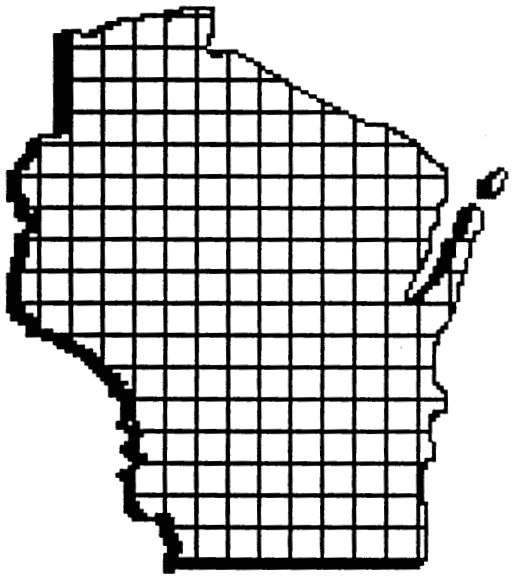
Wisconsin

Policy Research Institute Report



April 1997 Volume 10, Number 3

WISCONSIN'S REGIONAL ECONOMIES, 1991-96

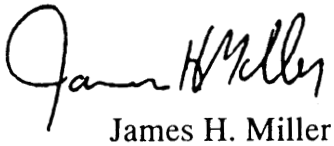
REPORT FROM THE PRESIDENT:

Two years ago, we published our first research project on metropolitan economic development in Wisconsin. We have continued this project, looking at the eight largest metropolitan areas in the state. In the Fox Valley, we did not include Oshkosh or Fond du Lac. As last time, the project was developed by the Center for Urban Initiatives and Research at the University of Wisconsin-Milwaukee. It is the only institution that has direct access to the jobs data from the State of Wisconsin's Department of Workforce Development. The results continue to be remarkable.

During a period from March 1991 to March 1996, employers in this data set added approximately 291,000 new employees. Every area of the state grew during this period, some experiencing more growth than others. Brown and Rock Counties and the Fox Cities grew faster than Racine County and the Milwaukee metropolitan area.

Perhaps the most interesting result of this research is the role of job creation in central cities. In six of the seven largest metropolitan areas in Wisconsin, the overwhelming amount of employment occurs in the central city. It is only in Milwaukee that the central city, with 43% of the jobs, trails the outlying suburbs. This trend, however, is beginning to accelerate. In our five-year data set, most central cities continued to create jobs at a faster rate than their outlying areas — but in Milwaukee, the numbers were staggering. The central city experienced net job growth of 2,481 jobs, while the suburbs experienced net job growth of 64,329 jobs.

These data must be closely examined by policymakers, especially those concerned with welfare reform and unemployment in the central city of Milwaukee.



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WISCONSIN'S REGIONAL ECONOMIES, 1991-96

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EXECUTIVE SUMMARY

The Wisconsin economy has continued to grow through the mid-1990s. Its rate of growth in recent years has not matched that of the beginning of the decade, but growth in employment has continued. In March 1996, the state reported 2.5 million jobs in firms with employees and an unemployment rate of 3.7%. As of January 1997, the state's unemployment rate was 3.6%, a rate that is again lower than the national rate for the 113th consecutive month. Two questions that arise, despite the growth, are whether all parts of the state are sharing in this growth and whether the same factors are responsible for the growth that is occurring. This report examines these questions.

To answer them, this analysis has divided the state into its eight-largest metropolitan areas and lumped the rest of the state together as a ninth area. It has used a unique data set, the Unemployment Compensation (UC) records, to monitor these economies and the changes that have occurred in them during the period from 1991 to 1996.

Among the findings are the following:

- In total, employers included in this data set added almost 291,000 new employees in the March 1991-March 1996 period.

- All areas shared in the growth of employment, but they did not share equally. Some metropolitan areas, such as Brown and Rock Counties and the Fox Cities, grew markedly faster than others. Racine and Milwaukee did not grow as rapidly. The range was from 6% to 21%.

- The smaller metropolitan and rural areas grew more rapidly than the metropolitan areas combined, but specific metropolitan areas far outdistanced the rest of the state.

- Manufacturing employment in the state grew by 11%, and it grew more rapidly in the non-metropolitan areas and actually declined in two of the metropolitan areas.

- Services employment and all industry components of the service sector added employment in all areas. The latter increased its proportion of the total economy.

- The industries most responsible for each region's growth varied. These regional economies share some common traits, but each is unique.

- In the majority of regions, industries that are likely to export goods or services have added the majority of new jobs. In three regions, however, employment related to local consumer demand was more important in job creation.

- In some communities, single-site, independent employers are responsible for the majority of employment in 1996, but in no region were single-site employers responsible for the majority of employment growth. In fact, in six of the nine regions, all net employment growth came from multi-site employers.

- The percentage of employers who were in existence in 1991 and were able to survive until at least March 1996 was virtually the same, about 66%, regardless of location within the state.

- The role of existing employers in the growth of local economies varied widely: firms that survived the five-year period contributed between 25% and 80% of the nine regions' employment growth. Those on the low end were much more reliant on new entrants.

- Also varying widely was the role of large growers, defined as employers adding at least 50 employees during the five years. Such employers contributed only 9% of the employment growth in the Fox Cities, but 65% of the growth in Rock County. In other words, it was a number of employers with modest growth in the Fox Cities and a few employers with large growth in Rock County that led overall growth.

- Both the size of employer responsible for the most employment in 1996 and the size most responsible for the growth in employment between 1991 and 1996 varies with the region examined. Commonly, but not always, employers with between 20 and 99 employees were responsible for the most employment and the greatest increases in employment. In two areas, however, employers with more than 500 employees had the most employees and the fastest-growing size category could include both the largest and the smallest (less than 20 employees) employers. Thus, the type and size of the additional space needs for employers differ considerably from community to community.

- With the exception of Milwaukee, the prominent role of the central city in the metropolitan areas is not being threatened by changes in the local economies.

- Nor is firm migration from the central city to its suburbs an issue in any place but Milwaukee, where 3.6% of the single-location firms in the city in 1991 could be found in the suburbs in 1996. Their 1996 employment, however, was only 2% of the city's 1991 employment.

- The average earnings per worker varied somewhat across the regions. At the high end were Milwaukee and Dane at $29,897 and $29,288, respectively. At the low end, not surprisingly, is the "rest of the state," with an average earnings per worker of $23,050.

- Average earnings per worker varied somewhat across regions for each industry, and earnings varied widely across industries within each region. Also varying in similar fashion was the proportion of workers who earned at least $25,000.

- In most regions, there are substantially more service-sector workers than manufacturing-sector workers who earn at least $25,000 — but in places such as the Fox Cities, Racine, and Rock, the opposite is true.

- To understand and operate better in each of these economies, those who are initiating either private or public actions would be well-served to note the many differences that exist among the local economies. Though the economies have a common heritage, each economy is unique. To be more successful in each requires a better understanding of the changes that are occurring and the forces responsible. This report gives the types of insights that can contribute to that better understanding.

INTRODUCTION

The Wisconsin economy has continued to generate new jobs. Aside from a modest slowdown in 1991-92, the Wisconsin economy has grown throughout the 1990s. The distribution of employment by industry has evolved and reflects changes occurring at the national level. Basically, service-sector employment is becoming more dominant. This is not to say that Manufacturing employment is disappearing. It is not. In fact, Manufacturing employment has been growing in Wisconsin from 1991-96, but its rate of growth is not sufficient to compete with the far faster growth in the service industries. Thus, in terms of the sheer number of jobs, Manufacturing is becoming relatively less important. Much of the employment growth in the state is still tied in some way to Manufacturing. It is just that direct employment in Manufacturing is relatively less important.

When one looks at the geographic distribution of employment in the state, there are changes as well. That is the focus of this report. With the seemingly ever-increasing urbanization of the state's population, it is important to understand better how well its metropolitan economies are functioning. Is employment growing? If it is, to what can this be attributed? Is growth coming from a few, specific industries? Is growth coming from large rather than small firms, from businesses that are independent or from those that are part of a larger organization? Answers to these and similar questions will allow us to understand better our local economies and better enable us to build on the strengths that have been developing.

Until two years ago, answers to such questions could only be determined for Milwaukee, but a somewhat similar examination of the changing metropolitan economies was completed by this author in 1995 and focused on the same metropolitan economies as this report does. This report expands upon that prior one to include an exami-

nation of the entire state economy by adding a category entitled "the rest of the state." This catch-all encompasses the smaller metropolitan areas and the rural areas, combined as one. Collectively, these are compared to the eight largest metropolitan areas.

The largest is the Milwaukee area and consists of four counties — Milwaukee, Ozaukee, Washington, and Waukesha. The next largest is Dane County, with the lead city of Madison. The third largest is Brown County with the central city of Green Bay. Three of the remaining metropolitan areas have a central city that shares its name with the surrounding county: Kenosha, La Crosse, and Racine. The other two are Rock County — which has two central cities, Beloit and Janesville — and the Fox Cities, which consists of 16 communities in three counties in the Fox Valley. Among the communities included are Appleton, Neenah, and Menasha. The Fox Cities, for this analysis, do not include Oshkosh or Fond du Lac, economies that are smaller and somewhat distinct.

The data set used for this analysis is based on the Unemployment Compensation records of the state's Department of Workforce Development (DWD). By law, every employer (with a few exceptions, such as small farms, family members, and religious organizations) with one or more employees in the previous quarter who received at least $1,500 in pay is supposed to report to the state the employer's name, address, employment, payroll, industry, and several other characteristics. This information is then aggregated and analyzed at any of several geographic levels, including the individual community, a county, or the state. The state uses these data for its official counts of employment.

The quality of the data has increased in recent years due to extensive efforts by the Department of Industry, Labor, and Human Relations (DILHR) — now DWD — to the point that it now requires only modest editing. We examine the data for inconsistencies, misplaced employers, and the like. We have attempted to correct for all identifiable imperfections. Still, the data set is not perfect. We warn the reader that although it remains the best data set to examine the questions we ask, some error is likely to remain, especially when one looks at small geographic areas.

One sector of the economy is particularly susceptible to error, in part because it is counted differently from what one might expect. That sector is Government. For this data set, many workers thought of as Government employees are counted in other industries. For example, post-office workers are counted in Standard Industrial Classification (SIC) 43, U.S. Postal Service. Teachers and university workers are counted in SIC 83, Educational Services. Transit drivers, even though they may work for a county transit authority, are counted as SIC 41, Local Passenger Transit. Additionally, Government workers do not have the same reporting requirement as private-sector workers, so such workers may not be reported as regularly. What this means is that employment in the Government sector will commonly appear to be smaller than most of us would expect.

The dates of the analysis are the period from March 1991 through March 1996, the latest period for which the data are available. The trends identified are likely continuing through the present. The state economy is continuing to grow, and unemployment is down very slightly in January 1997, compared with January 1996. The 0.1 change in rate is small enough to be of little consequence. Regardless, the economy is growing, if somewhat slower than that of the nation.

TOTAL EMPLOYMENT BY INDUSTRY

The most-common measure of any economy is the number of jobs it produces. (Our data set actually reports number of employees, but for ease of description, we will use jobs and employees interchangeably to mean the same phenomenon, ignoring the fact that the same person may hold more than one job.) Table 1 on the next page lists the number of employees in each of our geographic areas for each of nine industries, plus those that were never classified by industry. Since DWD uses the same data set, there should be few surprises.

Among the metropolitan areas, Milwaukee is easily the largest, being three times larger than Dane and more than 10 times larger than several of the smaller metropolitan areas. The smallest of these economies is Kenosha, with just more than 47,000 employees in March 1996. It is the "rest of the state" that has the largest numbers: 945,972 employees, but this is a collection of most of the state geographically.

Table 1

Total Employment by Industry, 1996

Industry	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Ag & Mining	597	2,555	548	314	239	4,072	504	454	12,062
Construction	5,487	10,370	6,428	1,931	1,988	25,285	2,440	2,172	34,143
Manufacturing	26,731	28,515	37,631	11,256	10,509	175,564	25,673	20,952	257,747
Trans./Util.	11,028	10,815	5,656	1,950	2,536	44,441	3,160	2,572	50,747
Wholesale Trade	6,948	11,696	4,950	2,006	4,073	47,348	2,564	2,718	44,499
Retail Trade	23,108	42,921	19,839	10,745	13,929	129,415	13,735	12,648	184,197
FIRE	9,942	20,318	7,184	1,545	2,510	55,753	2,238	1,747	34,901
Services	36,286	97,874	32,305	15,013	21,249	272,283	23,404	17,737	272,820
Government	4,133	21,029	2,668	2,243	2,218	33,536	3,648	3,490	54,718
Nonclassifiable						8			138
Totals	124,260	246,093	117,209	47,003	59,251	787,705	77,366	64,490	945,972

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

The eight metropolitan areas, however, contain 62% of all employment in the state. They also contain 64% of the Services employment (not to be confused with service-sector employment, which is a more-inclusive figure, combining all employment except Agriculture and Mining, Construction, and Manufacturing) and 65% of Wholesale Trade employment. The eight areas also contain 55% of the Manufacturing employment, an indication that Manufacturing is more concentrated outside the metropolitan areas than it is inside. Another industry most commonly found in the "rest of the state" is Agriculture and Mining. The metropolitan areas contain only 43% of this employment — perhaps in part because farms of fewer than 10 employees need not report to the state and, of course, because there are fewer farms in the metropolitan areas.

