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Connecticut Local Labor Market Areas 1980


Thomas E. Steahr

University of Connecticut - Storrs

Kenneth P. Hadden

University of Connecticut - Storrs

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CONNECTICUT LOCAL LABOR MARKET AREAS 1980

Thomas E. Steahr
Kenneth P. Hadden

Storrs Agricultural Experiment Station
College of Agriculture and Natural Resources
The University of Connecticut, Storrs, CT 06269

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Section I

CONNECTICUT LOCAL LABOR MARKET AREAS 1980

Introduction

This research report is intended to accomplish the second major objective in the original research project on the Analysis of Local Labor Market Areas in New England. This project has three major objectives: 1) to define and identify the local labor market areas within the New England states using minor civil divisions as the basic unit of analysis, 2) to describe the demographic and economic characteristics of these local labor market areas in New England and 3) to develop and to test hypotheses concerning the impact of socioeconomic and other characteristics of labor market areas on the level of earnings, on labor force participation rates and other selected economic variables.

The first goal has been achieved and is described in detail in the publication *Local Labor Market Areas in New England*, (Steahr, 1990). The brief discussion in this report on identification of the local labor market areas is derived from the complete report, and readers wishing a more detailed methodological treatment are referred to it.

The second objective is to describe the identified local labor market areas, derived from the analysis of minor civil divisions and commuter patterns, in terms of available characteristics of workers in each area. The data set for this purpose is described later but contains information on age, sex, race, household type, occupation, industry and earnings for persons in the labor force. These are the basic descriptions to characterize local labor markets in each New England state. A series of reports, one for each of the six states, will achieve objective two.

The third objective involves the development and testing of statistical hypotheses on levels of earnings, participation rates and other dependent variables using the local labor market areas as the basic units of analysis. A third, different data set is required to accomplish this goal. The most recent census data available at the time of this writing is the 1980 census. The summary tape series will be utilized for statistical analysis. A more complete presentation of the data will be part of the final report.

Section II

IDENTIFICATION OF LOCAL LABOR MARKET AREAS IN CONNECTICUT

The basic data were purchased from the United States Census Bureau as a computer tape for 1980 entitled *Number of Workers by County of Residence by County of Work*. This data set was created by the Census Bureau in response to a special tabulation from the basic record tapes and subsequently made available to the general public. For communities of less than 2,500 population, the sampling fraction was 25 percent of the housing units. For communities over 2,500 population, the sampling rate was one of every twelve housing units. This data set is not the Public Use Micro Sample (PUMS) data set which sampled individual records at the county level of 100,000 or more inhabitants. While the PUMS data are valuable for national-level analysis, they are useless for the study of New England commuter patterns between minor civil divisions (towns). The Number of Workers tapes reported commuters between towns identified by FIPS code, but no characteristics of commuters is reported.

Basic Algorithm

Using this data, the basic problem is to build an algorithm to calculate the strength of "links" between towns such that towns showing strong networks of "linkages" constitute a distinct clustering area. The indicators of linkages is the volume of commuting to work between towns. For example, in Connecticut there are 169 towns which give a 169 x 169 origin/destination matrix of 28,561 cells, less the 169 cells along the diagonal (the noncommuters). However, many of these potential streams of commuters are empty because no commuters are in them.

There are several different methodologies to calculate linkages but the algorithm used in this research is as follows:

- Let: i and j be any pair of towns;
 k be all towns in the system;
 C be the volume of commuters.

$$Link\ I = \frac{C_{i \rightarrow j} + C_{i \leftarrow j}}{\Sigma C_{i \rightarrow k} + \Sigma C_{i \leftarrow k} + \Sigma C_{k \leftarrow j} + \Sigma C_{k \rightarrow j}}$$

where: $C_{i \rightarrow j}$ is the number of workers living in town i but commuting to work in town j ,

$C_{i \leftarrow j}$ is the number of workers living in town j but commuting to work in town i ,

$\Sigma C_{i \rightarrow k}$ is the total number of out-commuters from place i to all places of work k , including j

$\Sigma C_{i \leftarrow k}$ is the total number of in-commuters from all places k , including j , to place i

$\Sigma C_{k \leftarrow j}$ is the total number of out-commuters from j to all places of work k , including i

$\Sigma C_{k \rightarrow j}$ is the total number of in-commuters from all places k , including i , to place j

This measure has an upper limit of 1 in the case where all commuting is in the i and j flows. The lower limit is 0 in the case where the i and j flows are zero but flows to k contain commuters. This utilizes all the commuting data in the entire matrix, since no lower limit of commuting is required. Those pairs of towns with the highest values are viewed as most closely related and form a basis for a cluster. It should be noted that the number of workers who live and work in the same town (stayers or noncommuters) are not part of the link calculation, nor is the total size of the work force (stayers and commuters from other towns) part of the link calculation. Methods to include these elements are discussed in the previous report (Steahr, 1990, pp. 5-7).

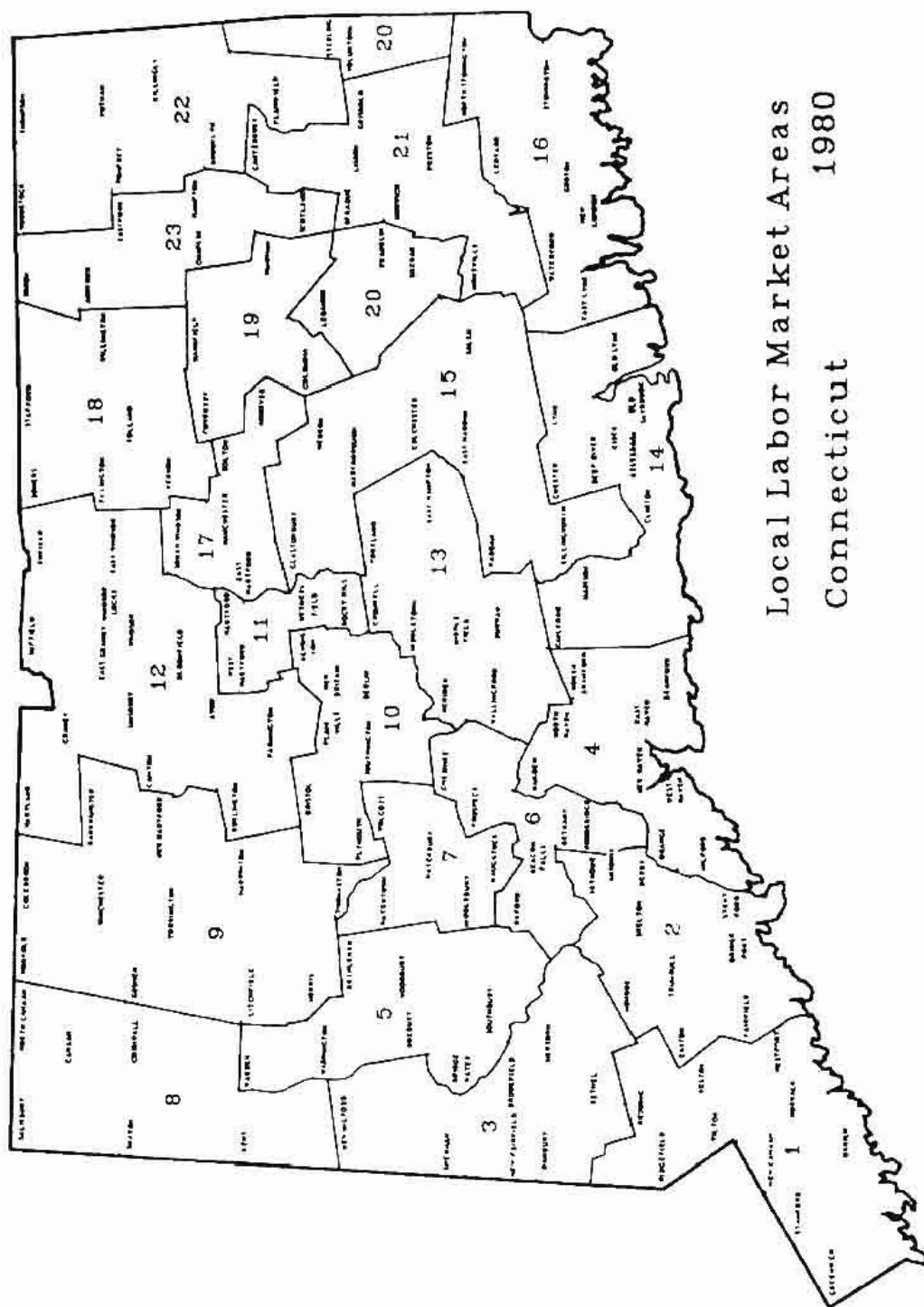
The matrix of linkages is then subjected to cluster analysis as a type of numerical taxonomy. Using the SAS statistical programs, the cluster procedure hierarchically clusters the data set by using one of eleven cluster-

