file, then coded "Large City" or "Mid-size City";
 2. If matched to the GIC file and has a SMSA code, but matched to neither the Large City file nor the OMB Central City file, then coded "Rural";

- The file was checked to make sure that schools assigned "Large City" or "Mid-size City" codes were located in the city and not outside the city - using the city name in the address. This was done by matching the ZIP code with a file of branch Post Office ZIP codes created from the U.S. Postal Service's Post Office Directory. Following this process, the file was checked to ensure that all schools using the same ZIP code received the same locale code. Locale codes for these schools were changed to the lowest or most urban locale code assigned to that ZIP code. The locale codes of 1,060 schools (one percent of all schools) were changed by this routine.

- Finally, the file was checked to ensure that if more than four schools within a school district were coded as being in an SMSA, then all schools within that district would be coded as being in an SMSA. This was justified because most school districts lie within county boundaries and SMSA boundaries follow county lines, and necessary because of the number of schools in small communities in SMSA's using names in addresses not recognized by the Census Bureau. One percent or 979 of 83,248 schools were recoded as a result of this operation.

Figure A-2 presents a flow chart of the locale assignment adjustment operation.

Figure A-2. Locale code adjustment chart



APPENDIX B

TABLES PRESENTING

NUMBER OF SCHOOLS AND STUDENT MEMBERSHIP BY STATE AND TYPE OF LOCALE

22

Table B-1.--Number and percent of all public schools by type of locale and State: School year 1987-88

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total
	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools
United States	7,490	9.00	11,935	14.34	11,264	13.53	8,162	9.80	1,941	2.33	19,685	23.65	22,771	27.35	83,248
Alabama	0	0.00	268	20.65	0	0.00	317	24.42	19	1.46	320	24.65	374	28.81	1,298
Alaska	0	0.00	65	14.25	0	0.00	16	3.51	0	0.00	104	22.81	271	59.43	456
Arizona	187	19.38	235	24.35	90	9.33	28	2.90	37	3.83	231	23.94	157	16.27	965
Arkansas	0	0.00	258	14.22	15	1.35	37	3.33	32	2.88	356	32.04	513	46.17	1,111
California	1,216	17.7	1,092	15.33	2,131	29.92	774	10.87	131	1.84	1,074	15.08	705	9.90	7,123
Colorado	113	8.54	203	15.34	309	23.36	48	3.63	71	5.37	199	15.04	380	28.72	1,323
Connecticut	115	11.86	165	17.01	158	16.29	147	15.15	55	5.67	280	28.87	50	5.15	970
Delaware	0	0.00	23	13.77	0	0.00	63	37.72	0	0.00	22	13.17	59	35.33	167
D. of Columbia	163	99.47	0	0.00	1	0.53	0	0.00	0	0.00	0	0.00	0	0.00	189
Florida	320	13.45	494	20.77	149	6.26	846	35.56	7	0.29	352	14.80	211	8.87	2,379
Georgia	126	7.31	250	14.50	344	19.95	122	7.08	14	0.81	515	29.87	353	20.48	1,724
Hawaii	0	0.00	79	34.50	0	0.00	101	44.10	0	0.00	8	3.49	41	17.90	229
Idaho	0	0.00	48	8.50	0	0.00	20	3.54	67	11.86	163	28.85	267	47.26	565
Illinois	597	14.01	421	9.88	1,178	27.64	209	4.90	56	1.31	758	17.79	1,043	24.47	4,262
Indiana	97	5.04	383	19.89	133	6.91	204	10.59	69	3.58	565	29.34	475	24.66	1,926
Iowa	0	0.00	264	16.17	0	0.00	56	3.43	82	5.02	427	26.15	804	49.23	1,633
Kansas	0	0.00	232	17.87	83	5.68	7	0.48	80	5.47	387	26.47	673	46.03	1,462
Kentucky	0	0.00	197	14.08	0	0.00	179	12.79	64	4.57	406	29.02	553	39.53	1,399
Louisiana	126	7.88	307	19.20	193	6.44	144	9.01	35	2.19	478	29.89	406	25.39	1,599
Maine	0	0.00	52	5.94	0	0.00	47	6.28	0	0.00	334	44.59	316	42.19	749
Maryland	170	14.00	40	3.32	659	54.69	28	2.32	17	1.41	92	7.63	199	16.51	1,205
Massachusetts	119	6.63	587	21.28	433	24.12	132	7.35	47	2.62	572	31.87	110	6.13	1,795
Michigan	268	7.40	534	14.75	738	20.39	349	9.64	59	1.63	990	27.35	682	18.84	3,620
Minnesota	63	4.01	73	4.65	297	18.92	13	0.83	21	1.34	345	21.97	758	48.28	1,570
Mississippi	0	0.00	108	11.31	12	1.26	80	8.38	71	7.43	374	39.16	310	32.46	955
Missouri	122	5.67	100	4.65	516	23.98	36	1.67	41	1.91	487	22.63	850	39.50	2,152
Montana	0	0.00	66	8.52	0	0.00	5	0.65	10	1.29	233	30.06	461	59.48	775
Nebraska	0	0.00	167	10.87	0	0.00	44	2.86	25	1.63	383	24.92	918	59.73	1,537
Nevada	0	0.00	116	38.03	0	0.00	30	9.84	10	3.28	36	11.80	113	37.05	305
New Hampshire	0	0.00	61	14.02	0	0.00	15	3.45	16	3.68	196	45.06	147	33.79	435
New Jersey	177	7.65	156	6.95	933	41.58	437	19.47	22	0.98	366	16.31	153	6.82	2,244
New Mexico	0	0.00	113	17.44	0	0.00	60	9.26	83	12.81	193	29.78	199	30.71	648
New York	1,177	29.63	155	3.90	465	11.71	749	18.86	72	1.81	824	20.75	530	13.34	3,972