If we examine the distribution of employment within areas, certain patterns are clear. One is that three industries dominate employment: Manufacturing, Retail Trade, and Services. A second point is that within each area, the relative role of each industry is somewhat different. For example, in the Fox Cities, Manufacturing employment accounts for 32% of the total, while in Dane County, it is less than 12%. Services in Milwaukee contain 35% of the area's employment, while in Rock County, they account for only 27% of the total. Each area has a different-sized economy, and each has a different mix of employment by industry. The variation may not be great, but it does exist and helps to define each economy.

CHANGE IN EMPLOYMENT BY INDUSTRY

The good news is that every area of the state added employment between March 1991 and March 1996. Some areas — such as Brown County, Rock County, the Fox Cities, Kenosha County, and Dane County — grew rapidly. Two areas, Racine and Milwaukee, did not grow as fast. All areas, however, did register gains, and in only a very few instances did employment decline in any industry in any specific area (*i.e.*, Manufacturing in La Crosse and Racine and Agriculture and Mining in La Crosse). Certainly, there are examples of modest growth, but the overall impression is one of continued growth.

Throughout the entire state, employers with one or more employees added 290,974 employees during this five-year period. The economy created additional jobs in self-employment and in small firms that did not report their existence. Among the employers who did report, the rate of growth for the five years was 13.4%. Some metropolitan areas far exceeded that growth rate, but others did not.

Table 2

Absolute Change in Employment by Industry, 1991-1996

Industry	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Ag & Mining	96	682	7	76	-3	1,034	17	17	1,149
Construction	1,523	2,798	1,131	217	588	1,528	199	312	7,174
Manufacturing	3,882	3,465	4,009	1,990	-16	6,838	-299	5,632	30,858
Trans./Util.	1,614	1,232	249	283	47	3,384	458	63	7,070
Wholesale Trade	1,236	2,189	619	730	486	3,519	54	415	1,081
Retail Trade	2,776	4,446	3,941	975	2,358	4,977	217	1,563	20,243
FIRE	3,897	96	1,316	249	639	4,204	0	148	3,349
Services	6,537	17,699	6,604	2,137	2,632	39,297	3,023	1,941	40,513
Government	82	2,235	372	300	-36	2,021	478	410	4,231
Totals	21,643	34,842	18,248	6,957	6,695	66,802	4,147	10,501	115,668
%Change	21%	16%	18%	17%	13%	9%	6%	20%	14%

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

In absolute employment growth, Milwaukee was the "winner" among the metropolitan areas, with 66,802 jobs added. Dane County, with an economy one-third the size of Milwaukee's, added approximately one-half as many jobs, revealing faster growth. Every area added at least 4,000 jobs.

One point that must be made is that, collectively, the metropolitan areas did not grow as fast as did the rest of the state. The metropolitan areas have 62% of total employment, yet they added only 58% of the employment growth that occurred. The smaller metropolitan areas and the non-urban areas have been adding employment at a faster rate. Some of the larger metropolitan areas are clearly in the lead — but with Milwaukee's slower growth holding the rate back for all of the metropolitan areas, the rest of the state appears to be the real growth "winner."

Manufacturing employment continues to grow in Wisconsin. Overall, the state added some 56,359 Manufacturing jobs between 1991 and 1996. This is a gain of 11%. The "rest-of-the-state" area accounted for 55% of this gain, although it contains but 43% of Manufacturing employment in the state. This phenomenon of rural Manufacturing growth is found elsewhere in the country. Industry currently tends to locate new Manufacturing away from metropolitan areas and away from other, unionized, higher-paying jobs.

Manufacturing-employment growth also occurred in some of the state's larger metropolitan areas as well. Rock County experienced a 36% increase in Manufacturing employment during the 1991-96 period. Kenosha realized a 21% increase, and Brown County a 17% increase. Racine and La Crosse both lost Manufacturing jobs. Milwaukee's Manufacturing employment grew by only 4%. The "rest of the state" and Dane County grew by 14%, while in the Fox Cities area, Manufacturing expanded by 12%. We will see below just what industries accounted for the largest gains in each geographic area.

The Brown County economy grew by 21% during the 1991-96 period, the fastest of any of the regions studied. This growth was led by Finance, Insurance, and Real Estate (FIRE) and new Construction activity. Employment in those industries grew by 64% and 38%, respectively, for the period. In absolute terms, Services added the largest number of jobs, 6,537. This industry's relative growth rate was 22%, just exceeding the growth rate of the overall economy. Wholesale Trade expanded at the same rate. Retail Trade growth was important numerically, but employment only expanded by 14% for the period. Manufacturing contributed 3,882 new jobs, a 17% growth rate. The only sectors with truly modest growth were Agriculture and Mining and Government.

Dane County's growth rate was a respectable 16% for the period and was led in absolute employment growth by Services. Its employment grew by 22%, matching the growth rate of Services in Brown County and exceeding that found in all other areas except for the Fox Cities. Growing even faster relatively (23%) was Wholesale Trade, indicating an expanded role in this sector for Madison. The largest relative gains came from Construction, in which employment grew by 37%. A quick view of the physical landscape in and around Madison reveals dramatic growth of new buildings for both retail and office activity, as well as new space for all of the other growing industries. The only industry to experience almost no growth was FIRE. The employment in the industry has been virtually stagnant for at least five years. This is an important industry to the area, but it has not been growing recently.

Employment in the Fox Cities grew by an impressive 18% during the study period. The largest absolute gains came from Services, Manufacturing, and Retail Trade. In a relative sense, both Services and Retail also posted impressive gains: 26% and 25%, respectively. Construction employment grew by 21%, and FIRE employment grew by 22%. Manufacturing employment, while important absolutely, actually grew by only 12%. The addition of more than 18,000 jobs did press the labor force, driving the unemployment rate in the Appleton-Oshkosh-Neenah metropolitan statistical area down to 3.5% in March 1996.

Also gaining employment at a rapid pace for the five years was Kenosha, an area written off as a disaster after the closing of American Motors. It added 17% to its employment base in 1991-96. The growth in employment was led by Services and Manufacturing, each adding about 2,000 jobs. The rate of growth for Manufacturing employment was 21%, followed closely by Services at 17%. Retail Trade did not expand as rapidly as it had been, but it still added close to 1,000 jobs and grew by about 10%. A surprising gain was achieved in Wholesale Trade. Kenosha was "discovered" as a convenient location for this industry. The industry added 730 jobs and grew a whopping 57% for the study period. There is little question but that the new industrial park in Pleasant Prairie had a very positive effect on the Kenosha economy, but employment in the City of Kenosha also grew substantially.

La Crosse County experienced an expanding economy. It did not grow as fast as some others in the state, but it still added 13% to its employment base. The leading industries were Services and Retail Trade, each adding close to 2,500 jobs. Retail grew at 20%, second in the state behind the Fox Cities. Services grew at a more-modest 14%. The industry that slowed the area's growth is Manufacturing. Unlike most of the state, Manufacturing employment in La Crosse did not expand in the 1991-96 period. Actually, it did expand early in the decade, but then some reductions undermined the growth. Employment gains in FIRE of 639 jobs helped to offset the lack of growth in Manufacturing, and FIRE's 34% increase during the period suggests a new industry may be contributing to future growth.

Metropolitan Milwaukee was clearly the leader in absolute employment growth. The area's economy added close to 67,000 jobs during the five-year period. All industries grew by at least 1,000 jobs, but by far the largest gainer was Services. This industry added more than 39,000 jobs. The specific Services industries will be explored below, but overall employment grew by 17%. The next-largest industry gain, one-sixth the size, was experienced in Manufacturing. Given the large Manufacturing base in place, this amounted to only a 4% increase. While this may seem modest, any gains are significant after the huge losses experienced in the 1980s. Besides, only services employment grew by double digits; every other industry experienced more-restrained growth. Transportation/Utilities/Communication was the second-fastest, growing relatively at 8%.

What is surprising is that both Wholesale and Retail Trade experienced growth: both had employment losses in excess of 1,100 between 1991 and 1994. Thus, Wholesale Trade actually expanded by 4,678 jobs and Retail Trade by 6,637 jobs in the last two years. That is a fortunate change in direction, if not dramatic growth. FIRE also was negative for the first three years of the study period and grew only in the last two years. These changes in direction speak well for the current economy of the region, even if it is not growing as fast as most of the areas of the state.

Racine County has also benefited from the last two years of the study period. From 1991 to 1994, Racine had not grown. Since 1994, it has grown by 6%, or more than 4,300 jobs. Three-quarters of these jobs came from one industry, Services. It grew by 15% during the five years. What does not show is that Racine also added 1,260 Manufacturing jobs in 1994-96. This is its second-fastest-growing sector, even though it is still negative for the

five-year period. Other sectors of the economy have grown modestly, if at all. The Racine area is still in transition, but there are some positive signs of its having turned the corner in the mid-1990s.

Rock County, by contrast, is humming along — largely on the basis of its traditional Manufacturing economy. The largest employment gains came from Manufacturing, which added 5,632 jobs for the period. More than one-half of that growth occurred in 1994-96, as the auto industry picked up nationally. The gain for five years was an astounding 36%, leading the overall Rock County economy to grow 20%. Also contributing were expansions in Services and Retail Trade. These grew 15% and 14%, respectively, and added 3,500 jobs to the local economy. If the American public continues to favor the type of vehicles created in Janesville, then the Rock County economy looks rock solid. Whether it will continue to grow at the same rate, though, is questionable. It seems unlikely that the auto industry can expand by any large measure at this point.

Growth in the "rest of the state" looks very similar to that which occurred in the majority of the metropolitan areas. The growth is concentrated in three industries: Manufacturing, Retail Trade, and Services. What is different are the rates of growth. The largest gainer, both relatively and absolutely, in the "rest of the state" is Services employment. That industry added more than 40,500 jobs and grew by 17%. Services growth is not confined to metropolitan areas; it is a universal phenomenon. The same can be said for Manufacturing-employment growth. More than half of the Manufacturing jobs added in the state were added outside the major metropolitan areas. Surprisingly, the growth rate in the "rest of the state" was only 14%, below that found in three of the metropolitan areas. Still, the addition of more than 30,000 Manufacturing jobs indicates a growth that is counter to that of a population increasingly living in metropolitan areas.

Not as important numerically, but reflecting the general growth, is the expansion of Construction employment. This industry added more than 7,100 jobs and grew by a notable 27%. Usually, more space must be constructed to accommodate growing employment. Given the general scale of growth in employment in the "rest of the state," it is little wonder that Construction should be expanding by a substantial margin. Growing by a comparable number of employees is Transportation/Utilities/Communication. It also added more than 7,000 employees. The major reason for growth was expansion in Transportation, especially in Trucking, an industry that is shifting its locational base as it continues to expand. The Transportation/Utilities/Communications growth rate was 16% for the 1991-96 period, far exceeding its growth in metropolitan areas.

The growth in Retail Trade is also occurring outside the major metropolitan areas. The "rest of the state" added more than 20,000 Retail jobs during the last five years. This amounted to a 12% growth rate. Growing almost as rapidly (10%) was FIRE, as it added 3,349 employees. Again, these may have appeared to be industries that would concentrate and grow in the metropolitan areas, but that currently is clearly not the exclusive province of the metropolitan areas.

Governments around the state appear to have grown during this period. As we stated at the outset, this growth may not all be actual; it may be an artifact of different reporting requirements. There is no doubt that as communities have grown, however, they have added some additional workers to provide more services. Regardless, this is not a growth industry.

INDUSTRIES WITH THE LARGEST EMPLOYMENT GAINS

Having just seen — at the one-digit-industry scale — where employment growth has been occurring, we now explore the same issue at the more-detailed, two-digit scale. Table 3 on the next page lists the fastest-growing industries — classified by two digits in the Standard Industrial Classification system, a scheme that pinpoints industries with increased accuracy as it moves from one to four digits — in each of the nine geographic areas we examined. Appearing under each geographic heading are the names of the industries in order of absolute employment gain and the number of employees added during 1991-96. A summary of the total number of jobs each set of 10 industries added is provided for each geographic area.