ing algorithms (SAS, 1985). In each method, each town begins a cluster by itself. The two closest clusters are merged to form a new cluster replacing the two old clusters. This process continues until only weak linkages exist, which indicates that an optimal number of clusters has been defined. In this research, the more closely related i and j were in terms of exchanging commuters, the larger is the value of the linkage. In the SAS programs, the values of the linkages are treated as distance measures, so the actual measurement undergoing cluster analysis is (1-Link value). By definition, each cluster of towns is termed a local Labor Market Area (LMA).

Results of Cluster Analysis

Examination of the commuter data set for Connecticut revealed that the total labor force 16 years of age and over was 1,467,415 workers and that 918,624 or 62.6 percent commuted to work to a town different from their town of residence. Only 548,791 or 37.4 percent lived and worked in the same town in 1980. Prior to cluster analysis, employed persons commuting to work outside of New England were removed from the data set. Also, persons working within New England whose town of work is unknown were removed. Of the 918,624 commuters in Connecticut, 749,038 or 81.5 percent reported their town of work. Only 169,586 or 18.5 percent did not report town of work. Of the 169,586 commuters not reporting the town of work, 159,299 or 93.9 percent commuted to work outside of the New England area. This suggests that while there are significant numbers of commuters from Connecticut to areas outside of New England, the internal commuter system is large enough for stable statistical analysis.

The interchange of workers between towns is very large. The 749,038 commuters in Connecticut produced a total of 5,883 commuter streams. A stream of commuters is the number of employed persons who live in one town but who work in a specific different town. The mean number of commuters in all streams in Connecticut is 127.3 and the median size stream is 24 workers. This indicates the extreme skewness of the distribution. The largest commuter stream in the state contained 11,228 workers who live in West Hartford but commute to work in Hartford.



Local Labor Market Areas
Connecticut
1980

Figure 1

A different perspective on the magnitude of commuting within Connecticut is seen by the number of towns to which persons commute. For the 169 towns in the state, the mean number of other towns to which workers commute is 34.8 and the median number is 32. This reveals a very complex pattern of commuting within Connecticut, and to characterize one town or class of towns as "bedroom" communities for a central city is a great oversimplification. In fact, Waterbury provides workers to 75 other towns throughout the state, the largest number of streams for any town.

A final view of commuting in Connecticut may be derived from data on the percent of the work force in each town who work in a different town. Each of the 169 towns in the state has a percentage of its workers who commute to work outside their town of residence. The mean percent figure for all 169 towns is 68.6, and the median percent is 72.9. This suggests a negative skew in the distribution but it is still a high proportion.

In brief, these data demonstrate the large volume and high complexity of commuting in Connecticut. The goal is to organize this pattern into fewer systems. The concept of a local labor market area is used for that purpose and the results of that analysis are presented below. The clusters of towns identified as constituting local labor market areas are shown in Figure 1 and the individual towns are listed in Appendix A. There are a total of 23 local labor market areas for the 169 towns for the state. The largest is area 12 which contains fourteen towns located north of Stratford. The smallest in terms of the number of towns involved are areas 19 and 11 with four towns each. Area 11 is the Hartford-West Hartford area, and area 19 is the Mansfield-Windham area.

Several important observations may be made about these local labor market areas. They are similar to, but not identical with, labor market areas defined by the Connecticut Department of Labor, Employment Security Division in 1978. This classification resulted in seventeen labor market areas. Comparisons with our findings show that the larger areas as defined by the Connecticut Department of Labor, such as Hartford, are divided into smaller labor market areas. However, the general similarity of the local labor markets by two independent methodologies suggests compatible results.

Another observation concerning the pattern of local labor market areas is their lack of conformity to metropolitan statistical area boundaries. The larger Hartford metropolitan area as defined by the Census Bureau is composed of several distinct labor market areas which overlap metropolitan boundaries to include nonmetropolitan towns. Because we have included all towns, distinct local labor market areas are found in non-metropolitan parts of the state.

Given the fact that these labor market areas are defined in terms of actual day-to-day commuting to work flows, it may be hypothesized that other social and economic activities of these workers are captured within the areas boundaries. For example, selection of retail outlets for food shopping, clothing and medical supplies may occur frequently within the commuting towns. Patterns of visitation with friends, location of parks and recreation facilities for the use of leisure time, and the search for new housing may occur primarily within labor market area boundaries. Data relevant to these possibilities are not part of this report but will constitute future research elaborations to demonstrate that these areas may be viewed as social areas rather than simply work areas.

Section III

DESCRIPTION OF LOCAL LABOR MARKET AREAS IN CONNECTICUT

This element of the research project required a separate, additional data set because the commuter data used to identify the local labor markets did not contain information on characteristics of the commuters. Fortunately, there is the *Census of Population: 1980 Journey-to-Work File* that contains selected characteristics of commuters. This special subject summary tape file provides sample data on journey to work characteristics arranged in sixteen tables. This includes information on sex by household relationship, age, race, Spanish origin, occupation, industry, class of worker, earnings, means of transportation to work, aggregate travel time and workers with a public transportation disability. The file contains this information for flows between minor civil divisions within the New England states. Selected parts of this data base are used to describe the local labor market areas in Connecticut.

