A COMPARATIVE ANALYSIS OF EMPLOYMENT CHANGE IN THE NORTHEAST

Jeffrey D. White and Steven E. Hastings

ABSTRACT

A modified version of shift-share analysis is used to examine spatial, temporal and compositional trends in employment growth in the Northeastern United States during the 1970s. The analysis is presented for subregions, states and metropolitan and nonmetropolitan counties. Secondary data compiled by the Department of Commerce, Bureau of Economic Analysis is used.

Employment growth in the Northeast, though positive overall, did not keep pace with that of the nation. While the distribution of employment among industries was very similar in the Northeast and the United States, the performance of these industries was not. The same was true for the three major subregions that comprise the Northeast. Nonmetropolitan counties outperformed their metropolitan counterparts in employment growth during the decade, with the most rural county types showing the greatest percentage employment growth.

INTRODUCTION

The decade of the seventies witnessed a deviation from historic trends of rural-urban growth. Changing migration patterns evidenced at the close of the sixties became even more pronounced. Along with this changing population distribution came changes in the geographic distribution of economic activity. The South and Western regions of the country continued their strong growth. Metropolitan areas, once the center and stimulus of economic growth, saw serious economic and social problems. Once considered backward and isolated, rural areas were recognized for their potential to both the corporation in search of a new location and the individual in search of a better way of life.

The continuation of recent trends highlights the ongoing need for a comprehensive regional approach to the economic and social development of the nation. This paper looks at changes occurring in Northeast employment distribution from two perspectives. The first is an examination of spatial, temporal and compositional changes in employment levels and distribution by region and state. The Northeast is then examined using metropolitan-nonmetropolitan county type delineations. Examination in this manner gives a more balanced picture of the changes occurring among and within the Northeastern United States. By using a shift-share technique, the changes in employment as well as the factors underlying these changes can be isolated.

The authors are former Graduate Assistant and Associate Professor in the Department of Agricultural and Food Economics, University of Delaware.

This paper is published with the approval of the Delaware Agricultural Experiment Station as Miscellaneous Paper No. 1033 by the Department of Agricultural and Food Economics, College of Agricultural Sciences, University of Delaware, Newark, DE, 19711. The authors acknowledge the constructive comments of the anonymous reviewers.

METHOD OF ANALYSIS

Traditional shift-share analysis is designed to isolate shifts in employment, income, or any other measurable variable in order to explain structural transformations in the economy of the region under analysis. It is used extensively in regional analysis (Curtis, 1971; Kennard, 1974; Petrulis, 1979). The objective is to determine if an observed pattern of growth in the local region is the result of overall trends, industrial specialization or local characteristics.

In terms of employment, the algebraic formulation for the traditional shift-share analysis is as follows:

Actual Growth = Standard Growth + Industrial Mix + Local Share, or

$(Ri)ri = (Ri)s + Ri(si-s) + Ri(ri-si)$

Ri = Base year employment in industry i in local region.

ri = Rate of growth in employment for industry i in local region.

si = Rate of growth in employment for industry i in base region.

s = Rate of growth in employment in all industries in base region.

Given the objectives of this study, a variant of the traditional shift-share model was found most suitable in providing a detailed picture of the economic structure of the region of study and its change over the period of analysis, and in the comparison of the growth and change in this structure among various regional delineations.

The modified technique, developed by Kalbacher (1979), presents its results in percentage form rather than absolute numbers as in the traditional model. In addition, this variant uses industry specific rather than overall growth rates in characterizing the base region economy. The adaptations make interregional and intertemporal comparisons easier and more meaningful.

The algebraic formulations of Kalbacher's components are as follows:

Actual Growth = Standard Growth + Industrial Mix + Local Share, or

$(Ri/R)ri = (Si/S)si + (Ri/R - Si/S)si + Ri/R(ri - si)$

R = Base year employment in all industries in local region.

Ri = Base year employment in industry i in local region.

S = Base year employment in all industries in base region.

Si = Base year employment in industry i in base region.

ri = Rate of growth of employment in industry i in local region.

si = Rate of growth of employment in industry i

in base region.