Examining these industries and numbers is useful in two ways. *First*, it shows what industries really have been leading the local employment growth. *Second*, by summing the number of employees added by the 10 fastest-

Table 3
Industries with the Largest Gain of Employment by Two Digit SIC, 1991-1996

	Brown County			Dane County			Fox Cities			Kenosha County		
Rank	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain
1	64	Insurance Agents, Brokers, & Service	2,506	73	Business Services	4,492	73	Business Services	1,985	37	Transportation Equipment	1,009
2	58	Eating and Drinking Places	1,805	83	Social Services	3,877	58	Eating and Drinking Places	1,730	35	Industrial Machinery and Equipment	861
3	79	Amusement & Recreation Services	1,752	80	Health Services	3,427	26	Paper and Allied Products	1,633	58	Eating and Drinking Places	759
4	73	Business Services	1,562	82	Educational Services	2,885	80	Health Services	1,620	51	Wholesale Trade-Nondurable Goods	637
5	42	Trucking and Warehousing	1,330	58	Eating and Drinking Places	2,187	36	Electronic & Other Electric Equipment	1,352	82	Educational Services	586
6	35	Industrial Machinery and Equipment	1,292	59	Miscellaneous Retail	1,813	17	Special Trade Contractors	1,020	80	Health Services	524
7	17	Special Trade Contractors	1,163	17	Special Trade Contractors	1,398	82	Educational Services	1,011	83	Social Services	424
8	83	Social Services	963	50	Wholesale Trade-Durable Goods	1,377	42	Trucking and Warehousing	962	73	Business Services	416
9	80	Health Services	939	15	General Building Contractors	1,082	59	Miscellaneous Retail	880	36	Electronic & Other Electric Equipment	305
10	82	Educational Services	913	87	Engineering & Management Services	904	20	Food and Kindred Products	840	56	Apparel and Accesory Stores	300
Totals			14,225			23,442			13,033			5,821

Source: Urban Research Center, UWM, ES202 Longitudinal Database, 1991-94

Table 3 (cont.)
Industries with the Largest Gain of Employment by Two Digit SIC, 1991-1996

	La Crosse County			Metro Milwaukee			Racine County			Rock County			Rest of State		
Rank	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain
1	57	Furniture and Home Furnishings Stores	832	73	Business Services	14,714	73	Business Services	880	37	Transportation Equipment	4,167	83	Social Services	7,798
2	59	Miscellaneous Retail	797	80	Health Services	8,645	36	Electronic & Other Electric Equipment	866	25	Furniture and Fixtures	1,092	35	Industrial Machinery and Equipment	7,456
3	80	Health Services	668	83	Social Services	5,676	37	Transportation Equipment	706	80	Health Services	796	58	Eating and Drinking Places	7,396
4	82	Educational Services	590	45	Transportation by Air	5,212	83	Social Services	682	58	Eating and Drinking Places	787	82	Educational Services	7,340
5	58	Eating and Drinking Places	493	50	Wholesale Trade-Durable Goods	3,684	70	Hotels and Other Lodging Places	503	82	Educational Services	629	80	Health Services	6,390
6	35	Industrial Machinery and Equipment	464	82	Educational Services	2,628	48	Communications	460	50	Wholesale Trade-Durable Goods	442	34	Fabricated Metal Products	5,462
7	55	Automotive Dealers & Service Stations	461	37	Transportation Equipment	2,602	28	Chemicals & Allied Products	304	53	General Merchandise Stores	358	73	Business Services	5,324
8	83	Social Services	460	87	Engineering & Management Services	2,193	87	Engineering & Management Services	295	55	Automotive Dealers & Service Stations	344	55	Automotive Dealers & Services Station	4,854
9	27	Printing and Publishing	397	36	Electronic & Other Electric Equipment	2,183	17	Special Trade Contractors	294	59	Miscellaneous Retail	320	42	Trucking and Warehousing	4,680
10	73	Business Services	397	67	Holding and Other Investment Offices	2,026	55	Automotive Dealers & Service Station	254	73	Business Services	302	17	Special Trade Contractors	4,370
Totals			5,559			49,563			5,244			9,237			61,070

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

growing industries and comparing this figure to the total employment growth for each area, we are able to determine the degree to which employment growth has been concentrated in a few industries or whether it is spread over many industries. The aggregation at the one-digit-SIC level does not allow this insight.

Collectively, the 10 fastest-growing industries in each area contributed between 6% and 17% of the employment growth that occurred during 1991-96. The fastest growers contributed the least in La Crosse and the most in Rock. Other areas in which the largest gainers were important contributors were Kenosha (15%), Brown County (14%), and the Fox Cities (13%). At the low end, joining La Crosse, were Milwaukee and Racine at 7%. The differences across geographic areas indicate that certain areas benefited far more from growth in a few industries. The upside is that it occurred. The downside may be that the economic growth is overly concentrated, subjecting the areas to greater probability of future downturns. This is conjecture, although common wisdom today talks of the benefits of diverse economies.

Brown County has experienced rapid growth in several industries. At the top of the list are Insurance, Eating and Drinking Establishments, and Amusement and Recreational Services. The Insurance industry added 1,283 jobs between 1991 and 1994. It then doubled its increase between 1994 and 1996. This is clearly a growth industry for that economy. Also doubling its increase in the last two years was Eating and Drinking Establishments. These places grew by 861 employees in 1991-94 and added another 944 employees in 1994-96. Its annual rate of growth increased. Amusement and Recreational Services did not, nor did it increase in employment at all from 1994 to 1996. Its growth came at the beginning of the decade. More growth may come in the future, depending on what arrangements are negotiated for gambling between the Native American tribes and the State of Wisconsin. In the meantime, the industry's employment has stagnated.

Business Services have grown in Brown County, as they have in every other area of the state. They grew faster in 1991-94 than in 1994-96, but they are still growing. Expanding at a much-faster rate is Trucking and Warehousing. This industry added 572 jobs in Brown County in 1991-94 and an additional 758 jobs in 1994-96. Leading the rapid growth in Manufacturing has been SIC 35, Industrial Machinery and Equipment. This industry did not make the top-10 list for 1991-94. Its growth has come almost exclusively since March 1994 and accounts for one-third of the total Manufacturing employment growth since 1991. (Below we explore even more-specific industries involved in Manufacturing-employment growth.)

Dane County has a different mix of the most rapidly growing industries. At the top of the list are Business Services and Social, Health, and Educational Services. Dane has a different economy from Brown. Its role as a regional center is greater, which means that it provides more of the services that have been growing. These services have been growing especially since 1994. Business Services, for example, added 573 employees a year in 1991-94 and 1,387 employees annually in 1994-96. Social Services grew by 695 employees a year in 1991-94 and 897 a year in 1994-96. The numbers for Health Services were 548 and 891, respectively. These are clearly growth industries for Dane County. The same can be said for the others on the list. Virtually all have been growing faster since 1994.

The Fox Cities have a somewhat different mix and certainly a different order of rapidly growing industries. Business Services at the top is an exception. It grew by 252 employees a year in 1991-94 and by 615 employees a year in 1994-96. Eating and Drinking Establishments grew at about the same rate throughout the 1991-96 period. Paper and Allied Products, however, grew by 257 employees annually in 1991-94 and by 431 employees a year in 1994-96. Health Services was not on the list at all in 1991-94. It is now fourth, adding 1,620 employees during the five-year study period. Miscellaneous Retail and Food and Kindred Products also did not appear on the list of fastest growers in 1991-94. These are recent additions and bode well for the economy.

Kenosha, which had been written-off by some as a Manufacturing center, has three Manufacturing industries — including the top two — on its fastest-growing industry list. At the top are Transportation Equipment and Industrial Machinery and Equipment, both adding in the neighborhood of 1,000 employees. Another rapid grower is the proverbial Eating and Drinking Establishments. A surprise to some, but noted earlier, is the growth in Wholesale Trade — as new businesses moved in and overall employment grew by 637 workers. The county also benefited from growth in Health, Social, Educational and Business Services.

La Crosse County has a somewhat larger economy than Kenosha's, but its largest gainers realized considerably smaller gains than the industries in Kenosha. The largest gainer was Furniture and Home Furnishing Stores. This industry appears on no other top-10 list. The county's second-fastest grower, Miscellaneous Retail, appears on only one other list. Neither appeared on La Crosse's 1991-94 list. Also not appearing previously are Educational Services and Industrial Machinery and Equipment. The economy seems to be changing, achieving some of its growth from different industries.

Metro Milwaukee experienced marked growth in its 10 fastest-growing industries. These 10 account for 74% of the net employment gain for the area during the 1991-96 period. Far and away the largest gainer was Business Services, which added 14,714 employees over the five years. Most of this gain occurred in the 1991-94 period, in which 3,593 employees were added annually; this slowed to 1,967 during 1994-96. Health Services, on the other hand, grew more rapidly since 1994. The industry added 1,461 employees annually in 1991-94 and 1,623 annually in 1994-96. Social Services expanded almost as rapidly: 977 employees annually in 1991-94 and 1,372 in 1994-96.

There are several surprises on the list, led by the growth in Wholesale Trade. This industry did not appear on the top-10 list for 1991-94. Thus, it is a recent phenomenon, one that should be creating demand for more space. Other new additions are Engineering and Management Services, Electronic and Other Equipment, and Holding and Other Investment Offices. Each has expanded by more than 2,000 employees since 1991.

Racine County has grown the slowest of the nine areas under investigation. Nevertheless, it still has some industries that have grown substantially. Leading the list is Business Services, with the addition of 880 employees. This industry grew at about the same rate throughout the 1990s. Electronic and Other Equipment grew much more rapidly since 1994: 112 versus 265 employees a year in 1991-94 as compared to 1994-96. Transportation Equipment employment remains unchanged since 1994, but its early gains still keep it near the top of the list for Racine. Social Services employment grew at a rate of 108 employees a year in 1991-94 and at 180 employees annually in 1994-96. Collectively, these 10 industries generated more employment gains than the county as a whole, indicating that there were some substantial losers in the county as well.

Rock County had a dramatically different experience. Its growth was led by Transportation Equipment, which added more than 4,100 employees. The next-largest grower, Furniture and Fixtures, added one-fourth that number of employees. Rock and Kenosha Counties stand out as the only areas in which Manufacturing industries take the top-two spots on the largest-growing-industry list. Transportation grew most rapidly in the 1991-94 period, averaging an additional 1,026 employees each year. That rate of increase slowed to 545 employees a year in 1994-96. Furniture and Fixture employment grew at about the same rate of about 200 additional employees annually throughout the period. The others grew modestly throughout, while Business Services actually lost some employment between 1994 and 1996.

The "rest of the state" had a number of industries that helped the area grow in employment. Those industries that contributed more than 5,000 new employees each consist of four Services, two Manufacturing industries, and one Retail Trade — Eating and Drinking Establishments. These are not unique industries; they reflect what is occurring in many of the metropolitan areas as well. Collectively, they account for about one-half of the area's net employment growth, indicating that employment growth was not as highly concentrated as it has been in several of the metropolitan areas.

GROWTH WITHIN MANUFACTURING

Obviously, the bulk of employment growth in almost all parts of the state has come from the service sector, but that does not mean that specific Manufacturing industries have not grown. They have. In some instances, they have grown substantially and in ways not revealed by the statistics used thus far. One industry can decline, while another is growing in the same geographic area. When the two are combined under some more-aggregated SIC, the changes cancel one another out. Thus, it is important to examine growth at the four-digit SIC level to determine exactly which specific industries have been experiencing the most-rapid growth. The results for the nine geographic areas during the 1991-96 period appear in Table 4 on page 12.

With the exception of the "rest of the state," the five largest growers within Manufacturing in the regions under scrutiny have not come close to adding 10,000 new employees. In fact, in only two of the metropolitan areas did the fastest growing industries add as many as 5,000 new employees. In only three instances among the metropolitan areas has any single industry added as many as 1,000 employees. Two of these exceptions are in the large Milwaukee market area; the third is in Rock County. Manufacturing employment is not growing rapidly.

In Brown County, the fastest growing Manufacturing industries collectively added just more than 2,500 employees. It appears that there are few links among them; the industries are quite disparate. The scale of change does not suggest any particular synergy that could ensure continued growth in these industries.

Dane County has experienced even less Manufacturing growth among its leaders than Brown County. Some disguised industry related to Motor Vehicles is the fastest-growing, but even it did not add 500 employees over five years. Other growers include Food Products, Plastics, Instruments, and Printing. None of them grew by as much as 100 employees a year. Manufacturing is not the driving force behind Dane County's growth.

Manufacturing in the Fox Cities largely has been led by the industry one would expect, Paper. Three of its fastest-growing Manufacturing industries are related in some way to Paper. What may be surprising, however, is that the fastest-growing Manufacturing industry is not Paper, but Electronics and Food Products. These two industries collectively grew by more than 2,000 employees, helping to strengthen the Fox Cities' economy. The paper-related industries collectively added about 1,800 more employees.

