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**Northeast Ohio's Regional Economy:  
An Assessment of the Economic State of the Region and its Political Challenges**

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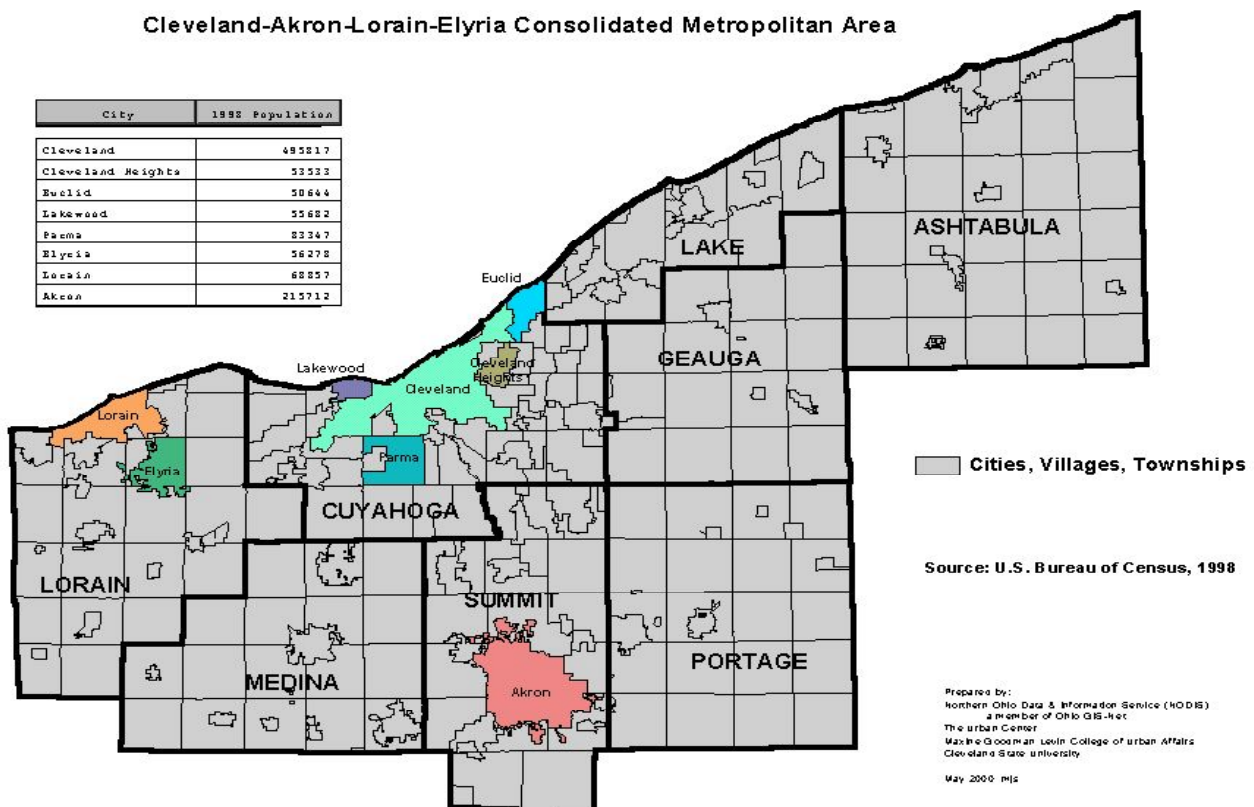
## **Northeast Ohio's Regional Economy: An Assessment of the Economic State of the Region and its Political Challenges**

The Cleveland-Akron metropolitan area in Northeast Ohio is of great interest to students of regional economic development for two reasons. First, it is a well-integrated, multi-nucleated, industrial economy that lacks a coordinating regional unit of government but still manages to make strategic investments through a dense network of private-public partnerships and the intervention of state government, along with the formal coordination of the regional highway system through the State's Department of transportation. While partnerships are common, local governments within this region are highly competitive for both middle and upper-income residents and business facilities. The second reason for interest in the region is the profound economic restructuring that occurred in the late 1970s and early 1980s. There is interest in the mechanisms that were developed to accommodate changes in the competitive reality that local businesses faced in the marketplace. In this paper we first review this economic history and introduce the economic geography of the region. These sections are then followed by a discussion of the size and structure of the regional economy, emphasizing the relationship between the region's two major urban centers, Akron and Cleveland, not only to each other but also to newer "edge cities." We also spend time considering the meaning of "high technology" employment in the context of a highly industrialized regional economy. The technological content of work deserves attention because it is often asserted that the slow rate of regional employment growth is attributable to weakness in the economy's technological base. We demonstrate that to the contrary, employment in this region is technologically sophisticated, especially in the area around Cleveland. Regional efforts at economic coordination are discussed in the next to last section of the paper, which is followed by a set of concluding observations.