Within Area Workers

One of the objectives of cluster analysis of commuter flows is to establish groups of towns which interchange workers with each other more than with other towns; i.e., form a cohesive labor market area. The extent to which that is the case for each of the 23 local labor market areas in Connecticut may be judged from Table 1 on the Work Force Within LMA. The first entry in this table is for Labor Market Area 1 which is comprised of 10 towns located in the southwest section of the state. There are a total of 152,783 persons 16 years of age or over working in the labor force in these 10 towns. Combining these 10 towns as a single geographic labor market results in 122,127 workers (or 80.0 percent) living and working within this labor market area. The balance of the work force in this labor market area commute in from other areas. There are a total of 30,656 workers or 20.0 percent of the work force in LMA 1 who are in-commuters from other LMAs. The large majority of 80 percent of the workers living and working within Labor Market Area 1 indicates an area with a high level of interdependence relative to the rest of the towns within Connecticut.

Table 1: Work Force Within LMA, by Resident Workers and In-Commuters, Connecticut, 1980

Labor Market Area	Number of Towns	Labor Market Work Force	Resident Workers		In-Commuters*	
			Number	Percent	Number	Percent
1	10	152,783	122,127	80.0	30,656	20.0
2	10	144,958	118,311	81.6	26,647	18.4
3	7	54,154	44,259	81.7	9,895	18.3
4	9	170,206	131,823	77.4	38,383	22.6
5	7	7,548	4,440	58.8	3,108	41.2
6	7	13,805	5,616	40.7	8,189	59.3
7	5	61,864	50,105	81.0	11,759	19.0
8	6	5,213	4,484	86.0	729	14.0
9	11	27,619	23,158	83.8	4,461	16.2
10	7	92,057	71,160	77.3	20,897	22.7
11	4	153,096	69,029	45.1	84,067	54.9
12	14	85,480	49,913	58.4	35,567	41.6
13	8	68,259	50,277	73.7	17,982	26.3
14	9	23,387	18,151	77.6	5,236	22.4
15	8	13,635	7,628	55.9	6,007	44.1
16	7	66,527	51,089	76.8	15,438	23.2
17	5	64,038	31,044	48.5	32,994	51.5
18	6	15,462	11,203	72.5	4,259	27.5
19	4	20,194	14,440	71.5	5,754	28.5
20	5	2,220	1,066	48.0	1,154	52.0
21	7	23,778	17,549	73.8	6,229	26.2
22	7	19,666	17,298	88.0	2,368	12.0
23	6	1,200	817	68.1	383	31.9
Totals	169	1,287,149	914,987	71.1	372,162	28.9

*Workers who live in towns outside the labor market area of work.

The other entries in Table 1 show considerable variation in the percent of the work force in each labor market who are resident workers. The percentage for the state is 71.1, meaning that 914,987 of the 1,287,149

persons in the labor force live and work within the same labor market area. However, the various areas range from a high of 88.0 percent for Labor Market Area 22 containing 7 towns in the northeast section of the state to a low of 40.7 percent for Labor Market Area 6 containing 7 towns around Beacon Falls. In terms of the overall Table 1 distribution, 7 of the 23 labor market areas reported resident workers of over 80 percent, 8 reported resident workers of between 70 to 79 percent, 1 reported resident workers at 68 percent, 3 reported resident workers between 50 to 59 percent and 4 reported resident workers between 40 to 49 percent. The larger the percentage of workers in a labor market who both live and work in that LMA, the more cohesive that LMA is.

Socioeconomic Characteristics of Labor Markets

Age

Selected variables from the commuter tape described previously will be used to characterize the work force of each labor market in Connecticut. Table 2 presents data on the total employed population by age for each labor market in the state in 1980. The percentages in this table and subsequent tables in this discussion are based on the total work force 16 years of age and over in each area. For example, for Labor Market Area 1 there are 152,783 persons in the work force (Table 1) but 20 percent of them (30,656) are incommuters from towns outside of this labor market. The figure of 6.6 percent in the age group 16-19 years of age shown in Table 2 is based on the total of 152,783, including those who are in-commuters from outside the labor market area. In other words, the percentage base is all workers in each labor market area regardless of place of residence.

The various age groupings as contained in the basic data show different degrees of variation for each age category. Workers between 16 to 19 years of age in 1980 ranged from a low of 5.1 percent in Labor Market 8 (the northwest corner) to a high of 12.1 percent in Labor Market 20 (the Franklin and Lebanon area). In terms of the overall distribution for this age group, there is relative concentration within the 6.0 to 9.9 percentage levels with 17 labor market areas reporting these figures.

The next age group of employed persons, 20 to 24 years of age, showed a slightly higher degree of variation across labor market areas. They ranged from a low of 9.5 percent of this age group employed in

Table 2: Total Employed Persons by Age, Local Labor Market Areas, Connecticut, 1980

Local Labor Market Area	Age Group					Total
	16-19	20-24	25-54	55-64	65+	
1	6.6	11.5	64.1	14.3	3.5	100.0
2	6.9	13.2	60.3	16.5	3.1	100.0
3	8.5	13.1	64.0	11.7	2.7	100.0
4	6.8	13.0	62.2	14.6	3.4	100.0
5	7.7	11.4	62.0	13.3	5.5	100.0
6	8.0	10.6	62.2	16.4	2.9	100.0
7	7.8	12.3	60.7	16.1	3.1	100.0
8	5.1	11.1	58.9	16.5	8.4	100.0
9	6.7	12.2	60.8	16.6	3.8	100.0
10	8.3	13.0	60.3	15.9	2.6	100.0
11	5.3	14.1	63.9	13.8	2.8	100.0
12	8.8	14.6	62.4	11.5	2.7	100.0
13	8.7	12.9	62.2	13.6	2.6	100.0
14	9.3	11.7	61.1	14.5	3.3	100.0
15	11.3	10.9	62.9	11.9	2.9	100.0
16	9.2	16.4	61.9	10.5	2.1	100.0
17	7.2	13.9	62.5	14.0	2.4	100.0
18	11.6	11.2	60.7	12.8	3.7	100.0
19	9.1	22.5	55.7	10.0	2.6	100.0
20	12.1	18.2	57.9	10.5	1.3	100.0
21	7.8	14.3	61.3	13.3	3.2	100.0
22	7.7	11.3	63.0	13.9	4.1	100.0
23	11.3	9.5	60.2	11.9	7.1	100.0

Note: Percentages in this table are based on the total work force 16 years of age and over in each local labor market area. Percentages may not add up to exactly 100% due to rounding.

Labor Market Area 23 (the Ashford and Eastford area) to a high of 22.5 percent of this age group employed in Labor Market Area 19 (the Mansfield and Windham area). In terms of the overall distribution for this age group, there is concentration within the 10.0 to 13.9 percentage levels with 16 labor market areas reporting these figures.

The age group of 25 to 54 years of age is the largest and appeared in the data set as a single figure, without smaller intervals. As might be expected, the labor market areas show a high degree of consistency with 20 of the 23 areas reporting between 60.0 and 64.1 percent of their employed persons in this broad age category. The lowest proportion is 55.7 percent in Labor Market 19 (the Mansfield and Windham area).