Kenosha County, the smallest of the metropolitan economies, had its five fastest-growing industries create more new jobs than the entire Manufacturing sector in the county. The county is losing some Manufacturing jobs, while gaining others. The biggest winner is an old standby, Motor Vehicle Parts and Accessories. This is followed in importance by Special Industry Machinery and Cutlery, Handtools, and Hardware. Only the last did not appear on the list for 1991-94. The Motor Vehicle-related employment grew less quickly in 1994-96, and the Special Industry Machinery experienced no growth in the 1994-96 period. The two other industries grew by 35 to 45 employees per year in 1994-96.

La Crosse County has experienced few gains in employment in Manufacturing. Its largest gain, a specific industry in Industrial Machinery and Equipment, grew by just more than 400 employees, or 87 persons per year, on average. Its other industries were even more modest, growing between 22 and 57 persons per year. La Crosse has grown, but it has not been Manufacturing industries that have led the way.

Manufacturing has not driven the Milwaukee economy either, but several industries have added substantial numbers of employees. Commercial Printing, Lithographic, emerges once again as the leader, gaining 2,413 employees. The industry has several hundred employers, and many have benefited from the growth in need for printing. Second on the list is SIC 3714, Motor Vehicle Parts and Accessories. This industry grew by 1,550 employees. Printing has been growing more rapidly since 1994: it added 390 employees a year prior to March 1994 and 622 per year since. Employment in Motor Vehicle Parts also grew more rapidly since March 1994, but its expansion rate of 355 per year cannot match that of Printing. The growth in the five fastest-growing Manufacturing industries together virtually matches total Manufacturing-employment growth for 1991-96. This suggests that the economy is facing reductions as well as expansions and that a net gain is a considerable accomplishment.

Racine is also facing considerable downsizing and disappearing Manufacturing employment. The county lost almost 300 Manufacturing jobs net for the five-year period. Yet, it has five identified industries that collectively added more than 2,100 employees. This means that substantial losses were realized in other Manufacturing industries. The largest gains were accomplished by Household Appliances and by Motor Vehicle Parts. Both added in the neighborhood of 675 employees. Both also experienced that growth before March 1994 and have since lost some of their initial gains.

Rock County Manufacturing is driven by the Motor Vehicle industry. It experienced dramatic gains in employment in 1991-96. Motor Vehicles' rate of annual employment growth, though, has dropped from 755 employees per year in 1991-94 to 455 per year in 1994-96. A similar trend exists for Motor Vehicle Parts. It is likely that

Table 4

Manufacturing Industries with the Largest Gain of Employment by Four Digit SIC, 1991-1996

	Brown County			Dane County			Fox Cities			Kenosha County		
Rank	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain
1	3555	Printing trades machinery	783	371*	Motor Vehicles and Equipment	499	3679	Electronic components, nec	1,288	37*	Transportation Equipment	917
2	2011	Meat packing plants	578	2013	Sausages and other prepared meats	488	203*	Preserved Fruits and Vegetables	758	355*	Special Industry Machinery	561
3	2761	Manifold business forms	549	3089	Plastics products, nec	342	2621	Paper mills	682	342*	Cutlery, Handtools, and Hardware	310
4	201*	Meat products	324	3826	Analytical Instruments	311	2672	Paper coated and laminated, nec	602	367*	Electronic Components & Accessories	279
5	373*	Ship and Boat Building and Repair	279	2836	Biological products exc. diagnostic	294	2679	Converted paper products, nec	513	201*	Meat Products	235
Totals			2,513			1,934			3,843			2,302

** General SIC code is used to protect firm anonymity*

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

Table 4 (cont.)

Manufacturing Industries with the Largest Gain of Employment by Four Digit SIC, 1991-1996

	La Crosse County			Metro Milwaukee			Racine County			Rock County			Rest of State		
Rank	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain
1	35*	Industrial Machinery and Equipment	434	2752	Commercial printing, lithographic	2,413	363*	Household Appliances	684	371*	Motor Vehicles and Equipment	3,162	3089	Plastic products, nec	4,054
2	2759	Commercial printing, nec	285	3714	Motor vehicle parts and accessories	1,550	3714	Motor vehicle parts and accessories	666	3714	Motor vehicle parts and accessories	972	2431	Millwork	1,960
3	2051	Bread, cake, and related products	135	2869	Industrial organic chemics, nec	989	284*	Soap, Cleaners, and Toilet Goods	293	253*	Public Building & Related Furniture	805	2752	Commercial printing, lithographic	1,899
4	344*	Fabricated Structural Metal Products	114	2013	Sausages and other prepared meats	880	364*	Electric Lighting and Wiring Equipment	276	356*	General Industrial Machinery	297	3519	Internal combustion engines, nec	1,802
5	2434	Wood kitchen cabinets	112	3544	Special dies, tools, jigs & fixtures	856	3599	Industrial machinery, nec	223	254*	Partitions and Fixtures	295	3321	Gray and ductile iron foundries	1,683
Totals			1,080			6,688			2,142			5,531			11,398

** General SIC code is used to protect firm anonymity*

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

future growth in these industries will be more modest, as the ramping up for new models has largely been accomplished.

The "rest of the state" has experienced some dramatic growth in Manufacturing employment: almost 31,000 more employees from 1991 to 1996. Some five industries can account for one-third of that growth. Plastics, not elsewhere classified, leads the way. Dane County is the only other area to have leading growth in this specific industry, but it is an increasingly important industry across the state. Also on the list are Millwork, Lithographic Printing, Internal Combustion engines, not elsewhere classified, and Iron Foundries. This is a mixture of industries that do not have any immediate interconnections. Each has found an enriching setting in the state's smaller metropolitan and rural areas.

GROWING SERVICE INDUSTRIES

The fastest-growing service-sector industries are usually shared by at least seven of our nine geographic areas. The most-often-shared growth industry is Help Supply Services, known commonly as Temporary Help. This industry is among the leaders in eight of the nine areas. Only in La Crosse does it not make the list. In four of the areas, it is either the fastest or second-fastest grower. This expanding use of Help Supply Services is a national phenomenon, not just a product of the Wisconsin economy.

Very close behind Temporary Help in terms of being commonly among the fastest growers is the category of Eating and Drinking Establishments. This is on the list for seven of the nine areas, and it is either first or second on the list of six of the areas — appearing there more often than Temporary Help. Both of these industries have been growing in employment across the entire state.

Another industry on the list of seven of the areas is Elementary and Secondary Education. Unfortunately, we are unable to tell whether a true increase in employment has occurred or whether we have had some new level of reporting compliance. It seems unlikely that so many jobs have been created in this sector when the citizenry has been so opposed to increased spending by the schools. On the other hand, a baby "boomlet" has been moving through the K-8 schools, taxing the existing buildings and personnel. The industry remains on the list, but we will discuss it no further, not knowing the veracity of its inclusion.

Only one other industry appears on the lists for more than two areas, Trucking, except local (four areas). Residential Care and Hotels and Motels appear twice. Once we get past the very-common threads, the local economies are experiencing growth from some very disparate industries within the service sector. If we go further down the list of growers, we find more commonality.

Brown County's fastest-growing service industries grew by three times as many employees as did its five fastest-growing Manufacturing industries combined. At the top of the service-sector list is Insurance Agents, Brokers and Services. This is an unusual industry to appear. Also unique is its third industry on the growth list, Amusement and Recreation, not elsewhere classified. This industry grew in 1991-94, but not at all in 1994-96. Eating and Drinking Establishments, Trucking, and Help Supply Services employment grew throughout the period.

Dane County's service growth was led by Help Supply Services. This sector grew rapidly in 1994-96, adding some 627 workers per year, versus only 349 per year during 1991-94. Eating and Drinking Establishments grew quickly as well. It added almost 440 employees a year during the five years. Individual and Family Services grew a bit slower: 314 employees per year over the last two years and 1,624 over the last five years. Residential Care grew at an even-faster pace more recently, some 423 per year for 1994-96. But over five years, it added only 1,570 employees. As is found in several geographic areas, Elementary and Secondary Education appears to have expanded quite rapidly, but we have doubts about whether it increased as fast as these numbers indicate.

In the Fox Cities, the leading grower in service is Eating and Drinking Establishments, adding 1,730 employees over five years. Again, near the top is Help Supply Services, adding 1,651 employees over five years. It is followed by Doctors Offices and Clinics, Elementary and Secondary Education, and Trucking, except local. Together, they added about 1,800 employees. The use of Temporary Help workers appears to have increased modestly

Table 5

Service Industries with the Largest Gain of Employment by Four Digit SIC, 1991-1996

	Brown County			Dane County			Fox Cities			Kenosha County		
Rank	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain
1	6411	Insurance agents, brokers, and service	2,506	7363	Help supply services	2,300	5810	Eating and drinking establishments	1,730	5810	Eating and drinking establishments	759
2	5810	Eating and drinking establishments	1,805	5810	Eating and drinking establishments	2,187	7363	Help supply services	1,651	51*	Wholesale trade*	602
3	7999	Amusement and recreation, nec	1,691	8322	Individual and family services	1,624	8011	Offices & clinics of medical doctors	757	8211	Elementary and secondary schools	477
4	4213	Trucking, except local	1,357	8361	Residential care	1,570	8211	Elementary and secondary schools	535	5699	Miscellaneous apparel and assessories	372
5	7363	Help supply services	936	8211	Elementary and secondary schools	1,460	4213	Trucking, except local	521	7363	Help supply services	276
Totals			8,295			9,141			5,194			2,486

** General SIC code is used to protect firm anonymity*

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

Table 5 (cont.)

Service Industries with the Largest Gain of Employment by Four Digit SIC, 1991-1996

	La Crosse County			Metro Milwaukee			Racine County			Rock County			Rest of State		
Rank	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain	SIC	Industry	Gain
1	6331	Fire, marine and casualty insurance	1,147	7363	Help supply services	8,197	7363	Help supply services	1,270	806*	Hospitals	902	5810	Eating and drinking establishments	7,396
2	5731	Radio, TV, and consumer elec. stores	805	4513	Air courier services	3,996	48*	Communications	491	5810	Eating and drinking establishments	787	8211	Elementary and secondary schools	6,921
3	59*	Miscellaneous retail	634	8062	General medical and surgical hospitals**	2,820	7011	Hotels and motels	470	8211	Elementary and secondary schools	656	4213	Trucking, except local	3,998
4	8211	Elementary and secondary schools	545	8011	Offices & clinics of medical doctors	2,399	8361	Residential care	315	7363	Help supply services	345	7363	Help supply services	3,043
5	5810	Eating and drinking establishments	493	8211	Elementary and secondary schools	2,147	8351	Child daycare services	264	4213	Trucking, except local	329	7011	Hotels and motels	2,829
Totals			3,624			19,559			2,810			3,019			24,187

** General SIC code is used to protect firm anonymity*

*** About one third of this is not an increase but a change of SIC*

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

after 1994. The rates of growth of such workers is higher by about 50 workers per year in 1994-96. The other industries contributing have grown more modestly, indicating that the gains in service employment are spread rather broadly across many different industries.

Kenosha's service growers are smaller in scale than the Fox Cities'. Leading the list is Eating and Drinking Establishments. This is followed by a segment of Wholesale Trade, Education, and Help Supply Services. Help Supply gains were actually negative for the 1994-96 period. Again, the growth of service employment is spread over a number of industries and is not accounted for by a select set of industries.

The gains in La Crosse are a bit different from those in other areas. Yes, Schools and Eating and Drinking Establishments are on the list, but leading the list are three different industries: one in Insurance and two in Retail. The presence of such growing industries signifies a more-unique economy.

Metropolitan Milwaukee's service growth is led by an industry that has been a leader there for years, Help Supply Services. Its growth of more than 8,000 employees is over twice that of the second-place industry, Air Courier Services, and three times larger than that of the third-place industry, General Medical and Surgical Hospitals. It is interesting to see that after a decade of decline in hospital employment, here it is again near the top of the list. Its position, though, should actually be sixth and the reported gain reduced. The numerical gain is actually a combination of real employment growth and the re-enumeration of County General Hospital employment that is basically the same in number but is now counted in Health Services, rather than in County Government. The increase in Air Courier employment is legitimate; this is a true growth industry. Other large gainers include the movement of more Health Services to Doctors' Offices and the seeming expansion of Elementary and Secondary Education.

Racine County's fastest-growing service is Help Supply Services. Unfortunately, it has not grown at all in the 1994-96 period: all growth occurred in 1991-94. The same cannot be said for employment in Hotels and Motels and Residential Care: employment in both has grown during the entire five-year period. Child Care Service employment growth is largely a product of the 1994-96 period.

Rock County experienced its greatest service-employment growth in Hospitals, Eating and Drinking Establishments, and three other common industries. None of these grew at phenomenal rates, but all contributed to the economy at a greater scale than did their competitors. Hospitals added about 180 employees a year, while trucking grew by about 65 employees a year.