Table B-1.--Number and percent of all public schools by type of locale and State: School year 1987-88--Continued

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total
	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools
North Carolina	0	0.00	437	22.39	0	0.00	217	11.12	61	3.13	557	28.53	680	34.84	1,952
North Dakota	0	0.00	73	10.56	0	0.00	1	0.14	24	3.47	87	12.59	506	73.23	691
Ohio	277	7.40	640	17.10	359	9.59	557	14.88	122	3.26	744	19.88	1,044	27.89	3,743
Oklahoma	144	7.62	199	10.53	85	4.50	36	1.91	73	3.86	522	27.63	830	43.94	1,889
Oregon	0	0.00	234	19.28	0	0.00	212	17.46	34	2.80	366	30.15	368	30.31	1,214
Pennsylvania	324	9.78	240	7.24	635	19.16	273	8.24	61	1.84	1,096	33.07	685	20.67	3,314
Rhode Island	45	15.10	35	11.74	120	40.27	20	6.71	7	2.35	59	19.80	12	4.03	298
South Carolina	0	0.00	156	14.14	0	0.00	248	22.48	0	0.00	383	34.72	316	28.65	1,103
South Dakota	0	0.00	31	3.92	0	0.00	7	0.89	10	1.27	148	18.73	594	75.19	790
Tennessee	278	17.61	194	12.29	68	4.31	156	9.88	55	3.48	419	26.54	409	25.90	1,579
Texas	996	17.21	1,196	20.67	540	9.33	194	3.35	67	1.16	1,426	24.64	1,368	23.64	5,787
Utah	0	0.00	171	23.59	0	0.00	241	33.24	19	2.62	119	16.41	175	24.14	725
Vermont	0	0.00	12	3.60	0	0.00	2	0.60	0	0.00	133	39.94	186	55.86	333
Virginia	0	0.00	455	25.84	254	14.42	179	10.16	6	0.34	282	16.01	585	33.22	1,761
Washington	138	7.45	375	20.25	274	14.79	219	11.83	28	1.51	355	19.17	463	25.00	1,852
West Virginia	0	0.00	132	12.18	0	0.00	131	12.08	34	3.14	243	22.42	544	50.18	1,084
Wisconsin	107	5.31	317	15.83	182	9.09	91	4.55	27	1.35	516	25.77	762	38.06	2,002
Wyoming	0	0.00	31	7.97	0	0.00	35	9.00	0	0.00	150	41.13	163	41.90	389

Based on school mailing addresses from the 1987-88 Common Core of Data "Public Elementary/Secondary School Universe" file, NCES, U.S. Department of Education.