The final two age groups, 55 to 64 years of age and 65 and over, show some variation across labor market areas but are essentially similar. The low percentage of employed persons 55 to 64 years old is for Labor Market Area 19 with 10.0 compared to the high percentage of 16.6 for Labor Market Area 9 (the Torrington and Litchfield area). The elderly employed persons also have relatively stable proportions, with 18 of the 23 labor market areas reporting between 2.0 to 3.9 percent.

Race

In addition to age, the employed population is reported by racial category and these data are shown in Table 3. As may be expected for the work force within Connecticut, the majority of persons are in the White category. This group ranges from a high of 99.5 percent for Labor Market Area 23 (the Ashford and Eastford area) to a low of 87.1 percent for Labor Market Area 11 (the Hartford area). Employed persons 16 years of age and over in the Black category are a small proportion of the work force in all labor market areas, with the highest percent being 9.9 in the Labor Market Area 11. The same pattern of small proportions for employed persons in the "other" racial category is observed. The maximum percentage is 3.0 for the Hartford labor market area.

Household Type

Table 4 presents the distribution of male workers by household type in Connecticut labor market areas in 1980. Similar to the other tables in this series, the percentages are based on all employed persons in each labor market area.

The majority of male workers live in complete households with the wife present in each labor market area. The high proportion is 65.5 percent for Labor Market Area 22 (the Putnam and Plainfield area) while the low percent is 52.3 for Labor Market Area 23 (the Ashford and Eastford

Table 3: Total Employed Persons by Racial Category, Local Labor Market Areas, Connecticut, 1980

Local Labor Market Area	Total Work Force	Percent Reporting		
		White	Black	Other
1	100.0	91.3	7.1	1.7
2	100.0	90.7	6.7	2.7
3	100.0	95.6	3.0	1.5
4	100.0	89.4	9.1	1.5
5	100.0	97.5	1.8	.7
6	100.0	96.2	3.3	.5
7	100.0	94.4	3.7	1.9
8	100.0	98.1	1.6	.3
9	100.0	98.3	.9	.8
10	100.0	95.9	2.7	1.4
11	100.0	87.1	9.9	3.0
12	100.0	93.6	4.8	1.6
13	100.0	95.2	3.0	1.8
14	100.0	97.6	1.3	1.1
15	100.0	97.9	1.1	1.0
16	100.0	94.4	3.7	1.8
17	100.0	94.3	4.4	1.3
18	100.0	98.4	1.1	.6
19	100.0	96.5	1.0	2.5
20	100.0	98.2	0.0	1.8
21	100.0	97.0	1.8	1.2
22	100.0	99.1	.4	.5
23	100.0	99.5	.5	0.0

Note: Percentages in this table are based on the total work force 16 years of age and over in each local labor market area. Percentages may not add up to exactly 100% due to rounding.

area). Many of the labor market areas (12 of the 23) report between 60.0 to 63.9 percent male workers with wife present. A much smaller percentage of the employed males have no wife present and 15 of the 23 areas reported between 10.0 to 13.0 percent without a wife present. This category

Table 4: Percentage Distribution of Males Who are Employed by Household Type and Labor Market Area, Connecticut, 1980

Local Labor Market Area	Male Workers				
	Total Percent	Wife Present	No Wife Present	Other HH Member	In Group Quarters
1	100.0	63.1	11.6	24.9	.3
2	100.0	62.7	10.6	25.9	.8
3	100.0	61.1	10.8	27.6	.5
4	100.0	62.0	12.4	24.1	1.5
5	100.0	59.1	8.7	28.3	3.9
6	100.0	62.5	11.6	25.4	.4
7	100.0	62.6	9.8	27.0	.6
8	100.0	58.7	13.2	18.6	10.0
9	100.0	64.7	8.9	25.4	1.0
10	100.0	64.3	11.2	24.0	.5
11	100.0	60.8	15.1	23.2	.9
12	100.0	62.4	11.2	25.9	.5
13	100.0	62.7	10.8	26.0	.5
14	100.0	60.2	10.9	28.3	.7
15	100.0	58.4	12.7	28.6	.3
16	100.0	59.5	11.9	18.2	10.4
17	100.0	64.2	12.0	23.5	.3
18	100.0	60.1	9.1	29.3	1.5
19	100.0	55.2	16.0	18.7	10.0
20	100.0	52.8	9.7	37.5	0.0
21	100.0	63.5	12.3	23.8	.4
22	100.0	65.5	10.0	23.2	1.3
23	100.0	52.3	10.2	34.4	3.1

Note: Percentages in this table are based on the total work force 16 years of age and over in each local labor market area. Percentages may not add up to exactly 100% due to rounding.

includes separated, widowed and divorced males. The category in Table 4 entitled Other Household Member includes persons other than the spouse such as relatives or unrelated household members. For the distribution of male workers, the percentage living with other household mem-

bers is from a high of 37.5 percent for Labor Market Area 20 (the Franklin area) to a low of 18.2 for Labor Market Area 16 (the Groton and New London area). Many of the areas, 12 of the 23, reported proportions between 23.0 and 26.0 percent. The last column in Table 4 shows the proportion of working males who are living in group quarters. This includes persons living in boarding houses, dormitories, military bases and other group quarters. The percentages are small with the largest being reported for Labor Market Area 16 with 10.4 percent (the New London and Groton area with the military presence).

The percentage distribution of women who are employed by household type and labor market area is presented in Table 5. It is immediately clear that the household composition of employed women is significantly different than for employed men. Employed women are much less likely to have the husband present. The highest proportion of married women with their husband present who are working is 6.6 percent for Labor Market Area 5 (the Warren and Washington area). A higher percent of working women are in the category of no husband present. This group includes married women who are separated, widowed or divorced. There is considerable variation in the distribution, ranging from a high of 28.2 percent for Labor Market Area 11 (the Hartford area) to a low of 14.7 percent for Labor Market Area 20 (the Franklin and Lebanon area). However, 10 of the 23 areas reported percentages between 18.0 and 20.0. The most dramatic pattern shown in Table 5 is the high percentages of working women in the "other household member" group. This includes unrelated women living in the same household or women living with relatives. There is a high of 83.1 percent of employed women living in households with other members in Labor Market Area 20 (the Franklin and Lebanon area). The low is 66.8 percent for Labor Market Area 11 (the Hartford area). The majority of the areas, 16 of the 23, reported proportions in the 70 percent range. While these are high percentages, they may be based on small numbers of working women compared to working men. Finally, most LMAs had few female workers who live in group quarters. A notable exception is LMA 19 (the Windham and Mansfield area) with 12.4 percent. This reflects students at The University of Connecticut or Eastern Connecticut State University who work, at least part-time, and live in a dormitory.