The "rest of the state" experienced some rather-dramatic growth in specific service industries. Linked to general trends and to the growth of tourism is the largest-growth industry, Eating and Drinking Establishments. This industry added more than 7,300 employees during the five years. The second-largest gains by far were in K-12 Education. If these are real rather than an artifact of new reporting, then this is an important component of economic growth. The other large growers include the Trucking, except local, the now-universal Help Supply Services, and Hotels and Motels. The gains in Trucking reflect the very-different and changing complexion of Trucking, as it has become de-regulated and increasingly a non-union industry. The gains in Hotels and Motels are related to the tourism growth and changes in the hotel industry.

OTHER DESCRIPTORS BEYOND INDUSTRY

One key dimension of identification of sources of employment growth is the industries in which expansion is taking place. Beyond industry, there are numerous other ways to characterize where employment growth has been occurring. One of them is to aggregate employment growth by whether it might be in an export-based industry, bringing new income to the local economy, or whether it is consumer-based, providing necessary goods and services to the local citizenry. Another characteristic is that of the autonomy of the employers: are the jobs being formed in businesses that are single-site, independent firms or are they being created in multi-site operations? A third issue is the degree to which the employment growth is coming from firms that have been around a few years versus newer entrants. Yet another is the degree to which employment growth is coming from many smaller-growth firms or whether the bulk of new employment is derived from firms that have been growing by large numbers — say, 50 or more employees. Each of these analyses appears below.

Export vs. Consumer Industries

The distribution of employment and employment gains by industry have given the reader a good notion as to the sources of employment gain in the nine regions. Further insight can be gleaned, however, by focusing more closely on two combinations of industries: Export Base, which includes industries that are more likely to sell products and services outside the immediate metropolitan area (but not necessarily outside the country), and Consumer Based or Residentiary Demand, which is basically industries that are aimed at the immediate residential market. Not all firms included in the definition may conform, but the general statement is accurate.

Residentiary demand is defined narrowly as Personal Services, Retail, and Small Scale (less than 20 employees) Business Services. Export Base includes all of Manufacturing and Large Scale (20 or more employees) Business Services. Basic economic theory asserts that it takes growth in Export Base employment to bring additional income into a region. Therefore, the greater the growth in Export Base employment, the healthier the local economy. We now look at each area to see to what degree each has experienced growth in export or Residentiary (Consumer) Demand.

The experience in the nine areas is quite varied (Table 6 on the next page; Δ91-96 = change from 1991 to 1996). In three counties — Brown, Dane, and Racine — and in the "rest of the state," the growth in Residentiary and Export Demand for the years 1991-96 is very similar, in that they have almost equal sums within each county. Obviously, the growth in Racine is far smaller than in Dane — but in each county, the growth in the two sectors is fairly similar.

This balance differs sharply from those conditions found in the other areas. In La Crosse, virtually no employment growth can be attributed to Export Base industries; it is all Residentiary. In the other areas — Fox Cities, Kenosha, Milwaukee, and Rock — growth in employment comes very decidedly from the Export Base industries. In Milwaukee, the ratio is 2-to-1 in favor of the Export Base employers. In Rock, the ratio jumps to 3.2-to-1. These four areas seemingly will bring in greater income than those that have a balance or an imbalance in the opposite direction.

Interestingly, the Export growth in these four metropolitan areas is not due to the same industry. In Milwaukee, it is Large Scale Business Services that have overwhelmed the growth in Residentiary Demand. In the other three areas, it is clearly Manufacturing-employment growth that is responsible for the larger, Export Base-employment increases. There need not be just one way for an economy to attract additional income.

Contribution of Autonomous vs. Multi-Site Employers

Hardly a day goes by without the financial news reporting some new corporate merger. It may be in financial services, such as the recently proposed savings and loan consolidation in California, or retail, such as the proposed merger of Staples and Office Depot (now on hold, though, at the behest of the federal government). Consolidation happens more than daily in the computer field, where larger firms buy up the upstarts with the newer technology. The question is whether these highly visible consolidations have implications at the local-economy level. In other words, is the majority of employment growth coming from multi-site organizations or do the single-site, independent firms still create most new employment? Does the answer to this question vary with the region?

Tables 7a and 7b on page 18 yield insights into these questions for the nine areas under study. A quick glance at Table 7a reveals that the answer to the second question is that the answers are going to vary. The percentage of employment in 1996 accounted for by Single-site employers ranges from a high of 59% in Kenosha to a low of 39% in Dane County and 40% in the Fox Cities. This is a substantial difference. These latter two areas are dominated by the Multi-site employers in several different industries. In the Fox Cities, the domination is likely due to the Paper companies, Retail, and Services. In Dane, it is more likely attributable to Retail and Services.

The other areas of the state are distributed along a continuum between the high and low figures. Little can be said about the reasons for the range, except that each economy is different and subject to different pressures. More to the point, though, is whether these areas are all becoming more reliant on Multi-site employers.

Table 6
Employment Growth in Export Base and Consumer Based Industries, 1991-1996

	Number of Employees																	
	Brown County		Dane County		Fox Cities		Kenosha County		La Crosse County		Metro Milwaukee		Racine County		Rock County		Rest of State	
	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96	1996	Δ91-96
Residentiary Demand	30,046	4,582	56,338	6,809	25,275	10,013	13,982	1,126	16,942	3,002	172,658	10,689	17,912	679	15,287	1,800	224,834	28,046
Personal Services	1,409	23	2,623	-74	1,408	697	667	86	783	54	9,302	42	956	26	677	-52	9,020	592
Retail	27,179	4,398	49,190	5,864	22,511	8,803	12,756	947	15,364	2,861	149,298	8,341	15,946	671	13,727	1,741	205,690	25,804
Small Scale Business Serv.	1,458	161	4,525	1,019	1,356	513	559	93	795	87	14,058	2,306	1,010	-18	883	111	10,124	1,650
Export Base	32,509	5,236	43,275	7,809	44,350	26,113	12,938	3,383	12,037	139	232,274	21,394	29,695	894	22,977	5,780	275,637	35,596
Manufacturing	26,731	3,882	28,515	3,465	37,631	22,832	12,256	2,990	10,509	-16	175,564	6,838	25,673	-299	20,952	5,632	257,747	30,858
Large Scale Business Serv.	5,778	1,354	14,760	4,344	6,719	3,281	682	393	1,528	155	56,710	14,556	4,022	1,193	2,025	148	17,890	4,738
Totals	62,555	9,818	99,613	14,618	69,625	36,126	26,920	4,509	28,979	3,141	404,932	32,083	47,607	1,573	38,264	7,580	500,471	63,642

Definitions

Personal Services: SIC 72

Retail: SICs 52-59, 75, 76, 78, 79

Small Scale Business: SICs 73, 87; Employment <20

Manufacturing: SICs 20-39

Large Scale Business Services: SICs 73, 87; Employment >19

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

Table 7a
Total Employment by Firm Type, 1996

Firm Type	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Single-site	65,516	97,008	46,857	27,858	28,198	404,919	39,242	29,093	487,321
Multi-site	58,744	149,085	70,352	19,145	31,053	382,786	38,124	35,397	458,651
% Single-site	53%	39%	40%	59%	48%	51%	51%	45%	52%
% Multi-site	47%	61%	60%	41%	52%	49%	49%	55%	48%

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

Table 7b
Change in Total Employment by Firm Type, 1991-1996

	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Single-site									
Employment Change	7,748	-16,616	-266	57	-1,089	-31,069	-5,276	951	-376
Rate of Change	13%	-15%	-1%	0%	-4%	-7%	-12%	3%	0%
Multi-site									
Employment Change	14,435	46,366	18,514	6,960	8,222	97,879	9,582	9,788	120,171
Rate of Change	33%	45%	36%	57%	36%	34%	34%	38%	36%

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

Table 7b shows the source of jobs for the 1991-96 period distributed among Single- and Multi-site employers. Six of the nine areas have seen a diminution in the number of jobs offered by Single-site employers. At the same time, however, three areas experienced a growth in employment among Single-site employers. This mixed picture again suggests that there are some fundamental differences among the economies of these areas that should be acknowledged and taken into account as public and private economic decisions are made.

On the other hand, all areas experienced much more employment growth among Multi-site employers than among Single-site ones. Even in Brown County, in which Single-site employers added 7,748 employees, the Multi-site employers added twice as many employees. In places like Dane County, the differences are enormous: Multi-site employers added 46,000 employees, while Single-site ones lost more than 16,000. That makes the economy rather different in 1996 than it was in 1991. Milwaukee's change is even more dramatic: Single-site firms lost 31,000 employees, while Multi-site ones gained close to 98,000. There is no question but that Multi-site employers currently are the chief job generators.

Even in the less-populated areas, the trend exists. The Single-site employers are holding steady in employment, but all employment growth is coming from the Multi-site employers. Whether it is behemoths like Wal-Mart that are taking over retail in many parts of the state or Joe's Fish and Bait with two locations to serve you, it is Multi-site employers that are the engines of today's economy across the state. It does not matter whether it is Kenosha, which has 59% of its employment in Single-site employers, or Dane County, with 39%; employment growth is coming from Multi-site operations.

Brown County is an anomaly. Its Single-site employment growth is 7,653 persons, larger than any other area of the state. Its base employment is 53% in Single-site, which puts it on the high side — but there is something unique about its employment base that continues to allow single-site employers to grow substantially. Whatever that is should be identified and built upon by those who hope to strengthen the Green Bay economy.

Rock County is the only other county to realize an employment gain of greater than 0% among Single-site, independent employers. There again, however, Multi-site employment grew by 10 times the amount of Single-site.

Table 8
Number of Employers in 1991 and Percent Present in 1996

	Areas								
Firms	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
1991	4,219	8,636	3,953	2,254	2,235	31,394	3,412	2,603	48,989
% Present, 1996	67%	66%	68%	63%	67%	67%	64%	65%	68%

Source: Center for Urban Initiatives and Research, UWM, ES202 Database, 1996

The trend is clearly one favoring Multi-site employers. As those individuals involved locally in economic development and space development survey the landscape, they should be aware that in almost every part of the state, it is the Multi-site or soon-to-become Multi-site employers on which they should focus their attention.

Firm Attrition

One of the continuing questions for those involved in business is that of survival. Specifically, what are the chances of a particular firm continuing over some longer period? That question is not one we can answer with our data set, since we do not have an accurate start date or confirmation of closures. What can be calculated, however, is a rate of remaining in existence as a reportable entity during a period of years. Some businesses may remain alive, but become part of another business. A few may move out of state. In both cases, according to our data set, they have ceased to exist. Other firms may have changed only their UC account number — but, because of doing so, they appear on a computer match to have disappeared. Larger employers we can trace manually, but there are too many small firms to undertake that task completely. Thus, the rate of survival that we compute and show in Table 8 above has some shortcomings. Nevertheless, it does give an indication of the percentage of businesses that existed and reported their existence to the unemployment-compensation program in both 1991 and 1996. If it understates survival, it does so for all areas.

Two points should be noted. *First*, there is not a great deal of variation across the nine areas in terms of the percentage of firms that survived the five years and continued to report their existence. The range is from 63% to 68%. No pattern is apparent. The *second* point is that Kenosha, which had the highest percentage of Single-site employment, experienced the lowest percentage of firms continuing to exist. At the other end of the spectrum, however, there is no simple relationship between those with low levels of Single-site employment and higher rates of continuation. The relationship is not linear. All we can say is that about one-third of the firms in existence at year one will have disappeared in some fashion by year five.

NET EMPLOYMENT GAINS FROM EXISTING EMPLOYERS, 1991-96

Employment gains come either from existing firms or from new employers. The UC data set does not allow us to determine precisely which firms are new; we can only tell whether they have been newly added to the list. What we can tell with some precision is which employers were in place in both 1991 and 1996. Most of these employers in 1996 are exactly the same firms they were in 1991. Some, however, may have merged with or bought other employers during the five-year period or simply changed ownership and — for that, or some other, reason — appear to be a new firm. As we stated, we have tried to edit for such changes to create as accurate a list as possible.

For employers that survived the full five years, Table 9 on the next page shows the number of employees collectively added, the number of employees collectively lost, the net change in employment accounted for by these employers, and what proportion of the total employment growth noted in Table 2 for the 1991-96 period can be attributed to the surviving employers in each geographic area.

Table 9
Jobs Added and Lost by Employers in Place in 1991

	Area								
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Jobs Added	17,393	32,051	13,635	5,348	7,265	106,837	8,350	11,854	121,956
Jobs Lost	7,302	13,174	5,745	3,589	3,329	62,470	6,849	3,292	55,452
Net Change	10,091	18,877	7,890	1,759	3,936	44,367	1,501	8,562	66,504
	Employment Growth from 1991-1996 Attributable to Employers in Place in1991								
Percent	45%	54%	43%	25%	55%	66%	35%	80%	56%

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

The *first* point to note is that these existing employers in every area created more job opportunities than they destroyed. What varied was the relationship between jobs added and jobs lost. In places like Brown, Dane, and La Crosse Counties, the Fox Cities, and the rest of the state, these surviving employers created at least twice the number of jobs that they lost. In Rock County, existing employers created almost four times as many jobs as they lost. In some communities — such as Kenosha, Milwaukee, and Racine — the existing employers, while creating more jobs than they lost, created less than twice as many. In Racine, surviving employers created only 21% more jobs than they lost. In Kenosha, the figure was 49% and in Milwaukee, it was 70%. In these latter communities, it appears that the survivors were not as healthy as those located outside Southeastern Wisconsin.