Table B-2.--Number and percent of students in membership in all schools, by type of locale and State: School year 1987-88

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total Students
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	
United States	5,347,256	13.40	6,733,324	16.79	6,702,726	16.79	4,802,864	12.03	977,782	2.45	8,810,507	22.07	6,539,876	16.38	39,914,335
Alabama	0	0.00	156,771	21.53	0	0.00	195,777	26.89	9,043	1.24	184,024	25.28	182,402	25.05	728,017
Alaska	0	0.00	31,598	29.51	0	0.00	9,377	8.76	0	0.00	31,908	29.80	34,202	31.94	107,085
Arizona	141,936	24.16	171,091	29.12	77,662	13.22	23,099	3.93	26,209	4.46	109,832	18.70	37,637	6.41	587,466
Arkansas	0	0.00	85,637	19.61	8,371	1.92	17,346	3.97	15,128	3.46	174,293	39.88	136,201	31.16	437,036
California	964,443	21.48	725,967	16.17	1,498,049	33.37	490,647	10.93	71,650	1.60	525,848	11.71	212,524	4.73	4,489,128
Colorado	62,019	11.09	107,299	19.18	184,854	33.05	22,308	3.99	32,943	5.89	74,679	13.35	75,265	13.46	559,367
Connecticut	64,149	13.89	80,442	17.42	75,928	16.44	68,245	14.78	27,923	6.05	129,130	27.96	16,051	3.48	461,868
Delaware	0	0.00	14,966	15.65	0	0.00	37,600	39.31	0	0.00	13,372	13.98	29,721	31.07	95,659
D. of Columbia	86,296	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	86,296
Florida	252,510	15.18	312,562	18.79	127,637	7.67	643,171	38.66	4,140	0.25	206,499	12.41	117,178	7.04	1,663,697
Georgia	74,022	6.73	159,077	14.46	259,892	23.62	72,114	6.55	12,035	1.09	336,374	30.57	186,911	16.99	1,100,475
Hawaii	0	0.00	53,878	32.43	0	0.00	82,035	49.38	0	0.00	6,071	3.65	24,155	14.54	166,139
Idaho	0	0.00	26,364	12.43	0	0.00	14,303	6.74	36,386	17.15	72,078	33.97	63,038	29.71	212,169
Illinois	418,025	23.08	210,659	11.63	595,129	32.85	85,165	4.70	24,567	1.36	268,725	14.83	209,176	11.55	1,811,446
Indiana	52,860	5.48	212,997	22.09	91,415	9.48	120,048	12.45	34,402	3.57	265,149	27.50	187,258	19.42	964,129
Iowa	0	0.00	129,025	26.85	0	0.00	26,177	5.45	35,203	7.33	136,320	28.79	151,791	31.59	480,516
Kansas	0	0.00	104,798	24.97	47,426	11.30	3,361	0.80	31,752	7.57	122,051	29.08	110,250	26.27	419,638
Kentucky	0	0.00	109,641	17.06	0	0.00	92,751	14.43	34,970	5.44	203,126	31.60	202,265	31.47	642,753
Louisiana	81,602	10.51	174,621	22.49	64,904	8.36	79,127	10.19	22,588	2.91	208,648	26.87	145,080	18.68	776,570
Maine	0	0.00	23,451	11.31	0	0.00	17,733	8.55	0	0.00	108,960	52.55	57,214	27.59	207,358
Maryland	104,964	15.35	17,345	2.54	395,303	57.81	12,322	1.80	11,761	1.72	51,586	7.54	90,516	13.24	683,797
Massachusetts	59,223	7.22	189,928	23.16	195,282	23.81	67,691	8.25	25,469	3.11	249,197	30.39	33,316	4.06	820,106
Michigan	175,935	11.14	224,975	14.24	364,675	23.09	149,279	9.45	22,589	1.43	415,772	26.22	226,435	14.33	1,579,660
Minnesota	41,976	5.91	45,424	6.40	215,651	30.36	5,507	0.78	10,860	1.53	170,749	24.04	220,128	30.99	710,295
Mississippi	0	0.00	60,118	12.17	9,562	1.94	47,682	9.66	40,605	8.22	184,310	37.32	151,539	30.69	493,816
Missouri	59,991	7.48	42,425	5.29	264,417	32.97	15,300	1.91	22,145	2.76	188,500	23.50	209,282	26.09	802,060
Montana	0	0.00	30,205	19.84	0	0.00	1,146	0.75	5,636	3.70	56,157	36.90	59,063	38.80	152,207
Nebraska	0	0.00	79,447	29.63	0	0.00	21,771	8.12	8,257	3.08	66,836	24.93	91,789	34.21	268,100
Nevada	0	0.00	91,191	54.21	0	0.00	18,395	10.93	5,588	3.32	16,375	9.73	36,680	21.80	168,229
New Hampshire	0	0.00	34,918	22.12	0	0.00	7,103	4.50	6,118	3.88	81,308	51.51	28,391	17.99	157,838
New Jersey	118,177	10.81	82,357	7.54	422,894	38.69	215,378	19.71	12,519	1.15	174,415	15.96	57,247	6.15	1,092,982
New Mexico	0	0.00	82,014	28.55	0	0.00	33,219	11.57	42,453	14.78	90,668	31.57	38,878	13.54	287,232
New York	1,045,134	40.30	81,020	3.12	277,223	10.69	4,7586	18.42	42,531	1.64	432,612	16.68	237,051	9.14	2,593,157