The interpretation of the components of this modified shift-share analysis differ somewhat from the traditional model. The Actual Growth component [(Ri/R)ri]in the modified model measures the growth experienced in the local area. The actual growth in an industry's employment is expressed as a percentage of total employment. Whereas in the traditional model, the Actual Growth component yields the actual number of employees gained (or lost) during the time period, the modified model expresses the actual change in employment as a percentage of total employment.

The Standard Growth component [(Si/S)si] of the modified models is analogous to the Actual Growth component, except that it is applied to the base region. It measures the growth in a base region industry's employment as a percentage of the base region's total employment. This differs from the traditional Standard Growth component in two ways. The first difference is that the component measures the employment change as a percent of the total, rather than as an absolute number. The second difference concerns the employment levels being analyzed. Standard Growth in the modified model is based on the employment in an industry in the base region and the growth of that employment in the base region. This differs substantially from the traditional model, which uses the Standard Growth component to measure the employment change that would have occurred in a particular industry in the local region had it grown at a rate equivalent to the base region as a whole.

The difference between Actual Growth and Standard Growth is Net Relative Change. This component measures the difference between the growth of employment in an industry in a local region and the growth in the base region. A positive Net Relative Change indicates that the growth of employment in the local region exceeded the growth in the base region. A negative Net Relative Change indicated that employment growth in the local region was less than in the base region. As in traditional shift-share, Net Relative Change is disaggregated into an Industrial Mix component and a Local Share component.

The Industrial Mix component [(Ri/R - Si/S)si] in the modified model seeks to measure the effect of the local region's industrial concentration on the area's growth. The Industrial Mix component takes the difference between the percentage of total employment in a given industry in the local region, and the percentage for the same industry in the base region. This is then multiplied by the rate of employment growth in that industry in the base region. This method of calculating Industrial Mix requires care in the interpretation of its sign.

In interpreting the Industrial Mix component, it can be assumed that a positive Industrial Mix is beneficial to the local region, while a negative value is a detriment. When both the first and second parts of the equation are positive (Ri/R - Si/S > 0) it means that the local region was more heavily concentrated than the base region in an industry that was experiencing positive growth in the region. Conversely, when both parts of the equation are negative (Ri/R - Si < 0), it signifies that the local region was less dependent on declining industry than the base region. This will also result in a positive Industrial Mix component.

Negative Industrial Mix components may result from a greater dependence in the local region on an industry that experienced declining employment in the base region (Ri/R - Si/S > 0 and si < 0), or a lesser concentration of local area employment in an industry experiencing a positive employment growth rate in the base region (Ri/R - Si/S < 0 and si > 0). Both possibilities are undesirable from the point of view of the local region.

While the interpretation of the sign of the Industrial Mix component is the same for both the traditional and modified shift-share models, what is being measured differs substantially. Both seek to quantify a local area's concentration in fast and slow growth industries, the modified model using base region growth rates and the difference in industry employment concentration and the traditional model using local region industry employment levels coupled with the difference in base region industry and overall employment growth rates.

The Local Share component [(Ri/R(ri - si)] in the modified model is similar to that of the traditional model. Both seek to measure the change in an industry's employment attributable to local regional characteristics. The difference between the two models is that the modified model uses the percentage of total employment in a particular industry in the local region, rather than simply local region industry employment as in the traditional model.

Aggregated over all industries in a local region, the Actual Growth, Standard Growth, Industrial Mix and Local Share components represent percentages of total employment. The aggregate Actual Growth component is the percentage by which employment as a whole grew in the local region during the study period. The aggregate Standard Growth component is the equivalent measure for the base region. The aggregate Industrial Mix and Local Share components represent their overall contributions to Net Relative Change, the difference between Actual and Standard Growth.

In the analyses of employment change that follow, the modified model of shift-share analysis is used. The local regions being analyzed are the subregions, states and counties of the Northeast. The base region used for comparison is the United States. Because a large number of areas were examined, the ease in interregional comparisons afforded by the modified model, as well as its inclusion of base region industrial structures, were found advantageous. Due to space limitation, primarily aggregate component values are presented and discussed.