The *second* point to note is the relative roles of these surviving employers in the net employment growth in their regions. The range of these firms' contributions to the net number of jobs added to each economy varies from a low of 25% to a high of 80%. These figures are a measure of the role of young and growing firms to the local-employment base. In Kenosha, it is clear that the economy is growing because of new additions to the employer pool; existing employers contributed but 25% of the employment gain. Kenosha's economy is a dynamic one, dependent for success on in-migration and new starts.

Rock County, by contrast, is at this point highly dependent for employment growth upon firms that have been in place for at least the last five years. These firms have added almost four times more jobs than they have lost. And they collectively account for 80% of the net employment growth realized in the county in 1991-96. That is a very high figure. It is unlikely that this figure will remain as high as it is for two reasons: further employment gain in the Automobile sector is unlikely to be as great and newer firms likely will become more significant contributors to employment growth.

For the "rest of the state," the employers in place in 1991 and again in 1996 were rather important for employment growth. They added almost twice as many jobs as they lost and accounted for 56% of net employment growth for the area. With a mix of sources for job creation, it seems that this area has achieved some balance between firms clearly in place five years ago and those that were not. This balance between old and new may be desirable since newer firms are likely to be more vulnerable and older firms are likely to be less dynamic.

PREVALENCE AND CONTRIBUTIONS OF LARGE (50+) GROWERS

Having learned that existing employers are important sources of employment growth in most regions of the state, we then seek to learn whether growth is largely coming from employers that have added a large number of additional workers. For this exercise, we define "large" as 50 or more new workers during the five years of analysis. We have determined just how many employers in each geographic area added this many workers and just what proportion of net employment growth in each area can be attributed to the growth of these large growers.

Table 10
Number of Employers who Added 50+ Employees, 1991-1996

	Area								
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
# of Employers	16	23	8	7	11	128	8	11	106
Jobs Added	3,047	4,409	1,560	731	2,746	26,547	562	6,876	19,355
	Employment Growth from 1991-1996 Attributable to Large Growth Employers								
Percent	14%	13%	9%	10%	38%	40%	13%	64%	16%

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

Table 10 above lists for each area the number of employers that have added at least 50 employees between 1991 and 1996. It also lists the number of jobs these employers have added and what proportion of the total, net-employment growth of the area these large growers have contributed. A smaller proportion indicates that it is newer firms and smaller firms that have contributed the bulk of expanded employment opportunities. A larger proportion indicates that it is the older, somewhat-larger firms that have created more employment opportunities.

With the exception of Milwaukee and the "rest of the state," very few employers have added 50 or more employees in the first part of the 1990s. In three of the areas, the figure is in single digits. In no case among the others does it exceed 23. More to the point is the number of jobs created and the proportion of net-employment growth these employers have contributed. Again, with the exception of Milwaukee and the all-encompassing "rest of the state," the large growers have added fewer than 7,000 per area. In six instances, the jobs added constitute 16% or less of the employment growth. That is modest and suggests that these economies are populated by the younger and smaller, growing employers.

Three areas — La Crosse, Milwaukee, and Rock — experienced 38% or more of their employment growth because of these big growers. These areas are much more dependent upon the large employers for their growth. The implication is that their economies are not as dynamic as the others. That is not to say that rapid growth did not occur — in La Crosse and Rock, it did — but the growth in employment is coming from traditional sources to a much-greater degree than it is in the other six areas of the state. Such a finding may not be a negative, just a fact. On the other hand, since larger firms tend to be more stable in employment, it may not be wise to rely on these same employers for more growth in the future.

EMPLOYMENT BY ESTABLISHMENT SIZE

One of the big debates in economic-development circles has been which size employer creates the most new positions. After raging for a decade, the answer is generally thought to vary with the time and place. We shall shortly see if that is the case in Wisconsin, but first we should see what the current distribution of employment is by the size of employer. Please note that employment is categorized by the number of employees at each specific location, even when an employer may have several locations. For example, a firm may have three plants and an overall employment of 1,000 persons. For this analysis, the firm would be counted three times and listed at each location with the number of jobs each specific location contains. Thus, one plant may have 150; another, 550; and the third, 300. These employers would be listed three times and placed in three different-sized categories.

Table 11 on the next page lists five arbitrary categories of number of employees. For each geographic area, the collective number of employees in establishments of each size is listed. Thus, for Brown County, for example, some 21,883 positions are in firms with one to 19 employees, and 34,560 employees are listed as being at establishments with 500 or more employees. The total number of employees in each area is the same as it appears in Table 1.

Table 11
Employment by Firm Size, 1996

Firm Size by Number of Employees	Number of Employees								
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
1-19	21,883	46,025	20,864	10,769	11,586	149,159	15,823	13,082	238,977
20-99	35,819	71,164	31,145	14,773	15,492	219,022	21,516	17,636	280,571
100-249	21,319	38,201	19,035	9,088	10,748	132,093	12,582	10,946	163,142
250-499	10,679	23,881	15,805	4,482	4,901	85,343	7,943	5,181	94,293
500+	34,560	66,822	30,360	7,891	16,524	202,088	19,502	17,645	168,989
Totals	124,260	246,093	117,209	47,003	59,251	787,705	77,366	64,490	945,972

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

What may be of interest beyond the absolute number of employees is the relative role each size category plays in each geographic area. The size category that contains the most employment in most areas is the second smallest, 20-99 employees. The other categories that compete with it are the largest, employers of 500 or more employees, and the smallest, those with 19 or fewer employees. Both Kenosha and "the rest of the state" have the second-largest number of employees working in establishments with one to 19 employees. The only consistent rule is that the size category that has the fewest employees in every geographic area is that of 250-499 employees.

The distribution of employment across size categories is really not very different across geographic areas. If we just examine the percentage of all employment that employers of fewer than 20 employees account for, we find the range is 18% to 25% — with seven of the nine areas varying between 18% and 20%. The "rest of the state" stands at the high end, with 25%. In other words, the communities vary slightly in terms of the distribution by size of employer. Of much greater interest is whether the same can be said about which size employers have been adding the most employees.

CHANGE IN EMPLOYMENT BY ESTABLISHMENT SIZE

The size of the establishment adding new employees has direct implications for economic development by virtue of space demands. If jobs are being added by small employers, then modest additions to existing buildings plus new, small spaces may be needed by a large number of employers. If, on the other hand, employees are being added largely by the biggest employers, it means that a few big spaces will be needed. Table 12 on the next page shows the establishment sizes that have been adding the most employees.

In seven of the nine areas, it is the 20-to-99-employee establishments that have added the most employees in 1991-96. One of the exceptions is Kenosha, in which the 100-to-249-employee establishments added modestly more employees. This actually may have been smaller employers that grew over the 100-person dividing line. The other exception, not surprisingly, was Rock County. Here, we already have learned that growth has come from a few larger employers that grew dramatically. Aside from these two areas, though, the most-rapid growth has occurred in the 20-to-99-employee organizations, not the smallest, as is commonly believed to be the case.

In Brown County, the 20-99 size category is responsible for 35% of the employment growth. These are likely to be young, but not new, employers that have expanded. The county also benefited from older, larger employers (those with 500 or more employees), which added just more than 25% of the employment growth. There, as elsewhere, the 250-499 category was responsible for only a small amount of the net growth (10%).

Dane County experienced a somewhat-different pattern. The 20-to-99-employee organizations accounted for 47% of its employment growth. This is clearly "where the action is." The largest employers actually lost employment. The smallest employers contributed some 20% of the total, indicating new life in the community.

The Fox Cities experienced yet another pattern. Again, the largest proportion of growth (37%) came from the 20-to-99-employee organizations — but, uncharacteristically, those employers with 250-499 employees added the second-most new positions, accounting for 32% of the growth. The smallest firms, by contrast, accounted for only 14% of the growth.

Kenosha's pattern is yet again different. Its largest employers lost employment. Its smallest employers grew collectively, but added only 9% of the new positions. The highest percentage of the growth, 40%, was contributed by the 100-to-249-employee establishments. Those with 20-99 employees added another 38%. The space and service needs are different here.

In La Crosse, employers with 250-499 employees lost employment; all others gained, but none dominated. Those with 20-99 employees added the most employment, 34%. Close behind were those with 100-249 employees, at 28%. The smallest and largest employers did contribute, but the majority of additions were in the mid-sized employers.

In Metropolitan Milwaukee, the establishment size with the largest aggregate employment, 20-99, also had the largest gain in employment in 1991-96. Employers this size added close to 25,000 new employees during the five-year period. Employers in the categories that were closest, 1-19 and 100-249, created just more than half as many jobs each. Their contributions were important, but it is clear that the economy is being driven by establishments with between 20 and 100 employees. Unlike some of the other areas, Milwaukee's largest employers did continue to grow and added 15% of the region's employment growth. This is less than their proportionate share, but more than that found in several of the state's geographic areas.

Racine's employment growth was also led by employers in the 20-to-99-employee category. They, in fact, were responsible for one-half of the growth. This is the highest proportion among the nine areas examined and points precisely to the fastest-growing establishment sizes. Even though the employers in the largest category have almost as many employees overall, they basically did not grow. Rather, the additional growth came from those with 250-499 employees (28% of the total) and the smallest (15%) of the total.

Rock County's growth was unusual in yet another way; the largest employers were responsible for 47% of the growth. As has been mentioned before, this is unusual in that the largest employers are commonly either not growing or not growing rapidly enough to maintain their share of the total employment. In Rock, it is the largest employers, basically those in Manufacturing, which have grown rapidly recently and bolstered the Rock County economy. Also contributing were employers with 20-99 and 100-249 employees. Each of these contributed just about one-fifth of the employment growth.

In the rest of the state, the more-expected pattern of employers with 20-99 employees contributing the

Table 12
Net Change in Employment by Firm Size, 1991-1996

Firm Size by Number of Employees	Change in Employment								
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
1-19	2,756	6,083	2,606	824	1,108	13,301	629	1,190	27,240
20-99	7,732	14,042	6,781	3,601	2,424	24,659	2,135	2,529	39,187
100-249	3,781	4,746	1,800	3,855	2,020	13,361	-32	2,317	18,640
250-499	2,225	5,433	5,900	1,293	-83	5,234	1,202	-749	9,829
500+	5,689	-554	1,161	-2,556	1,664	10,255	372	5,452	24,899
Totals	22,183	29,750	18,248	7,017	7,133	66,810	4,306	10,739	119,795

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-1996

largest percentage of the growth, 33%, prevailed. This was followed by the smallest employers (23%) and the largest (21%). The mid-sized firms contributed the rest. The gains were generally proportionate to their share of all employment, unlike the variations seen across the smaller metropolitan economies.

CITIES VS. THE SUBURBS

One issue that haunts some metropolitan areas is that of the erosion of the core role in the economy of the central city. In Milwaukee, for example, the central city in 1900 contained more than 90% of the region's employment. By 1979, the proportion of jobs in the city had dropped to 53% of the region's total. By 1996, as we shall see, that figure had dropped again to 43%. The suburbs have become increasingly dominant in terms of the number of jobs. The issue is whether this pattern is found in other metropolitan areas of the state.

Only six of the other areas under study are included in this portion of the analysis. Rock County has two central cities, which makes the analysis difficult, but it is included. The Fox Cities, which is defined as 16 communities, cannot be included. And it makes no sense to consider the rural areas and smaller metropolitan areas, so these are also excluded.

Employment in the Central Cities vs. the Surrounding Suburbs

The first question explored is the degree to which 1996 employment is concentrated in the central city or cities (in the case of Rock County). Table 13 on the next page reveals the distributions of employment in March 1996. With the exception of Milwaukee, employment is clearly concentrated in the central cities. Racine has the lowest percentage (70%) outside of Milwaukee, but it is still a substantial portion of the total. In all of these other cases, the central city is still the dominant element.

Unfortunately, in several of these areas, the role of the central city has been eroding even in the very short run. If we compare the percentage of total employment in the central city in 1994 with that in 1996, we find that it dropped by two percentage points in Dane, Milwaukee, and Racine and one percentage point in Brown County and La Crosse. On the other hand, the cities of Kenosha, Janesville, and Beloit all held their own during this period, relative to their suburbs, in terms of their percentage of regional employment.