Table B-2.--Number and percent of students in membership in all schools, by type of locale and State: School year 1987-88--Continued

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total
	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students	Percent	Students
North Carolina	0	0.00	274,987	25.32	0	0.00	148,213	13.65	36,502	3.36	308,353	28.39	317,921	29.28	1,085,976
North Dakota	0	0.00	29,097	24.08	0	0.00	172	0.14	8,771	7.27	20,558	17.02	52,205	51.49	120,813
Ohio	144,173	8.04	360,842	20.12	212,645	11.86	310,349	17.30	50,338	2.81	326,557	18.21	388,586	21.67	1,793,490
Oklahoma	69,370	11.91	90,210	15.48	48,649	8.35	24,978	4.29	31,826	5.46	165,856	28.47	151,701	26.04	582,590
Oregon	0	0.00	111,681	24.61	0	0.00	112,368	24.76	14,212	3.13	141,450	31.16	74,157	16.34	453,888
Pennsylvania	220,901	13.46	128,412	7.82	339,494	20.69	135,606	8.26	32,862	2.00	517,445	31.53	266,510	16.24	1,641,230
Rhode Island	21,946	16.41	16,168	12.09	50,761	37.96	8,687	6.50	4,750	3.55	25,308	18.92	6,118	4.57	133,738
South Carolina	0	0.00	98,664	16.04	0	0.00	161,470	26.26	0	0.00	222,462	36.17	132,401	21.53	614,997
South Dakota	0	0.00	14,723	11.60	0	0.00	3,980	3.14	4,632	3.65	40,754	32.11	62,847	49.51	127,936
Tennessee	177,503	21.54	93,385	11.33	50,065	6.07	89,468	10.85	34,213	4.15	217,963	26.44	161,623	19.61	824,220
Texas	784,598	24.24	776,034	23.97	401,429	12.40	122,757	3.79	40,078	1.24	701,777	21.68	410,194	12.67	3,236,867
Utah	0	0.00	104,425	25.04	0	0.00	178,302	42.75	6,328	1.52	60,867	14.59	67,153	16.10	417,075
Vermont	0	0.00	3,626	3.95	0	0.00	736	0.80	0	0.00	52,956	57.72	34,432	37.53	91,750
Virginia	0	0.00	291,035	29.72	179,294	18.31	114,825	11.72	3,377	0.34	145,978	14.90	244,908	25.01	979,417
Washington	57,719	7.44	172,623	22.25	150,021	19.33	112,427	14.49	12,749	1.64	148,224	19.10	122,189	15.75	775,952
West Virginia	0	0.00	48,006	13.41	0	0.00	47,205	13.19	9,315	2.60	97,870	27.34	155,599	43.46	357,995
Wisconsin	67,784	8.78	155,464	20.13	94,094	12.18	44,948	5.82	12,349	1.60	204,919	26.53	192,821	24.96	772,379
Wyoming	0	0.00	11,671	11.82	0	0.00	13,590	13.76	0	0.00	53,638	54.30	19,882	20.13	98,781

Based on school mailing address and student membership in the 1987-88 Common Core of Data "Public Elementary/Secondary School Universe" file, NCES, U.S. Department of Education.