At the end of the Second World War, Northeast Ohio consisted of a series of mostly self-contained factory cities buffered from each other by extensive farmland and connected by electric inter-urban railways (also known as trolley cars) and city streets. The system of limited access highways (popularly called interstate highways) that define the region today was not begun until the mid-1950s, and these separate economies were

connected to the rest of the United States through a dense web of rail lines.<sup>1</sup> Northeast Ohio's series of prototypical American industrial cities centered on Cleveland and its immediate suburbs (Map 1); Akron—America's rubber and tire capital until the 1970s is 67 kilometers to the south; 20 kilometers to the east is the city of Euclid—known for heavy industrial production; and about 50 kilometers to the west are the twin manufacturing cities of Lorain and Elyria. These five cities did not constitute an integrated regional economy at the end of the war because each had its own labor, housing, and retail markets. The connection between them was based on what they made—these were cities that produced both consumer durable goods and capital goods in unionized factories. Wage levels between the cities were largely linked through union agreements, not by the ebb and flow of commuting workers.

Map 1



<sup>1</sup> See "Highways" in the *Encyclopedia of Cleveland History*, <http://ech.cwru.edu/scripts/article.asp?ID=H2>

Since the late mid- to late-1960s, however, much has changed. The region is a critical node on the intercontinental railway and interstate highway systems and Cleveland's airport is the third hub in Continental Airline's domestic route system. Just to the south of Akron lies a second regional airport that offers limited competition and price discipline to Cleveland's dominant air carrier.

A number of factors converged during the 1960s to begin the pattern of migration out of the central cities: inter-urban electric trolleys disappeared and were replaced by limited access, high-speed highways; truck transportation became the dominant means of hauling finished goods; peoples' wealth increased—enabling them to afford new housing; the central business districts of these cities have lost their dominant position as a location for retailing; and the ethnic concentration of the region's large cities switched from predominately first and second-generation Central and Southern European ethnics to a mix of Appalachian whites and African-Americans. The result of the population and employment migration out of Cleveland to the south, east, and west; out of Akron to the north, west, and east; and out of Lorain and Elyria to the east and south—all flowing along the interstate highway system—was the formation of integrated, region wide, labor, housing, and retail markets. In other words, a group of quasi-autonomous cities located in the northeast corner of one of the larger states in the United States grew into a region that crosses eight counties. It is an economic region that, while contained within one state, is not governed by a single local government.

A range of statistical records is maintained for this broad economic region. The largest piece of geography is the Cleveland-Akron Consolidated Metropolitan Statistical Area (CMSA), which covers the functional regional economy.<sup>2</sup> The CMSA is, in turn,

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<sup>2</sup> In the United States local area statistics are collected for metropolitan areas, which are most often defined as a central city with a population of at least 50,000, the county it is located in (which is called the central county), and all surrounding counties where at least 15% of the employed population commute into the central county for work. If rural counties surround the metropolitan area, it is termed a Metropolitan Statistical Area (MSA). When two or more metropolitan areas abut, and workers stream into both central counties from at least one of the outlying counties, then each metropolitan area is termed a Primary Metropolitan Statistical Area (PMSA) and the amalgamated urbanized area is termed a Consolidated Metropolitan Statistical Area (CMSA). The PMSA where the city of Cleveland is located has three central cities: Cleveland, Lorain, and Elyria. Akron is the center of the PMSA to Cleveland's south. These two PMSAs form the Cleveland-Akron CMSA. See: Hill, Edward W., John Brennan, and Harold L. Wolman, "What is a Central City in the United States? Applying a statistical technique for developing taxonomies," *Urban Studies* (November 1998) 35(11): 1935-1969.

composed of two smaller statistical units—the Cleveland Primary Metropolitan Statistical Area (PMSA) and Akron’s PMSA. In 1990, the CMSA was home to 2,759,823 people living on 7,537 square kilometers, with an average population density of 366 people per square kilometer, or 948 per square mile. The Cleveland PMSA, excluding Lorain and Elyria, is the largest component of the CMSA, and contained 2,344 square kilometers and 1,831,122 people.<sup>3</sup> The portion of Cleveland’s PMSA around Lorain and Elyria is home to 271,126 people, with a population density of 493 per square kilometer. Akron’s PMSA has a population of 657,575 living on 2,344 square kilometers for an average density of 280 per square kilometer. All of the cities in the CMSA with populations in excess of 50,00 are identified on Map 1, along with the boundaries of the eight counties in the CMSA. The locations of the smaller cities in the CMSA are also outlined on the map.