STUDY AREA AND DATA

The employment data used to analyze employment changes were compiled by the Bureau of Economic Analysis (BEA), Department of Commerce. In compiling its county level data, the BEA relies on data generated by various federal and state

programs, censuses and non-governmental services. Primary among these is the information from state employment security agencies under the State Unemployment Insurance Program. Other sources and estimation procedures are used by the BEA to support its data in light of differing state regulations regarding the size of firms excluded from coverage under the Unemployment Insurance Program. Employment figures are reported at the one-digit Standard Industrial Classification (SIC) level for all regions.

The BEA is obliged to observe regulations regarding publication of data that might disclose individual firm activity and is, therefore, required to withhold such data. Since this study focuses on the county for much of its analysis, where such disclosure problems would be encountered, a method of estimating undisclosed data was applied. This estimation procedure applied state employment distributions among industries to county employment totals. This estimation was done so as to preserve known inter-industry ratios and county employment totals.

For the purposes of this study, the Northeast United States is composed of thirteen states and the District of Columbia. The Northeast is further divided into three subregions: New England (Maine, Vermont, New Hampshire, Rhode Island, Massachusetts and Connecticut); the Middle Atlantic (New York, New Jersey and Pennsylvania); and the South Middle Atlantic (Delaware, Maryland, District of Columbia, Virginia and West Virginia). County analysis will use metropolitan-nonmetropolitan county type classification established by Hines, Brown and Zimmer (1975). Changes in employment among and within these regional and county type delineations are analyzed.

ANALYSIS OF REGIONAL EMPLOYMENT CHANGE, 1970-1979

The Northeast, while experiencing an overall increase in employment for the decade of the seventies, fared poorly in relation to the nation as a whole (Table 1). The growth experienced in the Northeast during the decade was below that of the nation in every industry category, with the Northeast losing employment in four of the twelve industry groupings.

The Northeast experienced an overall Actual Growth for the decade of 9.60 percent. The nation had a growth rate of 22.47 percent for the same period, resulting in a Net Relative Change of -12.47 percent. A negative Net Relative Change existed for every industry category in the Northeast.

The negative deviation in growth rates between the Northeast and the nation is found in the Local Share component, indicating that the Northeast was at a competitive disadvantage with the rest of the nation in attracting or expanding new industry growth. That is, industries grew faster nationwide than in the Northeast. All individual industry categories also showed a negative Local Share, indicating that they grew at a slower rate in the Northeast than in the nation. While some industries exhibited a positive Industrial Mix component, it was not great enough to outweigh the negative Local Share.

There was substantial heterogeneity in the growth of employment among state and regions in the Northeast during the 1970s (Table 2). Of the three Northeast subregions, the South Middle Atlantic region performed the best, expanding its employment base by 20.25 percent. The Middle Atlantic states performed the worst of the 3 re-

Table 1. Shift-Share Analysis of the Northeast Relative to the United States, 1970-1979

	Actual Growth	Standard Growth	Net Relative Change	Industrial Mix	Local Share
Agriculture					
Farming	0.01	0.02	-0.02	-0.02	-0.00
Ag Services	0.09	0.29	-0.20	-0.08	-0.12
Mining	0.16	0.42	-0.26	-0.16	-0.10
Construction	-0.12	1.26	-1.38	-0.05	-1.33
Manufacturing					
Nondurable	-1.48	0.19	-1.66	0.03	-1.69
Durable	-0.07	1.94	-2.01	0.00	-2.02
Transportation	-0.08	0.80	-0.87	0.02	-0.89
Wholesale	0.82	1.83	-1.01	-0.00	-1.00
Retail	2.36	4.62	-2.26	-0.18	-2.09
Finance	0.88	1.67	-0.79	0.31	-1.10
Services	5.70	6.82	-1.12	0.30	-1.42
Government	1.31	2.61	-1.29	-0.16	-1.14
Total	9.60	22.47	-12.87	0.03	-12.90