Table B-3.--Number and percent of regular schools by type of locale and State: School year 1987-88

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total All Schools
	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	
United States	6,997	8.82	11,092	13.99	10,696	13.49	7,701	9.71	1,828	2.31	18,659	23.53	22,319	28.15	79,292
Alabama	0	0.00	263	20.47	0	0.00	313	24.36	19	1.48	319	24.82	371	28.87	1,285
Alaska	0	0.00	58	13.81	0	0.00	15	3.57	0	0.00	94	22.38	253	60.24	420
Arizona	177	18.97	224	24.01	89	9.54	27	2.89	37	3.97	223	23.90	156	16.72	933
Arkansas	0	0.00	158	14.21	16	1.44	37	3.33	32	2.88	356	32.01	513	46.13	1,112
California	1,178	17.10	1,043	15.14	2,069	30.03	746	10.83	124	1.80	1,039	15.08	691	10.03	6,890
Colorado	109	8.59	195	15.37	292	23.01	45	3.55	63	4.96	188	14.81	377	29.71	1,269
Connecticut	102	11.11	150	16.34	149	16.23	140	15.25	53	5.77	275	29.96	49	5.34	918
Delaware	0	0.00	20	13.89	0	0.00	50	34.72	0	0.00	22	15.28	52	36.11	144
D. of Columbia	166	100.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	166
Florida	283	13.83	387	18.91	135	6.60	744	36.36	5	0.24	294	14.37	198	9.68	2,046
Georgia	125	7.31	243	14.20	340	19.87	122	7.13	14	0.82	514	30.04	353	20.63	1,711
Hawaii	0	0.00	77	33.92	0	0.00	101	44.49	0	0.00	8	3.52	41	18.06	227
Idaho	0	0.00	46	8.38	0	0.00	19	3.46	64	11.66	155	28.23	265	48.27	549
Illinois	554	13.98	370	9.34	1,094	27.61	174	4.39	44	1.11	705	17.79	1,022	25.79	3,963
Indiana	91	4.95	364	19.79	124	6.74	197	10.71	63	3.43	530	28.82	470	25.56	1,839
Iowa	0	0.00	256	15.90	0	0.00	56	3.48	77	4.78	418	25.96	803	49.88	1,610
Kansas	0	0.00	228	15.63	84	5.76	7	0.48	80	5.48	387	26.53	673	46.13	1,459
Kentucky	0	0.00	171	12.93	0	0.00	160	12.09	59	4.46	388	29.33	545	41.19	1,323
Louisiana	122	8.17	285	19.08	97	6.49	135	9.04	33	2.21	429	28.71	393	26.31	1,494
Maine	0	0.00	48	6.90	0	0.00	45	6.47	0	0.00	298	42.82	305	43.82	696
Maryland	159	14.06	36	3.18	623	55.08	26	2.30	15	1.33	83	7.34	189	16.71	1,131
Massachusetts	118	6.80	364	20.98	416	23.98	129	7.44	46	2.65	555	31.99	107	6.17	1,735
Michigan	240	7.37	446	13.69	659	20.23	306	9.39	55	1.69	905	27.78	647	19.86	3,258
Minnesota	62	4.12	70	4.65	289	19.22	13	0.86	19	1.26	312	20.74	739	49.14	1,504
Mississippi	0	0.00	97	11.32	10	1.17	75	8.75	67	7.82	320	37.34	288	33.61	857
Missouri	116	5.77	94	4.67	470	23.37	35	1.74	38	1.89	430	21.38	820	41.17	2,011
Montana	0	0.00	64	8.28	0	0.00	5	0.65	10	1.29	233	30.14	461	59.64	773
Nebraska	0	0.00	163	10.74	0	0.00	42	2.77	24	1.58	374	24.64	915	60.28	1,518
Nevada	0	0.00	110	37.16	0	0.00	27	9.12	10	3.38	36	12.16	113	38.18	296
New Hampshire	0	0.00	61	14.02	0	0.00	15	3.45	16	3.68	196	45.06	147	33.79	435
New Jersey	158	7.41	150	7.04	905	42.45	413	19.37	19	0.89	341	15.99	146	6.85	2,132
New Mexico	0	0.00	112	17.42	0	0.00	57	8.86	83	12.91	192	29.86	199	30.95	643
New York	1,092	28.32	152	3.94	450	11.67	748	19.40	71	1.84	819	21.24	524	13.59	3,856