Northeast Ohio is typical of many major metropolitan areas in the Northeast and Midwestern United States.<sup>4</sup> The region grew geographically and experienced a huge boom in suburban housing beginning in the 1950s, and continuing until the late 1970s. The growth pattern was triggered and sustained by several of what historian Robert Fishman called the ten top influences on the American metropolis over the past 50 years: the construction of interstate highways, the invention of the declining balance mortgage and the creation of secondary mortgage markets that lowered the effective cost and risk of homeownership, and the economic restructuring in the traditional heavy manufacturing industries in the 1970s and 1980s.<sup>5</sup>

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<sup>3</sup> U.S. Bureau of the Census, Population Division, Population and Housing Programs Branch, Table 1: Land Area, Population, and Density for States and Counties, 1990, [www.census.gov/population/www/censusdata/density.html](http://www.census.gov/population/www/censusdata/density.html)

<sup>4</sup> Brennan, John and Edward W. Hill, “Where Are the Jobs?: Cities, Suburbs, and the Competition for Employment,” with John Brennan, *Survey Series* (Washington, DC: The Brookings Institution, Center on Urban and Metropolitan Policy, November, 1999) <http://www.brook.edu/es/urban/hillfa.pdf>

<sup>5</sup> “The Top Ten Influences on the American Metropolis of the Past 50 Years: A Survey Conducted by Robert Fishman,” *Housing Facts and Findings*, Vol. 1, Number 4 (Winter, 1999) [www.fanniemae.foundation.org/research/facts/wi99sl.html](http://www.fanniemae.foundation.org/research/facts/wi99sl.html)

### **Recent Economic History: The Comeback Region**<sup>6</sup>

Northeast Ohio reversed its two-decade-old pattern of population decline during the 1990s. The estimated population of the CMSA increased from 1990 to 1998 by 1.8 percent to 2.9 million people, after dropping by 2.7 percent from 1980 to 1990. The Cleveland portion of the CMSA experienced a 0.9 percent increase in population while the Akron portion had a 4.8 percent increase. Obviously there is shifting between the two portions of the CMSA taking place. The most dramatic population change has been in the region's four major cities (See Table 1).

Table 1

#### **City Population Change in Northeast Ohio**

City	Population 1998	Percent Change			
		1970 to 1980	1980 to 1990	1990 to 1998	1970 to 1998
Cleveland	495,817	-23.6	-11.9	-1.9	-34.0
Akron	215,712	-13.9	-6.0	-3.3	-21.7
Lorain	68,857	-3.9	-5.5	-3.4	-12.3
Elyria	56,278	7.3	-1.4	-0.8	4.9

At the end of the Second World War the city of Cleveland had nearly one million residents; the population in 1998 was estimated to be about 495,000. There was incredible crowding in the city's housing stock in the immediate post-war period, thus the initial movement to the suburbs, with the accompanying decreases in the city's population, was socially desirable. The early suburban migration was a reflection of new households spilling across city borders, taking advantage of innovations in housing finance and cheaper construction techniques to raise their families in more affordable housing. This early migration was a push from a crowded nest.

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<sup>6</sup> See Hill, Edward W., "Cleveland, Ohio: Manufacturing Matters; Services Are Strengthened; But Earnings Erode," (p. 103-140) and Shanahan, James L. and W. Richard Goe, "Akron: Ohio: Regional Economy at the Turning Point," (p.9-46) in Richard D. Bingham and Randall W. Eberts (eds.) *Economic Restructuring of the American Midwest*, Boston: Kluwer Academic Press, 1988; Hill, Edward W. "The Cleveland Economy: A Case Study of Economic Restructuring, in W.Dennis Keating, Norman Krumholz and David Perry (eds.) *Cleveland: A Metropolitan Reader* (Kent, OH: Kent State University Press, 1995): 53-86; and Hill, Edward W., "Comeback Cleveland by the Numbers: The Economy, Employment and Education," in David Sweet, David Beech, and Kathryn Wertheim Hexter (eds.) *The New American City Looks to its Regional Future* (Athens, OH: Ohio University Press, 1999): 77-100.