Table 2. Summary of Shift-Share Analysis for Regions and States in the Northeast, 1970-1979

Region/State	Employment 1970	Employment 1979	Actual Growth	Standard Growth	Net Relative Change	Industrial Mix	Local Share
United States	78,249,000	95,832,000	22.47	--	--	--	--
Northeast	24,484,463	26,834,150	9.60	22.47	-12.87	0.03	-12.90
New England	4,885,530	5,618,601	15.00	22.47	-7.47	-0.02	-7.45
Connecticut	1,258,699	1,452,943	15.43	22.47	-7.04	-0.08	-6.96
Maine	380,931	453,897	19.15	22.47	-3.32	-2.75	-0.57
Massachusetts	2,388,578	2,675,590	12.02	22.47	-10.45	-0.80	-9.65
New Hampshire	291,300	400,454	37.47	22.47	15.00	-1.49	16.49
Rhode Island	391,789	425,934	8.72	22.47	-14.35	-1.43	-12.92
Vermont	174,338	209,567	20.21	22.47	-2.26	-0.70	-1.56
Middle Atlantic	14,831,920	15,483,642	4.39	22.47	-18.08	0.06	-18.14
New Jersey	2,780,085	3,109,289	11.84	22.47	-10.63	-1.18	-9.45
New York	7,493,360	7,437,952	-0.74	22.47	-23.71	1.03	-24.74
Pennsylvania	4,558,475	4,936,401	8.29	22.47	-14.18	0.78	-13.39
S. Mid. Atlantic	4,766,908	5,732,113	20.25	22.47	-2.22	0.00	-2.22
Delaware	240,332	273,337	13.73	22.47	-8.74	-2.40	-6.34
Washington, D.C.	626,471	656,563	4.80	22.47	-17.67	1.51	-19.18
Maryland	1,487,490	1,779,605	19.84	22.47	-2.63	0.49	-3.12
Virginia	1,848,603	2,342,890	26.74	22.47	4.27	-1.20	5.47
West Virginia	564,012	679,728	20.52	22.47	-1.95	1.97	-3.94

gions, growing by only 4.39 percent during the decade.

In the Northeast, every state but two experienced a negative Net Relative Change in employment growth relative to the United States. Though all states, except New York, exhibited positive employment gain, only New Hampshire and Virginia grew by a greater percentage than the nation, resulting in positive Net Relative Change components. Employment growth in each of the three subregions was also below the growth of employment in the United States.

The modified shift-share analysis shows that the poor relative performance of the Northeast and its regions was due overwhelmingly to the Local Share component, indicating inherent disadvantages in local characteristics. The exceptions to this trend were New Hampshire and Virginia, the only states that showed a positive Local Share component, indicating that local advantages were the source of their strong growth. Positive, i.e., favorable Industrial Mix components, were found in all subregions and several states. However, these positive influences were exceeded by negative Local Share components. All gains made due to the favorable mix of industries were more than offset by losses due to local characteristics. No state had both positive Industrial Mix and Local Share components.

An important question is which industries contributed to or detracted from employment growth in the Northeast. Using Actual Growth as a measure, Services was overwhelmingly the greatest contributor to total employment growth in the United States and the Northeast (Table 3). This trend was also evident in the three subregions of the Northeast. Only in New Hampshire and West Virginia did another industry (Durable Manufacturing and Retail Trade, respectively) account for a larger share of total employment gain than Services. Nondurable Manufacturing, on the other hand, contributed the least (actually declining) to employment growth in the Northeast. This was true in each of the subregions and six of the states. Farming displayed the smallest employment growth in the United States. Other industries with poor performances were Construction, Durable Manufacturing, Retail Trade and Government, all at the state level.