Table B-3.--Number and percent of regular schools by type of locale and State: School year 1987-88--Continued

State	Large City		Mid-size City		Urban Fringe of Large City		Urban Fringe of Mid-size City		Large Town		Small Town		Rural		Total All Schools
	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	Schools	Percent	
North Carolina	0	0.00	412	21.65	0	0.00	212	11.14	60	3.15	545	28.64	674	35.42	1,903
North Dakota	0	0.00	64	9.91	0	0.00	1	0.15	23	3.56	69	10.68	489	75.70	646
Ohio	239	6.64	619	17.18	344	9.55	541	15.02	118	3.28	722	20.04	1,019	28.29	3,602
Oklahoma	134	7.34	189	10.35	81	4.44	36	1.97	68	3.72	503	27.55	815	44.63	1,826
Oregon	0	0.00	231	19.11	0	0.00	212	17.54	34	2.81	365	30.19	367	30.36	1,209
Pennsylvania	305	9.66	223	7.06	605	19.16	260	8.23	58	1.84	1,039	32.90	668	21.15	3,158
Rhode Island	39	13.45	35	12.07	119	41.03	20	6.90	7	2.41	59	20.34	11	3.79	290
South Carolina	0	0.00	143	14.01	0	0.00	227	22.23	0	0.00	349	34.18	302	29.58	1,021
South Dakota	0	0.00	25	3.24	0	0.00	5	0.65	9	1.17	143	18.55	589	76.39	771
Tennessee	261	17.35	186	12.37	66	4.39	140	9.91	54	3.59	389	25.86	399	26.53	1,504
Texas	954	17.19	1,118	20.14	518	9.33	1,177	3.37	61	1.10	1,360	24.50	1,352	24.36	5,550
Utah	0	0.00	149	22.78	0	0.00	217	33.18	10	1.53	104	15.90	174	26.61	654
Vermont	0	0.00	10	3.04	0	0.00	2	0.61	0	0.00	131	39.82	186	56.53	329
Virginia	0	0.00	417	25.36	231	14.05	169	10.28	6	0.36	261	15.88	560	34.06	1,644
Washington	115	7.10	312	19.26	241	14.88	191	11.79	23	1.42	301	18.58	437	26.98	1,620
West Virginia	0	0.00	124	12.25	0	0.00	125	12.35	32	3.16	212	20.95	519	51.28	1,012
Wisconsin	98	4.98	301	15.29	180	9.15	89	4.52	25	1.27	513	26.07	762	38.72	1,968
Wyoming	0	0.00	29	7.59	0	0.00	34	8.90	0	0.00	156	40.84	163	42.67	382

Based on school mailing addresses and school type codes from the 1987-88 Common Core of Data "Public Elementary/Secondary School Universe" file, NCES, U.S. Department of Education.

Table B-4.--States ranked by percent of student membership within each type of locale: Regular schools: School year 1987-88