Change in Employment in Cities and Suburbs, 1991-96

The fear of erosion of the central city is not a valid one for most cities in Wisconsin at this time. Green Bay added three times more new jobs than did the rest of Brown County. Kenosha added twice the number of jobs its suburbs did. La Crosse and Racine generated as many new jobs as did their suburbs. Janesville and Beloit, combined, added 7.6 times more new jobs than their suburbs. These central cities are doing well to very well in terms of capturing employment growth.

Madison, however, is not quite as dominant. It added more than 20,600 new positions, which seems like a lot — but its suburbs added approximately 14,000, thus undermining a very small portion of Madison's lead. In Milwaukee, virtually all net growth occurred in the suburbs. The city was able to just hold its own. Being able to do that is remarkable for a large city, as most of its counterparts in other states have been declining for years.

Communities Responsible for 50% of Suburban Jobs

Within these metropolitan areas, common questions are: Which of the suburbs are home to at least one-half of the total suburban employment? Is it just one suburb that dominates, or is employment spread among several suburbs? By determining how many suburbs and which, we can learn just how concentrated suburban employment is in 1996.

For seven metropolitan areas, Table 15 on the next page lists the communities that are the largest homes for employment and which collectively contain at least 50% of suburban employment. As is immediately apparent, suburban employment is concentrated. In Brown and La Crosse Counties, two suburban communities contain at

Table 13

Percent of Employment in Central City and Rest of Area, 1996

	Percent								
Area	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Central City	77%	75%	**	80%	80%	43%	70%	85%	**
Rest of Area	23%	25%	**	20%	20%	57%	30%	15%	**
Total	124,260	246,093	**	47,003	59,251	787,705	77,366	64,490	**

** *Not calculated*

Source: Center for Urban Initiatives and Research, UWM, ES202 Database, 1996

Table 14

Change in Employment Central City and Rest of Area, 1991-1996

	Absolute Change								
Area	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Central City	16,671	20,636	**	4,873	3,753	2,481	2,282	9,491	**
Rest of Area	5,512	14,206	**	2,144	3,380	64,329	2,024	1,248	**
Totals	22,183	34,842	**	7,017	7,133	66,810	4,306	10,739	**

** *Not calculated*

Source: Center for Urban Initiatives and Reseach, UWM, ES202 Longitudinal Database, 1991-1996

least one-half of the suburban employment. This is not very much employment, however, because the central city in each case has about 80% of the metro total, but what is suburban is concentrated. In Kenosha, Racine, and Rock Counties — three counties in which employment is still highly concentrated in central cities — only three communities are needed to capture one-half of the suburban employment. In Milwaukee, only seven communities are needed to capture one-half the suburban employment, even though the suburbs collectively contain 57% of all employment.

Table 15

Communities Responsible for 50% of Suburban Employment, 1996

	Area								
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Number	2	5	**	3	2	7	3	3	**
Communities	De Pere Ashwaubenon	Middleton Dane Co., NEC Sun Prairie Stoughton De Forest	**	Pleasant Prairie Bassett Bristol	Onalaska West Salem	Wauwatosa Waukesha Brookfield West Allis Menomonee Falls New Berlin West Bend	Burlington Sturtevant Union Grove	Edgerton Evansville Milton	**

** Not calculated

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

Table 16
Firm Movement from Central Cities, 1991-1996

Central City Firms	Area							
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock* County
# Moved from Central City	15	62	**	1	10	437	15	2
% Firms Moved 1991	0.48%	1.10%	**	0.06%	0.61%	3.61%	0.69%	0.10%
1996 Employment	100	1,655	**	1	108	7,044	339	31

* Includes central cities of Beloit and Janesville

** Not calculated

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1991-96

The largest "employment home" is Wauwatosa, an immediate suburb of Milwaukee. It has employment of more than 51,500 persons, which is still only 7% of the metropolitan total and 12% of the suburban total. Nevertheless, it has more jobs than all of Kenosha County. The other suburbs on the list for these areas vary greatly in the size of their employment base. Some, such as Pleasant Prairie, contain around 3,000 jobs, while others, like De Pere, have more than 12,500. The basic message is that the distribution among all suburbs is wide in absolute numbers, but the suburban employment is rather concentrated in all metropolitan areas.

Autonomous Firm Movement from the Central Cities, 1991-96

One possible cause of suburban employment growth is the migration of employers from the central city to its suburbs. The question is whether this is an issue in the metropolitan areas of Wisconsin. To explore this, we look first at only Single-site, autonomous firms that were located in a central city anytime between 1991 and 1995 and appeared only in a suburb in 1996. Such employers are very easy to trace, unlike multi-location establishments that may open new locations in one year and close others two years later. In such situations, it is difficult to decipher moves.

Table 16 above shows just how many Single-site, independent firms moved from their central-city locations to a suburb sometime between 1991 and 1996. It also shows the 1996 employment associated with the firms. This number must be used with care: the number of jobs is an estimate. Some of these firms might have had many fewer jobs if they continued to inhabit their central-city location. On the other hand, some have downsized since they first moved to the suburbs. We have not traced these changes over time; we are merely comparing their pre-movement employment with their most-recent, post-move employment.

Again, Milwaukee is the exception. It had 437 employers move to the suburbs. Together, in 1996, they employed more than 7,000 persons — the equivalent of 2% of the city's 1991 employment and 3.6% of its employers. The loss of employment is not very great and probably cannot be characterized as a major contributor to the slow growth in the city's employment base.

The movement of employers in the other metropolitan areas is even more modest. In two instances, they can be counted on one hand. In all but Dane County, they constituted much less than 1% of the employers in 1991. In Dane, they are just more than 1%. The number of employers and the number of employees are very modest by any scale. This should not be a major concern of any policymaker — outside of, possibly, Milwaukee. Besides, what we have not shown are the moves back to the city from the suburbs. While not as large as those moving out, they do help to counter the losses enumerated in Table 16.

DIFFERENCES IN EARNINGS PER WORKER

The focus, to this point, has been the change in number of employees in the various geographic areas. At least as important as the number of persons working is the earnings these workers are generating. Ideally, we will find that the earnings in an area are high and rising faster than employment, indicating a gain in real income. To ex-

plore the issue of earnings, we have used three measures of earnings. The first is the average earnings per worker in each major industry for 1996. The second and third figures reflect distributional issues. One examines the percentage of workers in each industry that earn more than $25,000, on average, per year and the other looks at the percentage of service-sector workers who earn more than $25,000 per year, on average. This latter measure is explored because of the charge that service-sector employment is less desirable than Manufacturing because it is lower-paying.

Average Earnings per Worker

The average earnings per worker is calculated by dividing total payroll per employer by the number of its employees and then averaging this figure across all employers in each industry. It is not an average wage. It is a figure that includes the combination of the chief executive officers' and laborers' pay and both part-time and full-time employees. The figure is not comparable to any other common statistic, but it does give a very-real view of what the average worker in each industry does earn. For example, a Manufacturing worker — with full-time work common, plus some overtime and relatively high wages — earns considerably more than a worker in Retail Trade, which is characterized by both low wages and part-time employment.

Table 17 below lists the average earnings per worker by industry and area. As one might expect, there is a range across areas within the same industry, and there is some variation across areas in terms of the combined average. There does seem to be a pattern of higher earnings per worker associated with larger populations. The highest average earnings are found in Milwaukee and Dane. The next-highest average is found in Brown County. Another step down come the smaller metropolitan areas of Kenosha, Rock, La Crosse, and Racine. Then, about $2,000 lower, come the smallest metropolitan areas and non-metropolitan areas of the rest of the state. The differences between the average earnings per worker in Milwaukee and the rest of the state is $6,847. That is a substantial sum.

Much-greater differences are found within each geographic area. In Kenosha, for example, the average earnings per worker in Retail is $11,970, compared with $40,029 per worker in Manufacturing.

Another finding is that the industry with the highest average earnings per worker is not the same in every area. Manufacturing is commonly the highest-paying industry — but in Milwaukee, the average in FIRE is higher by more than $3,000 per worker, and in Dane the averages in FIRE and Government are both in the range of $1,000 higher than in Manufacturing.

Furthermore, as might be expected, the earnings in each industry vary considerably across areas. Thus, Manufacturing averages vary from a high of $40,923 in the Fox Cities to a low of $28,238 in the "rest of the state." FIRE varies from a high of $40,730 in Milwaukee to a low of $23,726 in Racine. These differences indicate a very different mix of sub-industries and occupational distributions within those industries. In FIRE, for example, Mil-

Table 17
Average Annual Earnings Per Worker by Industry, 1996

	Areas								
Industry	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Ag & Mining	$18,143	$24,439	$17,616	$14,117	$20,873	$20,048	$17,474	$20,178	$19,687
Construction	$28,574	$31,433	$34,098	$33,749	$30,048	$31,702	$27,928	$29,500	$25,337
Manufacturing	$36,201	$34,111	$40,923	$40,029	$30,861	$37,364	$37,896	$39,488	$28,238
Transportation/Util.	$34,842	$33,454	$32,331	$28,823	$29,996	$33,381	$27,920	$32,693	$26,165
Wholesale Trade	$31,808	$31,538	$31,811	$30,692	$29,145	$36,394	$26,198	$28,333	$27,817
Retail Trade	$13,732	$13,104	$12,433	$11,970	$11,195	$13,601	$11,519	$13,257	$11,416
FIRE	$28,122	$34,272	$34,976	$27,839	$25,477	$40,730	$23,726	$25,198	$26,096
Services	$23,537	$26,473	$22,263	$22,017	$23,802	$24,750	$22,746	$22,157	$20,466
Government	$32,228	$34,767	$25,956	$28,600	$26,463	$31,102	$31,255	$25,117	$22,227
Average	$27,465	$29,288	$28,045	$26,426	$25,318	$29,897	$25,185	$26,213	$23,050

Source: Center for Urban Initiatives and Research, UWM, ES202 Database, 1996

waukee is home to the headquarters of regional investment banks, national mutual-fund firms, and national insurance companies, while Racine has local offices.

Brown County has the third-highest average earnings per worker of the nine areas. The highest-paying industry is Manufacturing, followed by Transportation/Utilities/ Communication, Government, and Wholesale Trade. All have averages above $30,000 per year. At the low end are the proverbial Retail Trade and Agriculture and Mining, the two lowest-paying industries in all areas. The area's averages for Transportation/Utilities/Communication and Retail Trade are the highest among all geographic areas, and earnings in Government are second-highest.

Dane County, the state's second-largest metropolitan area, has the second-highest average earnings per worker, $29,288. Its high average earnings per worker is derived from the distribution of all industries; it is not driven by any one industry. It does have the highest average earnings per worker in two industries, Agriculture and Mining and Government — but these are small industries, relatively, and do not drive the average. Most of the averages tend to be in the middle to upper middle of the ranges across the areas. That combination, plus having more workers in certain industries, makes the average as high as it is.

The Fox Cities have the next-highest overall average. This is driven, in part, by a very high earnings per worker among a large number of Manufacturing workers. The area also hosts the highest earnings per worker in Construction and the second-highest earnings among workers in FIRE. At the same time, it has the third-lowest average among Government workers, but it has a modest number of Government workers. The range of averages across industries is as great as anywhere, but the small proportion of workers in the lower-paying industries does not pull down the overall average.

Kenosha's overall average is very much in the middle among metropolitan areas, but it has a Manufacturing industry in which the average earnings per worker is very close to the tops in the state. On the other hand, its Retail Trade workers have a relatively low average, $11,970, as do its Agriculture and Mining workers, $14,117. In fact, workers in this industry have the lowest average of any areas of the state. Those in Services have the second-lowest average in the state. Many other averages are in the middle of the pack, resulting in an overall average earnings per worker that is similar to the rest of the state.

La Crosse County has an average earnings per worker that is in the middle. Its average among Retail Trade workers is the state's lowest, and its average among Manufacturing workers is second-lowest. Its other industry averages tend to be somewhere in the middle, keeping its overall average near the middle.

Metropolitan Milwaukee, as expected, has the highest average earnings per worker. Its averages lead the state in only two sectors, FIRE and Services — but these leads, along with relatively high averages in most industries and concentrations of workers in some of the higher-paying industries, yield the highest overall average earnings per worker of any area.

Racine, by contrast, has the lowest average earnings per worker of any of the eight metropolitan areas. Only the "rest of the state" is lower. Racine has the lowest average earnings per worker in four sectors: Construction, Transportation/Utilities/Communication, Wholesale Trade, and FIRE. It is close in several others. Its Manufacturing workers appear relatively well-paid — but beyond that, the distributions tend toward the lower end.

The same can be said for Rock County. It has the lowest average earnings per worker in Government and the second-lowest in Wholesale Trade, FIRE, and Services. No averages are at the top of the distributions. The result is a relatively lower average earnings per worker overall. Only Manufacturing workers have average earnings close to the top of the list.