ANALYSIS OF METROPOLITAN-NONMETROPOLITAN COUNTY EMPLOYMENT CHANGE, 1970-1979

Disaggregating the Northeast into metropolitan and nonmetropolitan counties also revealed substantial heterogeneity in the growth of employment (Table 4). Nonmetropolitan counties grew faster than metropolitan counties. The greatest growth occurred in the Northeast's Totally Rural Nonadjacent Counties. Those counties, along with Greater Metropolitan Suburban Counties, were the only groupings to display rates of growth in excess of the United States overall employment growth. Metropolitan Counties as a whole and Greater Metropolitan Core Counties grew by less than the Northeast as a whole. Only Greater Metropolitan Core Counties had a loss of employment.

Modified shift-share analysis of the county types indicates the poor relative performance of the Northeast as shown by the overwhelmingly negative Net Relative Change component. Both Metropolitan counties and Nonmetropolitan counties experienced negative Net Relative Change from 1970 to 1979. Only Greater Metropolitan Suburban and Total Rural Adjacent counties had growth rates great enough to produce Positive Net Relative Change components. The greatest deviation from the United States growth rate was in the Greater Metropolitan Core counties where employment actually declined over the decade.

Local Share was again the most important factor in determining relative employment performance. Positive Local Share components contrib-

Table 3. Actual Growth in Employment by Industry in the United States and Northeast, 1970-1979

Geographic Region	Farming	Ag Services	Mining	Construction	Nondurable Manufacturing	Durable Manufacturing	Transportation	Wholesale	Retail	Finance	Services	Government	Total
					-- Industry --								
United States	0.03*	0.29	0.42	1.26	0.19	1.94	0.80	1.83	4.62	1.67	6.82+	2.61	22.47
Northeast	0.01	0.09	0.16	-0.12	-1.48*	-0.07	-0.09	0.82	2.36	0.88	5.70+	1.31	9.60
New England	-0.02	0.09	0.01	-0.59	-1.21*	2.57	0.22	1.03	3.23	1.31	6.90+	1.45	15.00
Connecticut	0.14	0.09	0.07	-0.63*	-0.28	0.36	0.53	1.79	3.49	2.15	6.46+	2.00	15.43
Maine	-0.34	0.16	-0.00	0.31	-1.21*	2.42	0.30	1.26	4.78	0.94	7.54+	2.99	19.15
Massachusetts	0.00	0.06	-0.00	-1.08	-1.87*	2.83	0.13	0.49	2.26	0.92	5.84+	1.55	12.02
New Hampshire	-0.28	0.16	0.02	2.39	-0.66*	9.17+	0.57	2.18	8.68	2.60	8.64	4.00	37.47
Rhode Island	-0.01	0.08	0.03	-0.27	-1.40	4.54	-0.62	0.57	2.31	1.22	7.15+	-4.98*	8.72
Vermont	-0.47	0.30	-0.15	-1.25*	0.53	5.08	0.44	1.58	4.39	0.97	5.99+	2.80	20.21
Middle Atlantic	0.08	0.07	0.07	-0.44	-1.97*	-1.22	-0.33	0.57	1.54	0.59	4.87+	0.56	4.39
New Jersey	-0.05	0.09	-0.03	-0.26	-1.01	-1.68*	0.19	2.01	3.05	1.20	5.88+	2.46	11.84
New York	0.15	0.04	-0.01	-0.84	-2.38*	-1.10	-0.83	-0.06	0.31	0.11	4.23+	-0.37	-0.74
Pennsylvania	0.06	0.09	0.27	0.11	-1.90*	-1.15	0.18	0.73	2.64	1.00	5.32+	0.94	8.29
South Middle Atlantic	-0.19	0.15	0.59	1.37	-0.21*	0.81	0.40	1.40	4.01	1.37	7.03+	3.52	20.25
Delaware	-0.67*	0.23	-0.02	0.62	-0.06	-0.14	0.53	1.45	3.31	1.07	5.92+	1.50	13.73
Washington, D.C.	0.00	0.08	-0.00	-0.90	-0.39	-0.15	-0.99	-1.17	-1.54*	-0.06	5.86+	4.06	4.80
Maryland	0.19	0.11	-0.00	1.40	-1.39*	-0.33	0.31	1.87	4.71	1.46	7.54+	3.95	19.84
Virginia	-0.45*	0.21	0.57	2.38	0.52	2.60	0.93	2.04	5.23	1.89	7.74+	3.09	26.74
West Virginia	-0.32*	0.12	3.12	1.64	-0.11	0.20	0.31	1.49	4.63+	1.17	4.24	4.03	20.52

* Indicates smallest Actual Growth for the geographic region.