Large City			Mid-size City			Urban Fringe of Large City			Urban Fringe of Mid-size City			Large Town			Small Town			Rural		
State	Students	Percent	State	Students	Percent	State	Students	Percent	State	Students	Percent	State	Students	Percent	State	Students	Percent	State	Students	Percent
Abrev.			Abrev.			Abrev.			Abrev.			Abrev.			Abrev.			Abrev.		
DC	82,675	100.00	NV	89,201	53.77	MD	388,823	57.97	HI	82,035	49.39	ID	36,225	17.16	VT	52,920	57.75	SD	60,955	51.98
NY	995,654	39.19	HI	53,819	32.41	NJ	416,736	38.92	UT	176,163	42.74	NM	42,453	14.89	WY	53,209	54.23	ND	62,205	51.55
TX	778,324	24.29	AK	31,359	30.01	RI	50,756	38.09	FL	634,955	38.58	MS	40,543	8.24	ME	81,308	51.51	WV	149,987	43.80
AZ	141,135	24.08	VA	288,998	29.64	CA	1,480,053	33.37	DE	33,695	37.38	KS	31,752	7.59	NH	75,699	48.86	MT	59,063	38.81
IL	398,813	22.53	NE	79,261	29.62	LA	588,848	33.26	AL	195,396	26.91	IA	34,872	7.29	AR	174,293	39.93	VT	34,432	37.58
TN	176,822	21.56	AZ	170,676	29.12	CO	182,326	32.88	SC	159,910	26.14	MO	8,781	7.28	MS	183,814	37.38	NE	91,748	34.29
CA	954,324	21.52	NM	82,709	28.59	MO	260,926	32.69	OR	112,388	24.79	CT	27,371	6.14	NT	56,157	36.90	DE	29,193	32.38
RI	21,488	16.13	IA	128,006	26.77	MN	215,237	30.35	NJ	208,916	19.51	CO	32,124	5.88	SC	221,793	36.26	AK	33,751	32.30
FL	250,013	15.19	NC	272,700	25.16	MA	188,544	23.94	NY	477,548	18.80	OK	31,826	5.47	ID	72,004	34.11	IA	151,756	31.74
MD	100,330	14.96	UT	102,508	24.87	GA	259,099	23.61	OH	309,675	17.45	KY	34,825	5.44	SD	38,491	32.82	KY	202,111	31.55
CT	60,852	13.65	KS	103,735	24.78	MI	358,707	22.96	CT	65,613	14.71	AZ	26,209	4.47	PA	90,583	31.77	AR	136,201	31.16
PA	212,095	13.16	OR	111,241	24.53	PA	336,310	20.87	WA	110,791	14.52	TN	34,188	4.17	KY	511,144	31.71	MN	220,128	31.04
OK	68,708	11.81	ND	29,004	24.04	WA	147,984	19.40	KY	92,270	14.41	NH	6,118	3.88	NM	202,805	31.66	MS	151,286	30.77
MI	172,746	11.06	TX	765,710	23.90	VA	177,668	18.22	WY	13,433	13.70	MT	5,636	3.70	OR	141,438	31.19	ID	63,006	29.85
CO	61,226	11.04	MA	180,836	22.91	CT	74,045	16.60	NC	147,803	13.66	IN	34,301	3.58	GA	336,365	30.65	NC	317,719	29.37
NJ	114,831	10.73	LA	173,092	22.42	AZ	77,662	13.25	WV	46,197	13.49	RI	4,750	3.56	MA	236,559	30.28	ME	54,467	27.58
LA	80,907	10.48	WA	169,111	22.17	TX	400,628	12.50	IN	118,922	12.40	AR	15,128	3.47	KS	122,051	29.17	KS	110,250	26.34
WI	64,439	8.40	IN	212,291	22.14	WI	93,775	12.23	VA	114,672	11.76	NC	36,495	3.37	AK	30,199	28.90	MO	209,236	26.21
MA	59,223	7.50	NH	34,918	22.12	OH	210,667	11.87	MA	32,897	11.47	NV	5,588	3.37	IA	137,327	28.72	OK	151,565	26.06
MO	59,770	7.49	AL	155,866	21.46	KS	47,426	11.33	CA	485,628	10.95	OR	14,212	3.13	CT	128,044	28.71	VA	244,535	25.08
OH	131,304	7.40	OH	359,307	20.24	NY	275,445	10.84	NV	18,044	10.88	SD	24,107	3.09	OK	165,856	28.52	AL	181,257	25.04
WA	54,774	7.18	WI	154,127	20.10	IN	90,829	9.47	TN	88,892	10.84	CT	3,606	3.07	NC	307,698	28.44	WV	36,680	22.11