The migration did not stop in the early post-war years, and its consequences became less benign for the region's core cities, although these movements did improve the individual welfare of those that moved and their families. From 1970 to 1998, Cleveland's population dropped by 34 percent, while Akron's population decreased by nearly 22 percent. This migration had two components. The first was a flight from racially integrating schools. The second was a movement toward a set of residential services that were considered by the movers to be superior to those services available in the central city for the same tax cost. What is encouraging is the notable slowing of population loss during the 1990s, especially in the city of Cleveland.<sup>7</sup> This is an indication that either all those who could afford to move have done so, or that the region's core cities are offering services and amenities that can compete for residents who have choices.

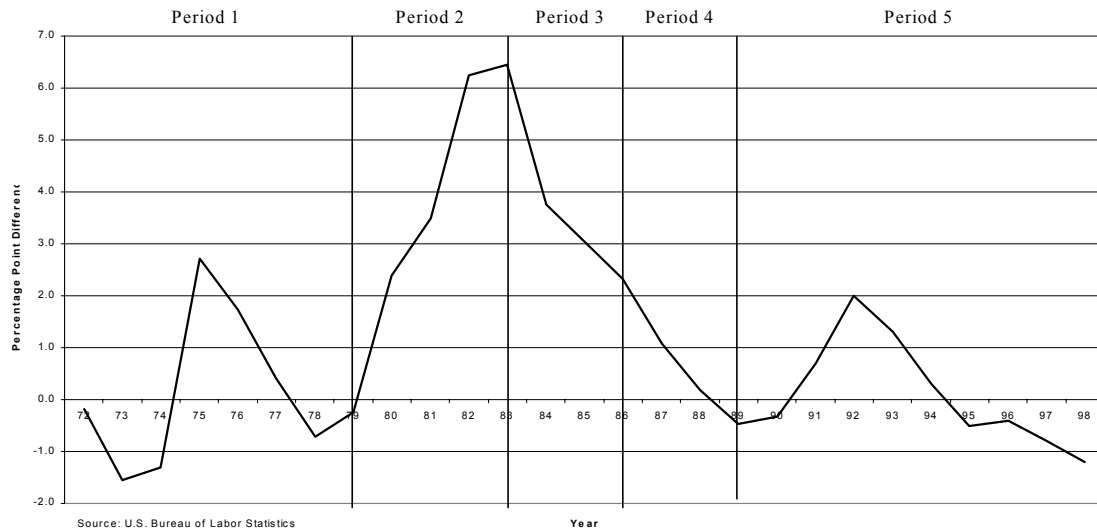
Examining a region's annual unemployment rate relative to the national average unemployment rate is a good near-term barometer of the performance of the regional economy. These data are plotted in Figure 1 for 1972 to 1998, where the unemployment rate in the CMSA is subtracted from the national rate and the difference in the two rates is plotted. If the unemployment rate in the Cleveland-Akron Consolidated Metropolitan Area is greater than the national unemployment rate then the difference is positive and the line will be above the X-axis of the graph. The graph depicts five periods in the recent economic history of the Cleveland-Akron region. From 1972 to 1979 the unemployment rate for the CMSA was cyclical and more volatile than the national average unemployment rate, responding vigorously to the recession of the mid-1970s. Unemployment in the 1976 recession was disproportionately concentrated in the manufacturing sector; this was a precursor to the fundamental restructuring that took place from 1979 to 1983. The economy crashed in 1979, bottomed out in 1983, and then began an unsteady recovery until 1985 to 1986. The recovery was firmly established after 1986. The unemployment rate for the nation was significantly below that of both the CMSA and state for a decade, from 1979 to 1989.