+ Indicates greatest Actual Growth for the geographic region.

Table 4. Summary of Shift-Share Analysis for Metropolitan-Nonmetropolitan Counties in the Northeast, 1970-1979

County Type	Employment 1970	Employment 1979	Actual Growth	Standard Growth	Net Relative Change	Industrial Mix	Local Share
Northeast							
Metropolitan	21,137,282	22,850,275	8.10	22.47	-14.37	0.29	-14.66
Greater Metropolitan Core	9,873,573	9,469,990	-4.09	22.47	-25.56	1.53	-28.14
Greater Metropolitan Suburban	4,274,449	5,373,138	25.70	22.47	3.23	0.24	2.99
Medium Metropolitan	5,856,998	5,695,019	14.33	22.47	-8.14	-1.51	-5.53
Small Metropolitan	1,132,262	1,311,128	15.80	22.47	-5.67	-1.46	-5.21
Nonmetropolitan	3,347,705	3,985,774	19.09	22.47	-3.38	-1.55	-1.83
Urbanized Adjacent	1,517,908	1,766,432	16.37	22.47	-6.10	-2.21	-3.89
Urbanized Nonadjacent	393,558	480,538	22.10	22.47	-0.37	-0.34	-0.03
Less Urbanized Adjacent	534,487	632,713	18.38	22.47	-4.09	-1.38	-2.21
Less Urbanized Nonadjacent	522,651	756,082	21.41	22.47	-1.05	-0.65	-0.40
Totally Rural Adjacent	110,071	133,623	21.27	22.47	-1.20	-2.23	1.03
Totally Rural Nonadjacent	169,031	217,395	28.53	22.47	6.06	-0.23	6.29

uted to positive net relative changes in only two county types. Industrial Mix, while mostly negative, never exerted sufficient influence to overcome negative local characteristics. Only Greater Metropolitan Suburban Counties gained employment due to both components.

The distribution of employment growth among industries for the metropolitan-nonmetropolitan counties shows results similar to those found in the state and regional analysis (Table 5). Services was the greatest contributor to employment gain in all county breakdowns with the exception of Urbanized Nonadjacent Counties. Nondurable Manufacturing was again the poorest performing industry in all but four county types, where Farming displayed the worst growth performance.

SUMMARY

A modified version of shift-share analysis was used to analyze employment growth in the Northeast during the 1970s. This analysis shows that in terms of employment growth, the Northeast performed poorly relative to the United States as a whole. This poor relative performance was evident in virtually all subregions, states and county types in the Northeast. Of the three subregions, only the South Middle Atlantic came close to keeping pace with employment growth in the United States. Of the states, only New Hampshire and Virginia experienced growth in employment greater than the United States.

Within county types, all Nonmetropolitan counties grew by greater percentages than all their Metropolitan counterparts, except Greater Metropolitan Suburban counties. Overall, the growth of employment in Nonmetropolitan counties was twice as great as the growth in Metropolitan counties.

In terms of industry contribution to employment growth, services was the greatest contributor to employment gain, with few exceptions, throughout the Northeast states and counties. Nondurable Manufacturing accounted for the greatest losses in the majority of states and county types.

These results indicate a shift of industrial growth out of the Northeastern region of the United States during the decade of the seventies. Within the Northeast, they indicate a shift from the urbanized areas toward rural areas during this time period. With regard to specific industries, they indicate very little growth, even decline, in manufacturing industries and extensive growth in service industries. There is no guarantee that these trends will continue in to the next decade. However, a continuation of these trends will greatly affect the industrial and geographic structure of industrial activity in the Northeast and imply a changing role for the Northeast in the national development process.

REFERENCES

Curtis, Wayne. An Analysis of Income and Employment Changes in Four Rural Counties in Alabama, 1960-69. Agricultural Experiment Station Bulletin 417, Auburn University, 1971.