Table 5: Percentage Distribution of Women Who are Employed by Household Type and Labor Market Area, Connecticut, 1980

Local Labor Market Area	Female Workers				
	Total Percent	Husband Present	No Husband Present	Other HH Member	In Group Quarters
1	100.0	3.9	22.3	73.3	.4
2	100.0	2.9	21.4	74.6	1.1
3	100.0	3.5	19.3	76.6	.6
4	100.0	3.3	25.1	69.4	2.1
5	100.0	6.6	16.5	75.1	1.8
6	100.0	3.9	14.8	81.0	.4
7	100.0	3.1	20.7	75.5	.6
8	100.0	3.1	23.0	73.0	1.0
9	100.0	2.5	19.5	76.7	1.3
10	100.0	2.4	19.1	77.8	.6
11	100.0	4.0	28.2	66.8	1.0
12	100.0	3.5	18.1	77.6	.8
13	100.0	2.8	19.6	76.8	.9
14	100.0	4.1	17.6	78.1	.2
15	100.0	4.0	14.9	81.0	.1
16	100.0	3.8	22.7	71.0	2.5
17	100.0	3.0	20.8	76.0	.2
18	100.0	2.2	17.6	80.0	.2
19	100.0	2.8	20.0	64.8	12.4
20	100.0	2.2	14.7	83.1	0.0
21	100.0	3.6	18.7	77.3	3.8
22	100.0	2.7	19.0	77.8	.5
23	100.0	4.5	22.0	70.5	3.1

Note: Percentages in this table are based on the total work force 16 years of age and over in each local labor market area. Percentages may not add up to exactly 100% due to rounding.

Occupational Structures

It is also of interest to examine the distribution of total employed persons by occupational classification in each labor market area and these data are presented in Table 6. The distribution of workers over the eight occupational groups will be made. As reported in the basic data, the first occupational group is professional workers and managers. Labor Market Area 1 (the Greenwich and Stamford area) recorded the highest percent at 32.5 of its total work force. Only two other areas, Labor Market Area 11 (the Hartford area) and Labor Market Area 8 (the Canaan and Cornwall area) also had over 30 percent of their workforce in this category. The technician group is a small part of the occupational structure in all labor market areas, with 4.6 percent being the highest reported for Labor Market Area 16 (Groton and New London). Similarly, workers in the sales category comprised approximately 10 percent of the workforce in the labor market areas in Connecticut. Most LMAs (19) had between 8.0 and 12.0 percent in this occupational category.

The occupational group of administrative support revealed significant variation across labor market areas in the state. The high is 27.5 percent for Labor Market Area 11 and the low is 8.6 percent for Labor Market Area 23 (the Ashford and Eastford area). Of the 23 areas, six reported between 15.0 and 20.0 percent of the work force in this category. Service occupations ranged from a high of 22.2 percent of the work force in Labor Market Area 5 (the Warren and Washington area) to a low of 8.6 percent in Labor Market Area 20 (Franklin and Lebanon area). Other areas, 8 of the 23, reported between 10.0 to 12.0 percent of their work force in service occupations. As might be expected in the state, not many of the total employed persons are located in farming and forestry occupations. However, Labor Market Area 20 (the Lebanon and Franklin area) has 25.5 percent employed in farming and forestry. Labor Market Area 23 (the Ashford and Eastford area) also reported a high of 13.2 percent. The rest of the labor market areas all reported less than 7 percent in this occupational group, and most (16) had less than 2.0 percent.

Employed persons in crafts and repair occupations are a significant proportion of the labor force in most labor market areas. The highest percent is 19.2 for Labor Market Area 16 (the Groton and New London area) and the lowest is 7.5 for Labor Market Area 19 (the Mansfield and

Table 6. Percentage Distribution of Total Employed Persons by Occupation,

Occupation	1	2	3	4	5
Prof./Manag.	32.5	22.9	24.8	25.9	28.7
Technicians	2.9	2.8	3.9	3.5	2.3
Sales	10.5	8.9	8.8	9.7	11.0
Admin. Support	22.0	18.9	17.7	19.8	9.8
Service	9.8	10.8	11.2	11.6	22.2
Farming/Forest	.9	.4	.7	.5	5.3
Crafts/Repair	10.7	14.0	13.9	11.8	10.4
Operators/Labor	10.6	21.3	19.0	17.2	10.3
Total	100.0	100.0	100.0	100.0	100.0
Occupation		13	14	15	16
Prof./Manag.		23.7	24.5	25.6	25.0
Technicians		3.2	2.0	2.3	4.6
Sales		8.1	11.8	10.7	8.2
Admin. Support		16.8	15.5	15.3	13.9
Service		12.6	12.7	14.7	13.2
Farming/Forest		1.2	1.1	3.6	1.2
Crafts/Repair		14.4	13.3	14.3	19.2
Operator/Labor		20.0	19.2	13.6	14.8
Total		100.0	100.0	100.0	100.0

Note: Percentages in this table are based on the total work force 16 years of age
Percentages may not add up to exactly 100% due to rounding.

Local Labor Market Areas, Connecticut, 1980

Local Labor Market Area						
6	7	8	9	10	11	12
23.4	22.6	30.9	19.3	19.6	30.9	25.5
2.4	3.2	2.7	1.9	2.8	4.1	4.0
8.8	8.3	8.6	8.0	7.6	9.0	10.2
13.0	18.3	13.7	15.7	16.3	27.5	19.1
13.0	12.2	13.2	10.8	10.4	10.3	11.1
3.2	.5	7.0	1.7	.4	.4	1.3
14.7	12.6	12.8	15.3	15.7	8.1	11.9
21.5	22.3	11.0	27.3	27.3	9.7	16.9
100.0	100.0	100.0	100.0	100.0	100.0	100.0
17	18	19	20	21	22	23
24.0	23.2	28.9	14.1	24.2	17.6	26.8
3.9	1.6	4.1	0.0	2.4	2.7	.7
8.2	10.6	7.0	4.5	10.6	6.5	9.1
17.1	15.2	19.0	9.5	16.6	14.4	8.6
9.1	16.9	19.3	8.6	14.5	13.3	10.6
.5	2.1	1.4	25.5	1.7	1.9	13.2
17.4	11.8	7.5	12.7	11.7	14.6	16.2
19.7	18.6	12.7	25.0	18.3	29.0	14.9
100.0	100.0	100.0	100.0	100.0	100.0	100.0

and over in each local labor market area.

Windham area). Many of the other labor market areas reported between 10 to 14 percent employed in crafts and repair. The final occupational group in Table 6 is operators and laborers and there is significant variation across labor market areas. The highest is 29.0 percent in Labor Market Area 22 (the Pomfret and Putnam area) while the lowest is for Labor Market Area 11 at 9.7 percent (the Hartford area). Eight of the labor market areas reported more than 20 percent of their labor force in the operators and laborers category.

Industrial Structure

The percentage distribution of the total employed population by industrial category for each local labor market in Connecticut in 1980 is shown in Table 7. In terms of the first industrial group of construction industries, none of the 23 labor market areas reported over 10 percent. In fact, the highest was 9.3 percent in Labor Market Area 23 (the Ashford and Eastford area). However, the second industrial category of manufacturing activities revealed significant variation across labor market areas. The range is from a high of 46.5 percent for Labor Market Area 17 (the East Hartford and Manchester area) to a low of 8.1 percent for Labor Market Area 5 (the Warren and Washington area). Twelve of the 23 labor markets reported over 30 percent of their labor force working in manufacturing industries.