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<sup>7</sup> This pattern is repeated in a number of older, formerly industrial cities in the United States, see the special issue of the *Brookings Review* (Summer 2000) on U.S. urban policy: [http://www.brook.edu/press/review/rev\\_des.htm](http://www.brook.edu/press/review/rev_des.htm)



**Figure 1**  
**Percentage Point Difference Between the CMSA's Annual Unemployment Rate and the National Rate: 1972 to 1998**

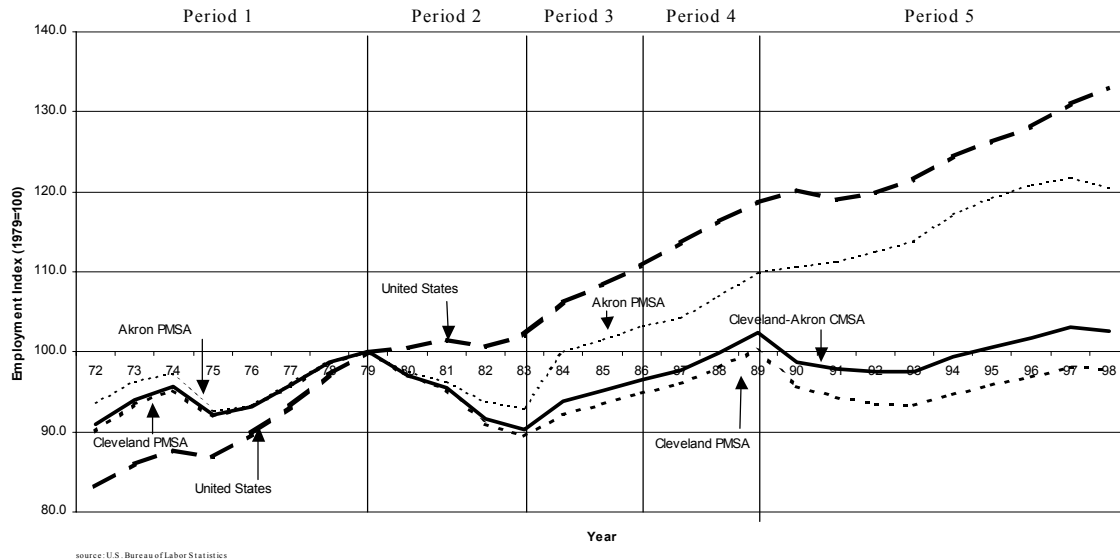


Generally, the unemployment rate for the CMSA was below the national rate from 1988 on, marking the economic “comeback” of Northeast Ohio. Movements in the unemployment rate mark four of the five periods of recent economic history; the fifth period is more evident when employment figures are examined (Figure 2).

An employment growth index for the Cleveland-Akron CMSA (the solid dark line), the nation (the dashed dark line), Akron’s PMSA (the lighter dotted line), and Cleveland’s PMSA (the darker dotted line) are plotted in Figure 2. The index is benchmarked to the level of employment in 1979 because it is the region’s peak level of employment before the intense period of restructuring took place from 1979 to 1985 (1979 marks the end of what we termed the “old economic order”<sup>8</sup>). Therefore, when the index has a value of 100, employment is at the same level as it was in 1979.

<sup>8</sup> Hill, Edward W. , “The Cleveland Economy: A Case Study of Economic Restructuring”, in W. Dennis Keating, Norman Krumholz and David Perry (eds.) *Cleveland: A Metropolitan Reader* (Kent, OH: Kent State University Press, 1995): 53-86.

**Figure 2**  
**Employment Growth Index for the US, Cleveland-Akron CMSA, Cleveland PMSA, and Akron PMSA: 1972 to 1998**