GA	73,085	6.66	MT	30,192	19.84	LA	64,772	8.39	LA	78,849	10.21	WA	8,212	3.07	IN	262,881	27.41	OH	387,925	21.86
MN	41,866	5.90	AR	85,697	19.61	OK	48,475	8.34	MS	47,682	9.70	LA	22,588	2.93	LA	207,654	26.90	SC	132,239	21.62
IN	52,595	5.12	CO	107,046	19.30	FL	127,059	7.72	MI	146,862	9.40	OH	50,338	2.84	WV	91,515	26.72	WY	19,882	20.27
ID	0	0.00	FL	307,277	18.67	TN	50,065	6.10	AK	9,196	8.89	MO	22,145	2.77	WI	204,610	26.68	TN	161,361	19.67
HI	0	0.00	KY	108,516	16.94	MS	9,525	1.94	ME	17,742	8.73	WV	8,790	2.57	MI	414,280	26.52	IN	187,105	19.51
MS	0	0.00	CT	74,248	16.65	AR	8,371	1.92	MA	64,934	8.23	PA	32,073	1.99	TN	215,884	26.32	LA	144,033	18.66
NE	0	0.00	CA	713,599	16.09	NH	0	0.00	NE	21,705	8.11	MD	11,426	1.70	AL	184,023	25.34	LA	28,391	17.99
SC	0	0.00	SC	97,792	15.99	SC	0	0.00	PA	130,294	8.08	NY	42,435	1.67	NE	66,636	24.30	NH	186,911	17.03
NH	0	0.00	OK	90,134	15.50	DE	0	0.00	ID	14,299	6.77	VA	12,528	1.66	MN	170,363	24.02	GA	263,946	16.38
SD	0	0.00	DE	13,884	15.40	SD	0	0.00	GA	72,114	6.57	WI	12,289	1.60	MO	188,464	23.61	PA	74,124	16.35
NM	0	0.00	GA	157,862	14.38	NM	0	0.00	RI	8,687	6.52	CA	69,649	1.60	TX	688,771	21.50	OR	67,112	16.28
DE	0	0.00	MI	221,350	14.17	KY	0	0.00	WI	44,861	5.85	MN	10,794	1.52	WA	1	19.25	UT	121,686	15.95
NC	0	0.00	WV	45,954	13.42	NC	0	0.00	IA	26,177	5.47	MI	22,554	1.44	RI	23,308	18.99	HI	24,155	14.54
AR	0	0.00	RI	16,168	12.13	IA	0	0.00	IL	79,746	4.50	UT	5,918	1.44	AZ	109,732	18.72	HI	225,783	14.45
ME	0	0.00	ID	25,561	12.11	MT	0	0.00	NH	7,103	4.50	IL	24,140	1.36	OH	325,747	18.35	MI	38,878	13.55
UT	0	0.00	MS	58,880	11.97	UT	0	0.00	OK	24,978	4.30	AL	9,043	1.25	NY	432,140	17.01	CO	75,077	13.54
OR	0	0.00	ME	23,411	11.85	OR	0	0.00	CO	22,145	3.99	TX	39,663	1.24	ND	20,511	17.00	MD	90,203	13.45
VT	0	0.00	WY	11,561	11.79	VT	0	0.00	AR	17,346	3.97	NJ	12,168	1.14	NJ	171,616	16.04	TX	408,373	12.75
NV	0	0.00	IL	204,976	11.58	AK	0	0.00	AZ	23,001	3.92	GA	12,035	1.10	IL	266,464	15.06	IL	207,188	11.70
VA	0	0.00	TN	92,974	11.34	ID	0	0.00	TX	122,649	3.83	VA	3,377	0.35	VA	145,828	14.96	NY	236,483	9.31
AL	0	0.00	SD	11,493	9.80	NE	0	0.00	SD	2,727	2.33	FL	4,107	0.25	DE	13,372	14.83	NY	117,036	7.11
KS	0	0.00	PA	125,903	7.81	HI	0	0.00	MO	15,300	1.92	DE	0	0.00	UT	60,474	14.67	AZ	37,608	6.42
KY	0	0.00	NJ	81,118	7.58	AL	0	0.00	MD	12,240	1.82	DC	0	0.00	CO	73,972	13.55	NJ	65,268	6.10
WV	0	0.00	MN	45,341	6.39	WV	0	0.00	VT	736	0.80	HI	0	0.00	FL	205,364	12.48	CA	210,766	4.75
IA	0	0.00	MO	42,425	5.31	NV	0	0.00	KS	3,361	0.80	VT	0	0.00	CA	493,451	11.35	RI	6,083	4.57
MT	0	0.00	VT	3,543	3.87	ME	0	0.00	MN	5,507	0.78	AK	0	0.00	NV	16,375	9.87	MA	31,772	4.03
ND	0	0.00	NY	80,697	3.18	MD	0	0.00	MT	1,146	0.75	SC	0	0.00	MO	50,968	7.60	CT	15,785	3.54
AK	0	0.00	MD	16,793	2.50	JC	0	0.00	ND	172	0.14	ME	0	0.00	HI	6,071	3.66	DC	0	0.00
WY	0	0.00	DC	0	0.00	NY	0	0.00	DC	0	0.00	WY	0	0.00	DC	0	0.00	DC	0	0.00