The industrial groups of transportation and wholesale trade did not contain significant proportions of workers in any of the local labor market areas. The highest percentage of workers in either of these two groups is 9.7 percent of the workers in transportation in Labor Market Area 4 (the Milford and New Haven area). Proportions for all other areas are lower than that for both groups. However, employment in the industrial category of retail trade is significant for all the labor market areas. The range is from a high of 22.9 percent in Labor Market Area 18 (the Stafford and Tolland area) to a low of 6.4 percent for Labor Market Area 20 (the Franklin and Lebanon area).

The industrial group of finance, insurance and real estate (F.I.R.E.) contains less than 10 percent of the employed work force in all the labor market areas except two; Labor Market Area 11 with the high of 26.1 percent (the Hartford area) and Labor Market Area 12 with 11.1 percent (the

Avon and Simsbury area). A similar pattern is observed for the next two industrial classifications of business repair and personal services. The highest concentration of workers for either groups is 7.7 percent in business repair in Labor Market Area 1 (the Norwalk and Redding area). All other areas recorded smaller proportions employed in these groups.

Professional services is a significant industrial category for all of the labor market areas in Connecticut. The range is wide, however, with a high of 48.1 percent employed in this industry in Labor Market Area 19 (the Mansfield and Windham area) and a low level of 8.8 percent in Labor Market Area 20 (the Franklin and Lebanon area). Of all the labor market areas, 13 reported between 20 and 30 percent employed in professional services industries.

The final two categories in Table 7 are public administration and an "all other" residual group. With two exceptions, none of the labor market areas reported over 8.5 percent of their workers in any of these groups. The two exceptions are for Labor Market Area 20 (the Franklin and Lebanon area) with 37.2 percent employed in the other category and Labor Market Area 23 (the Ashford and Eastford area) with 13.5 percent employed in the other category. The major industries in this "all other" category are extractive (farming, fishing, forestry and mining) and entertainment and recreation services.

Earnings Structure

The percentage distribution of the reported earnings in 1979 by employed persons in each labor market area in Connecticut is shown in Table 8. The data in this table are percentages of workers in each earnings category and the figure at the bottom of each labor market area is the number of workers upon which the percentage figures are based. In other words, in Labor Market Area 1 there are 20.8 percent of the total of 148,748 workers reporting earnings of between \$10,000 - \$14,999. This would yield a figure of 29,750 employed workers in this category but for simplicity the number of workers representing each income category was omitted in favor of proportions that may be compared across labor market areas. It should also be noted that these total employed figures for each labor market (the 148,748 in Area 1) do not match the total employed figures from Table 1 (the 152,783 for Area 1). The reason is that no all employed per-

Table 7. Percentage Distribution of Total Employed Persons by Industry, Local

Industry	Local Labor Market Area				
	1	2	3	4	5
Construction	5.3	3.8	5.7	3.8	8.4
Manufacturing	29.0	38.7	37.3	23.8	8.1
Transportation	5.5	5.1	4.0	9.7	3.8
Wholesale Trade	3.4	3.1	2.3	4.9	2.0
Retail Trade	15.2	14.4	14.9	15.1	20.6
F.I.R.E.	8.0	5.6	4.1	6.2	5.1
Business Repair	7.7	3.7	4.0	3.8	3.9
Personal Service	3.0	1.9	1.9	2.1	5.8
Professional Service	18.1	18.9	20.8	25.4	31.4
Public Admin.	2.4	3.6	3.2	3.9	5.3
All Other	2.5	1.3	1.8	1.4	5.7
Total	100.0	100.0	100.0	100.0	100.0

Industry	13	14	15	16
Construction	4.0	5.6	6.6	4.1
Manufacturing	35.7	30.6	14.5	38.2
Transportation	4.3	5.2	4.7	5.1
Wholesale Trade	3.0	1.7	4.3	1.6
Retail Trade	15.0	20.1	20.7	15.7
F.I.R.E.	4.3	4.3	6.2	2.9
Business and Repair	2.6	3.7	5.5	3.0
Personal Service	1.7	2.9	3.1	2.4
Professional Service	23.8	20.5	24.4	20.4
Public Admin.	3.8	2.8	4.3	5.0
All Other	1.8	2.5	5.7	1.6
Total	100.0	100.0	100.0	100.0

Note: Percentages in this table are based on the total work force 16 years of age and 100% due to rounding.

Labor Market Areas, Connecticut, 1980

6	7	8	9	10	11	12
7.1	2.9	7.3	5.5	4.0	3.0	4.1
32.2	37.3	13.5	41.6	45.0	13.2	32.9
5.1	5.2	3.8	3.6	4.4	5.8	3.8
5.2	3.1	1.4	2.2	2.6	3.4	4.4
11.3	14.8	14.7	16.5	14.6	11.1	16.6
3.6	4.7	4.4	3.9	3.3	26.1	11.1
4.6	3.5	4.6	3.0	2.3	4.2	3.8
2.1	2.1	7.6	1.9	1.7	2.3	2.0
21.0	21.4	30.3	17.1	18.7	21.6	16.2
3.6	4.0	4.4	2.8	2.4	8.5	3.0
4.2	1.0	7.9	2.0	1.0	1.0	2.4
100.0	100.0	100.0	100.0	100.0	100.0	100.0
17	18	19	20	21	22	23
3.9	5.0	2.8	5.3	3.8	3.3	9.3
46.5	23.4	13.9	17.5	28.2	44.8	15.0
3.2	5.0	3.5	7.5	5.6	4.0	5.2
4.2	2.1	1.6	7.6	3.2	1.6	.8
13.4	22.9	15.9	6.4	15.9	12.4	12.9
5.3	3.7	2.4	1.1	4.0	2.7	3.8
5.6	2.9	2.5	5.3	2.6	1.6	2.7
1.5	3.7	1.6	.7	2.5	1.4	3.1
13.2	23.3	48.1	8.8	26.4	20.7	27.0
2.1	5.3	5.7	2.6	5.3	3.4	6.7
1.2	2.8	2.1	37.2	2.4	4.2	13.5
100.0	100.0	100.0	100.0	100.0	100.0	100.0

over in each local labor market area. Percentages may not add up to exactly

sons reported their income. The percentage distributions in Tables 2 through 7, however, are based on the labor force sizes presented in Table 1.

Several patterns are apparent in Table 8. One clear pattern is the relatively large percentages in each labor market of workers reporting annual earnings in 1979 in the \$1 to \$3,999 category. Ten of the 23 labor market areas in Connecticut reported 20 percent or more of their workers falling into this low category. This represents large numbers of part-time and/or seasonal workers in these LMAs. The next three income categories ranging from \$4,000-\$5,999, \$6,000-\$7,999, and \$8,000-\$9,999 have approximately similar proportions of workers. Typical percentages range from about 8 to 11, with a few exceptions in the 13 or 14 percent values.

A second clear pattern in Table 8 is the relative concentration of workers in the earnings category of \$10,000-\$14,999. Twenty of the 23 labor market areas reported workers earnings at the 20 to 24 percent level in this category. The lowest level is 19.3 percent in this earning group for Labor Market Area 15 (the East Haddam and Haddam area). The adjacent income group of \$15,000-\$19,999 is also significant for most of the labor market areas. Eleven of the 23 areas reported over 15 percent of their workers' earnings in this category.