The "rest of the state" has a different distribution of industries within the overall mix of industries. It has the lowest average earnings per worker in five of the 10 industries: these include Construction, Manufacturing, Transportation, Services, and Government. It also has the second-lowest average in one industry and third-lowest in two others. Metropolitan areas tend to have higher wages. This certainly seems to be confirmed by the distributions of earnings shown in Table 17. Part of the economic appeal to employers of the less-populated areas are the lower wage demands.

Workers Earning More Than $25,000 per Year

Average earnings per worker are only one indicator of the rewards of work. Another indicator that has greater meaning is the percentage of workers in each industry in each area who earn above some minimum level. For this analysis, we have arbitrarily chosen $25,000 per year. This is not a lot of money in today's economy, but it is above the minimum wage and above the poverty level for even a large family. The greater the relative number of workers above this minimum, the healthier the local economy and the greater the chances that any individual worker will have such earnings, should they enter the industry.

As Table 18 below reveals, five of the nine areas under analysis have at least one-half of their workers with earnings at or above $25,000 annually. The largest proportion of workers with these earnings (55%) is in Dane County. Others close behind include Milwaukee, the Fox Cities, Brown County, and Rock County. Racine is also very close (49%). The lowest proportion (35%) is in the "rest of the state," although La Crosse is not far ahead (38%).

What is more striking than the total differences across areas are the different proportions with earnings at or above $25,000, both within industries and within geographic areas. For example, within Agriculture and Mining, the proportion with the higher earnings varies from a high of 45% of workers in Dane to a low of 6% in Kenosha. In FIRE, the range is from 77% of the workers in Brown County to 35% in Racine County. Areas may appear to have similar distributions of employment by industry, but the financial payoff in terms of earnings differs greatly.

The same can be said for the variation within each geographic area. In Brown County, for example, the percentage of workers earning more than $25,000 varies from a low of 13% in Retail Trade to a high of 87% in Government. In Racine, the range is from 6% in Retail to 93% in Government. In which industry one works, far more than in what geographic area, greatly influences one's chances of earning at least $25,000.

Brown County has three industries in which it has the highest proportion of workers earning at least $25,000. These industries are Transportation/Utilities/Communication (84%), Retail Trade (13%), and FIRE (77%). It has one that is the second-largest proportion, Government. It also has one industry in which it has the lowest proportion: Construction. That combination leaves it in fourth place overall.

Table 18

Percent of Workers that Earn $25,000+ Annually by Industry, 1996

	Area								
Industry	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Ag & Mining	24%	45%	10%	6%	36%	33%	20%	27%	26%
Construction	57%	64%	75%	71%	60%	67%	58%	59%	44%
Manufacturing	72%	75%	80%	69%	63%	83%	77%	81%	56%
Transportation/Util.	84%	71%	76%	50%	62%	68%	47%	64%	51%
Wholesale Trade	59%	71%	62%	62%	70%	73%	43%	62%	45%
Retail Trade	13%	9%	8%	4%	4%	9%	6%	13%	5%
FIRE	77%	67%	64%	43%	54%	73%	35%	41%	39%
Services	41%	57%	41%	47%	36%	44%	37%	39%	29%
Government	87%	87%	65%	81%	30%	85%	93%	38%	38%
Total	52%	55%	54%	45%	38%	54%	49%	50%	35%

Read: of all manufacturing workers in Brown County XX% earn $25,000+

Source: Center for Urban Initiatives and Research, UWM, ES202 Longitudinal Database, 1996

Dane County, which had the second-highest average earnings per worker, has the highest percentage (55%) of workers with earnings of at least $25,000. It is home to two industries, Agriculture and Mining and Services, which have the highest percentages of workers earning at or above $25,000 per year. Its Government workers are the second-most commonly paid at or above $25,000. These, plus the generally high percentage of other workers earning at or above $25,000 make it the best-paid economy. One drag on Dane's position is Retail Trade. The county's 9% is certainly not the lowest percentage, but it is in rather sharp contrast to most of the other industries in the county.

The Fox Cities have the second-highest percentage of workers earning at least an average of $25,000 per year. It enjoys this position despite having but one industry, Construction, which has the highest proportion of workers earning at least $25,000 among all areas. Since Construction has less than 5% of all workers in the area, it cannot carry the average very far. So it is a combination of workers from many areas that together creates the second-highest figure.

Kenosha has the second-lowest proportion of workers earning at least $25,000. Helping to put the county at this lower level are the 4% of Retail workers and the 6% of Agricultural and Mining workers who earn at least $25,000. Also contributing are the second-lowest proportion of Manufacturing and Transportation/Utilities/Communication workers who earn at least $25,000. Kenosha has a relatively high level of average earnings per worker in Manufacturing, but this is not due to a high percentage of workers with higher earnings. Instead, it is due to a smaller number of workers, perhaps in the auto industry, who are well paid.

As mentioned above, La Crosse is at the lower end of the distribution in terms of the proportion of workers who earn at least $25,000. It has the second-lowest proportions of well-paid workers in Manufacturing and Services and the lowest proportion in Government and Retail Trade. As we saw above, its average earnings per worker is also fairly low when compared to the other areas. It does have five industries in which at least one-half of the workers have earnings at or above $25,000. It is just that there are several industries in which there are not many workers with higher earnings.

Milwaukee has earnings above the norm. It has two industries, Manufacturing and Wholesale Trade, in which the highest proportion of workers earn at least $25,000. Some 83% of Manufacturing workers in Milwaukee earn at least $25,000. It is no wonder that when these jobs disappear, some pain is felt, and when they reappear, there is rejoicing. In no other industry does it have the largest percentage of well-paid workers, but then it is not near the smallest percentages of higher earnings' workers in any industries.

Racine and Rock Counties look fairly similar in terms of the distribution of workers earning at least $25,000. Racine has the highest proportion of Government and Retail Trade workers with earnings at or above $25,000 and the smallest percentage of similarly paid workers in Transportation/Utilities/Communication. Both areas are on the low side in Construction. The net effect in both is a middle ground, with about one-half of all workers with earnings at or above $25,000.

The "rest of the state" is commonly found with the smallest percentage of workers with earnings at or above $25,000. Despite this position at the bottom, it actually has the lowest percentage with higher earnings in only three industries: Manufacturing, Construction, and Services. Since two of these are the largest employers in the area, their payrolls help to place the rest of the state at the bottom of the geographic areas examined.

Proportion of Higher-Paid, Service-Sector Workers, 1996

A commonly held view is that service-sector employment does not pay very well. Communities that see growth in this sector fear that they will not be able to maintain the same level of income as did households which were tied to manufacturing employment. Is this, in fact, the case? Rather than go through some elaborate analysis, we do a simple computation: compare both the relative and absolute number of workers with earnings equal to or more than $25,000 in manufacturing with the number in the service sector. For most applications, including this one, the service sector is said to include: Transportation/Utilities/Communication, Wholesale and Retail Trade, FIRE, Services, and Government. Table 19 on the next page reveals the pertinent figures.

Table 19

Number and Percent of Service Sector Workers that Earn $25,000+ Annually, 1996

	Areas								
	Brown County	Dane County	Fox Cities	Kenosha County	LaCrosse County	Metro Milwaukee	Racine County	Rock County	Rest of State
Number	42,383	107,299	28,604	12,230	14,619	265,331	16,177	13,931	170,596
Percent	46%	52%	39%	37%	31%	46%	33%	34%	27%

Service workers are those who work in Transportation/Utilities/Communications, Wholesale and Retail Trade, FIRE, Services, and Government

Source: Center for Urban Initiatives and Research, UWM, ES202 Database, 1996

In Brown County in 1996, some 42,383 workers in the service sector had average earnings at or above $25,000. This compares with 19,246 workers in manufacturing in the county. The percentage of higher-paid workers was larger in manufacturing (72%) than in the service sector (46%), but the absolute numbers are markedly greater in the service sector.

In Dane County, more than one-half of all service-sector workers have earnings of at least $25,000. In manufacturing, the figure is 75%. In absolute numbers, exaggerated by Dane's relatively larger service-sector base, the number of more highly paid service workers is 107,299, compared to only 21,386 in manufacturing.

In the Fox Cities, with their large and healthy manufacturing base, manufacturing does have more employees with earnings of at least $25,000 than does the service sector. Some 30,105 manufacturing workers (80% of all such workers) are in that earnings bracket, compared to 28,604 workers in the service sector (39% of such workers). The Fox Cities is one of only three areas in the state in which there are more workers in manufacturing than the service-sector with earnings of at least $25,000.

Kenosha has 37% of its service-sector workers and 69% of its manufacturing workers with earnings of at least $25,000 — but, given the greater preponderance of service workers, there are some 12,230 service workers, compared to 7,767 manufacturing workers with earnings of at least $25,000. This is the more-common pattern.

Relatively, La Crosse has more than twice as many more-highly-paid manufacturing workers, 63%, than service workers, 31% — but, in absolute number of workers, service workers with higher earnings win by a more than two-to-one margin: 14,619 compared to 6,621 in manufacturing.

Milwaukee has relatively highly paid manufacturing workers. Some 83% of such workers have earnings at or above $25,000, compared to only 46% of service-sector workers in the metropolitan area. But the size of the service sector is such that in absolute numbers, the higher-paid service workers outnumber those in manufacturing 265,331 to 145,718 — despite Milwaukee's having more of these better-paid, manufacturing workers than all of the other metropolitan areas combined.

Racine is one of the three areas of the state in which the number of workers in manufacturing surpasses the number in the service sector with earnings of at least $25,000 in 1996. Some 19,768 (77%) manufacturing workers, compared to 16,177 (33%) service-sector workers, had earnings of at least $25,000. This near-parity results in part from the modest percentage of service-sector workers with such earnings and in part from the relatively high percentage of manufacturing workers with such earnings.

Rock County has a situation similar to that in Racine: more manufacturing (16,971) than service-sector (13,931) workers have average earnings equal to or above $25,000. Relatively, there is no question but that manufacturing pays more: 81% of manufacturing workers compared to 34% of service-sector workers meet the guideline. The difference is larger manufacturing employment relative to other sectors of the economy.

As would be easily guessed, the "rest of the state" has but 27% of its service-sector workers and 56% of its Manufacturing-sector workers with earnings at or above $25,000. Both are the lowest figures for the nine areas — but, again, the service sector is large enough that its smaller percentage of better-paid workers still leaves it with more than 25,000 more workers in the service sector with earnings greater than or equal to $25,000: 170,596 in service versus 144,338 in manufacturing.

In sum, no absolute rule can be stated on whether manufacturing or the service sector has more, better-paid workers. In most instances, despite consistently higher percentages of manufacturing workers earning at least $25,000, absolutely, more service-sector workers earn that amount.

CONCLUSION

Although there are some similarities among the eight metropolitan areas and even the rest of the state, there are far more differences. These economies have many elements that differentiate them from one another. To understand better that which is driving each, each economy should be examined by itself. Assuming that each is like the others will lead to many erroneous conclusions about both the composition of the economies and what factors seem to be driving their growth.

In terms of trends which seem to be universally shared, there are very few. On most subjects, there is variation. A few shared characteristics, however, do emerge: 1) all areas of the state have been growing during the last five years in terms of employment; 2) multi-location employers have been adding many more employees than have single-site, independent employers; and, 3) about one-third of the employers in place in every area in 1991 had disappeared by 1996. Every other topic explored has at least one area that differs from the others. Often, it is two or three areas that differ, even among the metropolitan areas. The lesson learned is that to understand local economies better, one should examine them individually.

The author wishes to acknowledge and thank **M. Marc Thomas** and **Christine Cramer** of the University of Wisconsin-Milwaukee Center for Urban Initiatives and Research for their considerable assistance in assembling the data for and construction of the tables in this report.

About the Institute

The **Wisconsin Policy Research Institute** is a not-for-profit institute established to study public-policy issues affecting the state of Wisconsin.

Under the new federalism, government policy increasingly is made at the state and local levels. These public-policy decisions affect the lives of every citizen in the state. Our goal is to provide nonpartisan research on key issues that affect citizens living in Wisconsin, so that their elected representatives are able to make informed decisions to improve the quality of life and future of the state.

Our major priority is to improve the accountability of Wisconsin's government. State and local governments must be responsive to the citizenry, in terms of the programs they devise and the tax money they spend to implement them. Accountability should apply in every area to which the state devotes the public's funds.

The agenda for the Institute's activities directs attention and resources to the study of the following issues: education, welfare and social services, criminal justice, taxes and spending, and economic development.

We believe that the views of the citizens of Wisconsin should guide the decisions of government officials. To help accomplish this, we also conduct semiannual public-opinion polls that are structured to enable the citizens to inform these officials about how they view major statewide issues. These polls are disseminated through the media and made available to the general public and the legislative and executive branches of state government. It is essential that elected officials remember that all of the programs established and all of the money spent comes from the citizens of Wisconsin and is made available through their taxes. Public policy should reflect the real needs and concerns of all of the citizens of the state and not those of specific special-interest groups.