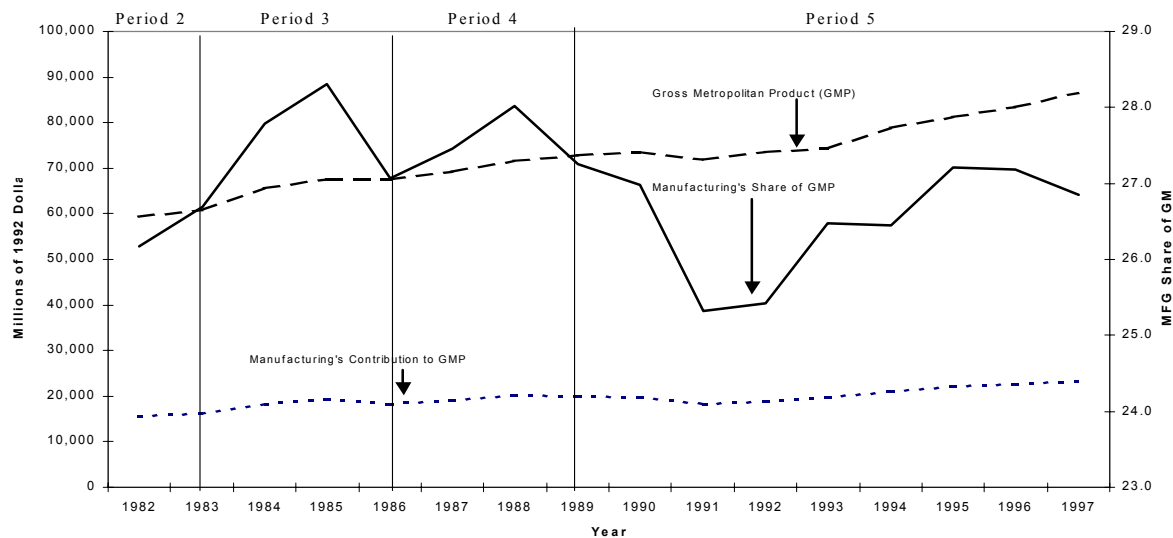
The employment growth index follows the pattern exhibited in the previous figure for the first four periods. The employment index for the region bottomed out in 1983 then grew at a steady pace until 1989. Employment growth recovered more quickly in the Akron PMSA than in the Cleveland PMSA over this time period, marking the emergence of northern Summit County (the county that contains Akron and the place where the suburbs of both Cleveland and Akron abut) as one of the region's population and employment growth spots. Summit County is a prime destination of employers and households who have been moving out of the Cleveland PMSA, mostly from Cleveland's inner-ring suburbs. The fifth period of the region's recent economic history became evident with the mild recession that began in 1989. Employment growth has been largely anemic from 1989 to 1998 in the Cleveland PMSA, and the growth rate in the entire CMSA has been modest.

## **The Cleveland-Akron Economy**

In 1997, the Cleveland-Akron Consolidated Metropolitan Statistical Area had a Gross Metropolitan Product (GMP) between \$93.0 and \$93.2 billion.<sup>9</sup> In size, this economy is between Ireland's and Finland's; it is a bit smaller than the San Jose metropolitan area (\$96 billion) and a little more than half the size of southeast Michigan (the Detroit, Flint, and Ann Arbor metropolitan areas). Per capita income in 1998 was \$29,239 in the Cleveland PMSA and \$26,934 in Akron's PMSA, which is higher than the per capita income of any European nation.<sup>10</sup>

Despite the swings in employment the region has experienced over the past two decades, real (inflation adjusted) Gross Metropolitan Product (GMP) has not had a significant downturn after the economy bottomed out in 1983 (Figure 3).

Figure 3  
Real Gross Metropolitan Product for the Cleveland-Akron CMSA: 1982 to 1997 (\$1992)



Source: See note 10.

<sup>9</sup> This is between \$86 billion and \$87 billion in 1992 dollars.

<sup>10</sup> The estimates of Gross Metropolitan Product are from the Urban Center, Cleveland State University. We estimate GMP by taking the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce's estimates of Gross State Product (GSP) and multiply that number by the CMSA's share of state personal income (also obtained from the BEA). We use the same method to estimate the region's share of manufacturing's contribution to GSP. We obtain these data from: [www.bea.doc.gov/bea/regional/](http://www.bea.doc.gov/bea/regional/). Estimates of per capita personal income are from [www.bea.doc.gov/bea/regional/bearfacts/](http://www.bea.doc.gov/bea/regional/bearfacts/). The data on European economies are 1997 and 1998 estimates from the *World Economic Factbook, 1999* produced by the CIA and available from Global Statistics: <http://www.xist.org/countries/countries.htm>.

Despite the major restructuring experienced by the region's manufacturing firms and plants, manufacturing's contribution to GMP only declined in the 1989-1992 recession. The enormity of this fact is made clear by the fact that manufacturing employment in the Cleveland PMSA dropped by 28 percent from 1979 to 1987. Akron's PMSA witnessed a 23 percent loss in manufacturing employment over the same time period. In 1983, the real value of manufacturing GMP was \$16.2 billion in 1992 dollars. In 1997, manufacturing's contribution to GMP was \$23.2 billion in 1992 dollars. Coming out of the most recent recession, manufacturing's share of GMP increased from 25.3 percent of GMP to a peak of 27.2 percent in 1996, dropping to 26.9 percent in 1997.