A final pattern in Table 8 is the relative steady proportions of workers falling into the \$20,000-\$24,999 and \$25,000-\$49,999 earnings groups. The variability is rather narrow in both categories, with most figures within the 6 to 10 percent range. The highest income group of \$50,000 or more contains fewer than 2.3 percent of all workers in all areas except Labor Market Area 1 in which 4.5 percent of the earners are in this high category.

Median earnings reflects the middle value by the earnings distributions; for each LMA the median earnings is that value which has half of the workers above it and half below it. There is considerable variation across LMAs in their median earnings; LMA 17 (East Hartford and Manchester) had the highest at \$13,634, while LMA 20 (Franklin and Lebanon) was lowest at \$7,914. Median earnings will be discussed further in the next section.

Section IV

CLASSIFYING LOCAL LABOR MARKETS AREAS

The cluster analysis procedure described earlier succeeded in reducing Connecticut's 169 towns to 23 LMAs. Because we wish to examine, in a preliminary way, the economic performance of LMAs, further simplification will be helpful. In particular, we will classify LMAs according to their primary economic base or bases, on the one hand, and according to their metropolitan status, on the other. We will then examine, as an indicator of economic performance, average 1979 median earnings for the LMAs classified by economic base and by metropolitan status.

LMAs Classified by Economic Base

A simple and conventional scheme for classifying workers is based upon the fundamental nature of the work they do. Accordingly, workers are engaged in **extracting** materials from nature, as in farming, fishing, forestry and mining; or they are employed in **manufacturing** goods from extracted material, as with fabricators, assemblers and the like; or they are providing services, as in the professions, administration, personal and repair services, etc.

Once workers have been classified according to this schema, it becomes possible to characterize cities or, as in the present case, local labor market areas as being more or less specialized in one (or more) of these three industrial categories. Information contained in Table 7 allows us to classify Connecticut's 23 LMAs in 1980 in terms of their industrial base or specialization. Operationally, a LMA is considered to be specialized in **extractive** industry if 10 percent or more of the LMA's workers are in the "all other" industrial category. While this category is defined to include entertainment and recreation service workers, a review of Table 7 indicates that fewer than 3 percent of workers in most LMAs are so employed. Further, information contained in Table 6 is also helpful. The occupational category of "Farming, Forest" refers to extractive occupations and provides additional support for our interpretation of the "All other" industrial category as being primarily extractive. Hence, we conclude that two LMAs—20 and 23—are specialized in extraction. If 30 percent or more of a

Table 8. Percentage Distribution of Earnings in 1979, Total Employed Person

Earnings in 1979	Local Labor Market Area				
	1	2	3	4	5
\$1 - \$3,999	15.6	16.5	17.7	17.5	24.1
4,000 - 5,999	6.6	7.1	7.4	8.0	8.1
6,000 - 7,999	7.2	8.1	8.8	8.3	12.1
8,000 - 9,999	8.2	9.1	10.9	9.8	8.5
10,000 - 14,999	20.8	22.0	21.3	21.8	23.3
15,000 - 19,999	14.6	16.4	15.0	15.4	10.2
20,000 - 24,999	9.4	9.8	8.1	8.7	6.6
25,000 - 49,999	13.1	9.2	9.0	8.9	5.6
50,000 or more	4.5	1.9	1.9	1.7	1.4
Total Labor Force	148,748	141,318	52,713	165,640	7,273
Median Earnings	\$12,980	\$11,864	\$11,221	\$11,468	\$9,341

Earnings in 1979	13	14	15	16
\$1 - \$3,999	17.5	24.0	25.5	16.2
4,000 - 5,999	8.0	9.6	10.7	8.8
6,000 - 7,999	8.7	7.4	8.9	10.0
8,000 - 9,999	9.7	10.5	7.9	8.3
10,000 - 14,999	22.6	20.8	19.3	19.9
15,000 - 19,999	16.9	12.8	12.1	17.9
20,000 - 24,999	8.7	6.9	7.7	9.1
25,000 - 49,999	6.8	6.6	5.7	8.8
50,000 or more	1.1	1.4	2.3	.9
Total Labor Force	66,669	22,488	13,268	64,582
Median Earnings	\$11,350	\$9,714	\$9,241	\$11,683

Note: Percentages in this table are based on the total work force 16 years of age and

by Local Labor Market Area in Connecticut

6	7	8	9	10	11	12
20.3	17.9	25.7	19.4	16.5	13.1	17.7
8.3	8.7	10.3	7.9	7.1	6.3	7.6
9.7	10.5	8.8	11.0	8.4	8.3	8.0
8.7	11.2	11.2	11.8	9.1	11.8	9.1
20.9	21.2	20.8	24.0	23.1	24.0	20.9
16.5	14.4	12.8	13.2	18.4	16.3	15.2
7.2	7.7	3.5	6.4	9.7	9.4	9.4
6.8	6.8	4.9	5.1	6.5	8.9	10.4
1.5	1.6	2.0	1.1	1.3	1.9	1.8
13,555	60,455	5,113	26,907	90,003	150,040	83,636
\$10,218	\$10,401	\$8,9297.9	\$9,983	\$11,926	\$12,188	\$11,818
17	18	19	20	21	22	23
14.8	26.4	29.9	25.0	20.4	18.1	25.5
6.2	9.1	8.8	11.6	9.3	10.2	11.1
7.1	10.4	9.1	14.0	10.3	13.1	11.3
7.8	9.9	11.3	9.3	13.0	13.2	5.5
19.4	20.9	20.6	23.2	21.4	22.3	24.1
18.6	10.9	10.1	8.3	13.8	13.9	15.1
12.5	6.2	4.0	4.3	6.3	5.2	1.2
12.1	5.1	5.9	4.1	4.7	3.1	5.1
1.6	1.1	.3	080	.8	1.0	1.0
62,967	14,939	19,582	2,052	22,987	19,229	1,136
\$13,634	\$8,828	\$8,389	\$7,914	\$9,538	\$9,303	\$8,764

over in each local labor market area.

LMA's workers are in the manufacturing category (Table 7), then those LMAs are considered to be specialized in **manufacturing**. There were 12 such LMAs in 1980 (see Table 9). Finally, when 60 percent or more of a LMA's workers are employed in transportation, wholesale trade, retail trade, FIRE, business repair, personal services, professional services or public administration in Table 7, then that LMA is considered to be specialized in **services**. There were 12 LMAs so classified (see Table 9).

Clearly, it is conceivable that one LMA might just meet the criteria for inclusion in all three categories. None of Connecticut's LMAs do this. It is more likely that a LMA might meet criteria for inclusion in two categories. Indeed, three LMAs do this: LMA 12 and 14 have both manufacturing and services as economic bases, and LMA 23 has extractive and service economic bases.

As Table 9 makes clear, most of Connecticut's LMAs in 1980 were specialized in either manufacturing or services, or both. Only one, LMA 20, was specialized exclusively in extractive industries. The two predominant economic bases, manufacturing and services, had rather comparable 1979 earnings: \$10,243 and \$10,100 respectively. The range (that is, the low and high values) was somewhat higher for individual manufacturing LMAs (\$9,303 for LMA 22 to \$13,634 for LMA 17) than for service LMAs (\$8,389 for LMA 19 to \$12,980 for LMA 1). The average 1979 median earnings for the two extractive LMAs—\$8,339—was considerably lower than for the other two economic bases; in fact, this average for the

Table 9. Labor Market Areas Included in the Three Economic Base Categories and Average 1979 Median Earnings of the Three Economic Base Categories.