Dawson, John A. Shift-Share Analysis: A Bibliographic Review of Technique and Applications. Vance Bibliographies Public Administration Series: Bibliography No. P949.

Hines, Fred K., David L. Brown and John M. Zimmer. Social and Economic Characteristics of the Population in Metro and Nonmetro Counties, 1970. Agricultural Economic Report No. 272, U.S. Department of Agriculture, Washington, D.C., 1975.

Kalbacher, Judith Z. "Shift-Share Analysis: A Modified Approach." Agricultural Economics Research, Vol. 31, No. 1, 1979.

Kennard, Charles E. and Dennis K. Smith. A Base Book for Rural Development. University of Delaware, Agricultural Experiment Station Bulletin 407, December 1973.

Petrulis, M. F. Regional Manufacturing Employment Growth Patterns. Rural Development Research Report No. 13, June 1979.

U.S. Department of Commerce, Bureau of Economic Analysis. Local Area Personal Income 1974-79. U.S. Government Printing Office: Washington, D. C., June 1981.

Table 5. Actual Growth in Employment by Industry in Metropolitan - Nonmetropolitan Counties in the Northeast, 1970-1979

Geographic Region	Farming	Ag Services	Mining	Construction	Nondurable Manufacturing	Durable Manufacturing	Transportation
					-- Industry --		
Northeast							
Metropolitan	0.03	0.06	0.02	-0.24	-1.63*	-0.43	-0.15
Greater Metropolitan Core	0.02	0.03	0.01	-0.98	-2.97*	-1.63	-0.94
Greater Metropolitan Suburban	0.05*	0.10	0.07	0.85	0.79	0.76	1.09
Medium Metropolitan	0.04	0.06	-0.01	0.08	-1.02*	0.24	0.20
Small Metropolitan	-0.06	0.10	0.03	0.41	-2.19*	2.04	0.25
Nonmetropolitan	-0.10	0.33	0.80	0.82	-0.79*	2.28	0.40
Urbanized Adjacent	0.15	0.46	0.27	0.27	-1.79*	1.71	0.00
Urbanized Nonadjacent	-0.43*	0.19	0.54	0.58	-0.14	1.82	0.37
Less Urbanized Adjacent	0.31	0.32	0.73	1.77	-0.16*	1.66	0.57
Less Urbanized Nonadjacent	-0.35*	0.18	1.21	0.97	0.67	3.36	0.51
Totally Rural Adjacent	-1.13*	0.25	3.21	1.48	0.13	3.06	2.20
Totally Rural Nonadjacent	-1.23	0.04	3.22	2.27	-1.33*	5.93	1.95

Table 5 (continued)

	Wholesale	Retail	Finance	Services	Government	Total
Northeast						
Metropolitan	0.75	2.02	0.88	5.68+	1.13	8.10
Greater Metropolitan Core	-0.73	-0.67	-0.08	3.69+	0.18	-4.09
Greater Metropolitan Suburban	3.03	5.59	2.28	9.52+	1.55	25.70
Medium Metropolitan	1.46	3.58	1.36	6.26+	2.08	14.33
Small Metropolitan	1.49	3.90	1.41	5.51+	2.89	15.80
Nonmetropolitan	1.55	4.53	1.02	5.77+	2.47	19.09
Urbanized Adjacent	1.41	4.77	0.95	6.15+	2.00	16.37
Urbanized Nonadjacent	1.64	5.13	0.97	5.48	5.96+	22.10
Less Urbanized Adjacent	1.38	4.03	1.18	5.91+	0.67	18.39
Less Urbanized Nonadjacent	1.78	4.19	1.01	5.04+	2.83	21.41
Totally Rural Adjacent	1.64	3.73	0.67	3.87+	2.17	21.27
Totally Rural Nonadjacent	2.26	4.33	1.46	5.49+	3.14	29.53

* Indicates smallest Actual Growth for the geographic region.

+ Indicates greatest Actual Growth for the geographic region.