### **The Location of Work**

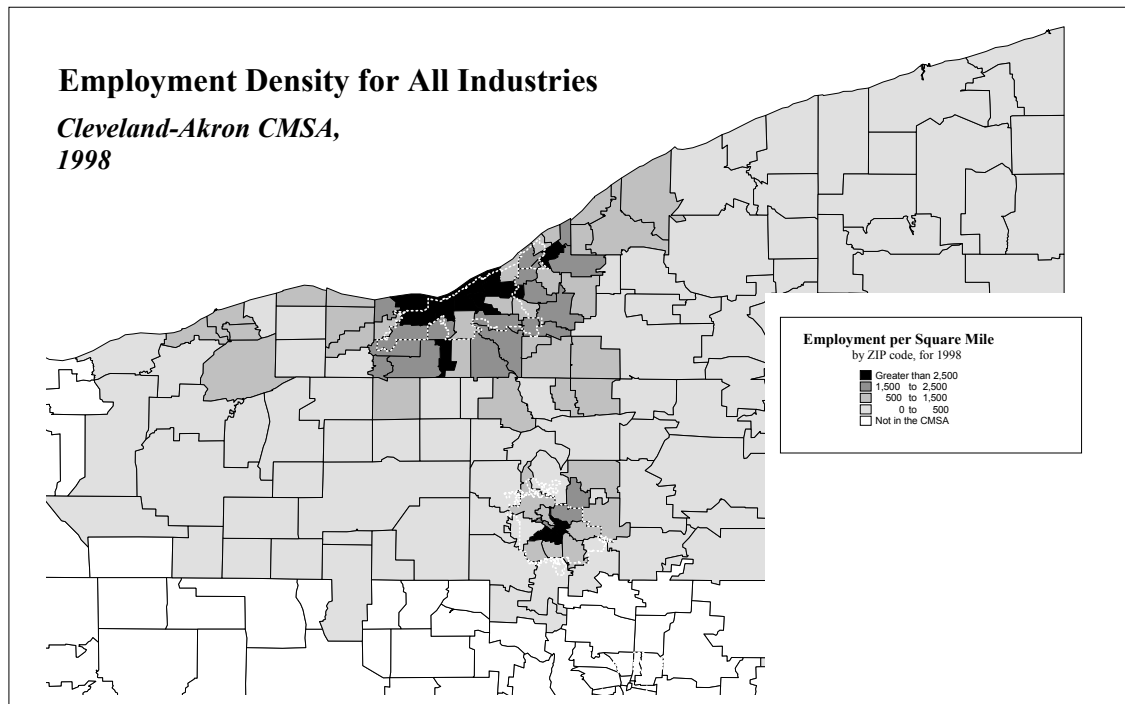
The fact that the region is a highly integrated economy is evident from the second map, which depicts employment per square mile in 1998 plotted by zip code areas.<sup>11</sup> The densest areas of employment are colored in black (with more than 2,500 private sector employees per square mile), followed by dark gray (1,500 to 2,500 per square mile), medium gray (500 to 1,500 per square mile), and light gray (from 0 to 500 per square mile). The densest areas of employment are within the cities of Cleveland and Akron (both are outlined in dashed white lines), and in two well-recognized regional "edge cities."<sup>12</sup> One of these edge cities is at the intersection of two interstate highways—the major north-south highway between Cleveland and Akron and the other is the region's major east-west connector. The second edge city is located in the high-status, high-income eastern suburbs of Cleveland, which has attracted a number of major corporate headquarters. The next densest areas of employment are in a set of municipalities that follow the highway system around Cleveland and are in the city of Akron and one of its suburbs.

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<sup>11</sup> These are postal delivery codes that are smaller than municipalities and cover fairly homogeneous areas.

<sup>12</sup> Bingham et al., *Beyond Edge Cities* (NY: Garland Publishing, 1997).

Map 2



Source: ES-202, The Urban Center, Cleveland State University

The location of the 44 corporate and divisional headquarters of firms with more than \$500 million in revenues in 1998 is provided in Table 2. The table shows that the city of Cleveland is the location of 16 of these headquarters, a bit more than one-third of the total. Akron is home to four of the firms, including Goodyear Tire and Rubber Company—the region’s largest firm. The others are located in various suburbs along the interstate highway network. GenCorp is in Akron’s edge city of Fairlawn, near where Goodrich was headquartered before moving to Charlotte, North Carolina.

It is clear from the data presented in Table 2 that business locations near a major airport, or in the central business district in one of the region’s major cities, is not a competitive imperative in an era of global competition and a highly mobile workforce.