Economic Base*	Labor Market Areas Included	Median Earnings
Extractive	20, 23	\$ 8,339
Manufacturing	2, 3, 6, 7, 9, 10, 12, 13, 14, 16, 17, 22	\$10,243
Services	1, 4, 5, 8, 11, 12, 14, 15, 18, 19, 21, 23	\$10,100

*See text for definitions of the three economic base categories.

This table is based upon information presented in Tables 7 and 8.

two extractive LMAs is less than the **lower limit** of the range for manufacturing and service industries.

LMAs Classified by Metropolitan Status

In addition to classifying local labor market areas on the basis of their major industrial activities, LMAs may also be distinguished on the basis of their metropolitan character. In 1980 Connecticut had 13 central cities of metropolitan areas as designated by the U.S. Office of Management and Budget, and used extensively by the U.S. Bureau of the Census.

If a LMA contains one (or more) central city of a metropolitan area, that LMA will be classified as **metropolitan**. If no central city is present in a LMA, it will be designated **nonmetropolitan**.

These 13 central cities are contained within ten LMAs as follows: LMA 1 (Stamford, Norwalk), LMA 2 (Bridgeport), LMA 3 (Danbury), LMA 4 (New Haven, West Haven), LMA 7 (Waterbury), LMA 10 (Bristol, New Britain), LMA 11 (Hartford), LMA 13 (Meriden), LMA 16 (New London) and LMA 21 (Norwich). The ten metropolitan LMAs had an average 1979 median earnings of \$11,462, with a range of \$9,538 (LMA 21) to \$12,980 (LMA 1). The remaining 13 LMAs, nonmetropolitan in character, had average median earnings of \$9,698, considerably lower than the corresponding figure for metropolitan LMAs. Further, the range of median earnings for nonmetropolitan LMAs—for \$7,914 (LMA 20) to \$13,634 (LMA 17)—shows that these LMAs are a more heterogeneous group than their metropolitan counterparts, at least as far as earnings are concerned.

The two major conclusions that may be drawn from the above analysis are that (1) extractive LMAs performed substantially worse than either manufacturing or service LMAs, and (2) nonmetropolitan LMAs also performed substantially worse than metropolitan LMAs with respect to earnings in 1979.

**APPENDIX A: 1980 LOCAL LABOR MARKET AREAS
TOWNS BY FIPS CODES
CONNECTICUT**

Labor Market Area 1

FIPS Code	Town Name
9001025	Darien
9001040	Greenwich
9001050	New Canaan
9001065	Norwalk
9001070	Redding
9001075	Ridgefield
9001090	Stamford
9001105	Weston
9001110	Westport
9001115	Wilton

Labor Market Area 2

9001010	Bridgeport
9001030	Easton
9001035	Fairfield
9001045	Monroe
9001080	Shelton
9001095	Stratford
9001100	Trumbull
9009005	Ansonia
9009030	Derby
9009105	Seymour

Labor Market Area 3

9001005	Bethel
9001015	Brookfield
9001020	Danbury
9001055	New Fairfield
9001060	Newtown
9005065	New Milford
9001085	Sherman

Labor Market Area 4

9009020	Branford
9009035	East Haven
9009045	Hamden
9009065	Milford
9009075	New Haven
9009080	North Branford
9009085	North Haven
9009090	Orange
9009125	West Haven

Labor Market Area 5

9005010	Bethlehem
9005015	Bridgewater
9005085	Roxbury
9005110	Warren
9005115	Washington
9005130	Woodbury
9009110	Southbury

Labor Market Area 6

9007005	Chester
9009010	Beacon Falls
9009015	Bethany
9009025	Cheshire
9009095	Oxford
9009100	Prospect
9009135	Woodbridge

Labor Market Area 7

9005120	Watertown
9009060	Middlebury
9009070	Naugatuck
9009120	Waterbury
9009130	Wolcott

Labor Market Area 8

9005020	Canaan
9005030	Cornwall
9005045	Kent
9005075	North Canaan
9005090	Salisbury
9005095	Sharon

Labor Market Area 9

9005005	Barkhamsted
9005025	Colebrook
9005035	Goshen
9005040	Harwinton
9005050	Litchfield
9005055	Morris
9005060	New Hartford
9005070	Norfolk
9005100	Thomaston
9005105	Torrington
9005125	Winchester

Labor Market Area 10

9003010	Berlin
9003020	Bristol
9003090	New Britain
9003095	Newington
9003100	Plainville
9003115	Southington
9005080	Plymouth

Labor Market Area 11

9003070	Hartford
9003105	Rocky Hill
9003130	West Hartford
9003135	Wethersfield

Labor Market Area 12

9003005	Avon
9003015	Bloomfield
9003025	Burlington
9003030	Canton
9003035	East Granby
9003045	East Windsor
9003050	Enfield
9003055	Farmington
9003065	Granby
9003075	Hartland
9003110	Simsbury
9003125	Suffield
9003150	Windsor
9003155	Windsor Locks

Labor Market Area 13

9007015	Cromwell
9007025	Durham
9007035	East Hampton
9007055	Middlefield
9007060	Middletown
9007070	Portland
9009055	Meriden
9009115	Wallingford

Labor Market Area 14

9007010	Clinton
9007020	Deep River
9007040	Essex
9007065	Old Saybrook
9007075	Westbrook
9009040	Guilford
9009050	Madison
9011050	Lyme
9011075	Old Lyme

Labor Market Area 15

9003060	Glastonbury
9003085	Marlborough
9007030	East Haddam
9007045	Haddam
9007050	Killingworth
9011010	Colchester
9011085	Salem
9013030	Hebron

Labor Market Area 16

9011015	East Lyme
9011030	Groton
9011040	Ledyard
9011060	New London
9011065	North Stonington
9011095	Stonington
9011105	Waterford

Labor Market Area 17

9013005	Andover
9013010	Bolton
9003040	East Hartford
9003080	Manchester
9003120	South Windsor

Labor Market Area 18

9013025	Ellington
9013040	Somers
9013045	Stafford
9013050	Tolland
9013060	Vernon
9013065	Willington

Labor Market Area 19

9013015	Columbia
9013020	Coventry
9013035	Mansfield
9015070	Windham

Labor Market Area 20

9011005	Bozrah
9011020	Franklin
9011035	Lebanon
9011100	Voluntown
9015060	Sterling

Labor Market Area 21

9011025	Griswold
9011045	Lisbon
9011055	Montville
9011070	Norwich
9011080	Preston
9011090	Sprague
9015015	Canterbury

Labor Market Area 22

9015010	Brooklyn
9015035	Killingly
9015040	Plainfield
9015045	Pomfret
9015050	Putnam
9015065	Thompson
9015075	Woodstock

Labor Market Area 23

9013055	Union
9015005	Ashford
9015020	Chaplin
9015025	Eastford
9015030	Hampton
9015055	Scotland

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