Location in a “nice” working environment near the exit ramp of a limited access highway is a more important means of attracting a workforce.<sup>13</sup>

Table 2  
Corporate Headquarters in Northeast Ohio with 1998 Revenues Above \$500 Million

Rank by Revenue	Firm	City	Industry or Product
1	Goodyear Tire and Rubber	Akron	Rubber/Chemicals
2	TRW, Inc.	Cleveland	Motor vehicle parts
3	National City Corp	Cleveland	Banking
4	Keycorp	Cleveland	Banking
5	Eaton Corp	Cleveland	Motor vehicle parts
6	FirstEnergy	Akron	Electric utility
7	Progressive Corp	Mayfield Heights	Insurance
8	Sherwin-Williams Co	Cleveland	Chemicals
9	Parker Hannifin Corp	Mayfield Heights	Fluid power systems
10	OfficeMax	Shaker Heights	National office supplies retail
11	LTV	Cleveland	Metals
12	B.F. Goodrich*	Richfield	Aerospace parts
13	Roadway Express	Akron	Trucking
14	NACCO Industries	Mayfield Heights	Industrial trucks & tractors
15	M.A. Hanna	Cleveland	Plastics
16	American Greetings	Brooklyn	Greeting cards
17	Pioneer Standard Electronics	Garfield Heights	Electronics distribution
18	GenCorp	Fairlawn	Aerospace & automotive parts
19	RPM, Inc	Medina	Paints & coatings
20	Lubrizol	Wickliffe	Specialty chemicals
21	Applied Industrial Tech	Cleveland	Industrial products
22	Ferro Corp	Cleveland	Specialty chemicals
23	Geon Co	Westlake	Plastics
24	Jo Ann Stores	Hudson	National fabric & craft retail
25	Lincoln Electric Co	Euclid	Motors & generators
26	Cole National Corp	Cleveland	National optical retailing
27	MTD Products	Strongsville	Lawn tools
28	A. Schulman Inc	Akron	Plastics
29	Travelcenters, Inc	Westlake	Highway rest stop facilities
30	Charter One Financial	Cleveland	Banking
31	International Management Inc	Cleveland	Sports management & marketing
32	Westfield Companies	Westfield Center	Insurance
33	Spitzer Management	Elyria	Regional automotive retail
34	Invacare Corp	Elyria	Medical instruments
35	Steris Corp	Mentor	Electro medical equipment
36	Great Lakes Cheese Co	Hiram	Cheese/food production
37	Forest City Enterprises	Cleveland	Real estate development
38	Nordson Corp	Westlake	Adhesives and coatings
39	NCS Healthcare	Cleveland	Skilled nursing facilities
40	Olympic Steel, Inc	Bedford Heights	Steel service center
41	Cater Jones, Inc	Kent	Regional lumber retail
42	The Richard F. Jacobs Group	Westlake	Real estate development
43	Park-Ohio Holdings	Cleveland	Manufacturing
44	OM Group	Cleveland	Agricultural chemicals

Source: Greater Cleveland Growth Association, *Fortune*, *Crain's Cleveland Business*, and the *Plain Dealer*

<sup>13</sup> See: Cohen, Natalie, “Business Location Decision-Making and the Cities: Brining Companies Back,” (Washington, DC: The Brookings Institution, Center for Urban and Metropolitan Policy, April, 2000) [www.brook.edu/urban/](http://www.brook.edu/urban/)

Both competitive and regional realities are evident from the location of employment in the Cleveland-Akron CMSA. The data displayed in Table 3 on the location of private sector employment by postal zip code were used to examine the locations of work in the Cleveland-Akron CMSA in 1997.<sup>14</sup> Employment in the Cleveland-Akron CMSA is predominantly located in the suburbs of the two major central cities. Nearly 70 percent of all private sector employment is suburbanized and the majority of that employment (40 percent of the total) is located in the suburbs that experienced their greatest growth spurt immediately after the Second World War. A string of recently developed suburbs, which now contain 12.6 percent of the region's employment, connects the Akron and Cleveland PMSAs.

Table 3  
**Distribution of Private Employment Cleveland-Akron CMSA: 1997**

	Total	Percent Distribution
Cleveland & Akron City Total	366,940	30.8%
Central Business District	173,581	14.6%
Balance of City	193,359	16.2%
Suburban Total	822,974	69.2%
Distressed suburbs	110,323	9.3%
Pre-war suburbs	85,725	7.2%
Early post-war suburbs	476,476	40.0%
Recently developed suburbs	150,450	12.6%
<b>Total</b>	<b>1,189,914</b>	<b>100.0%</b>

Source: ES-202, The Urban Center, Cleveland State University

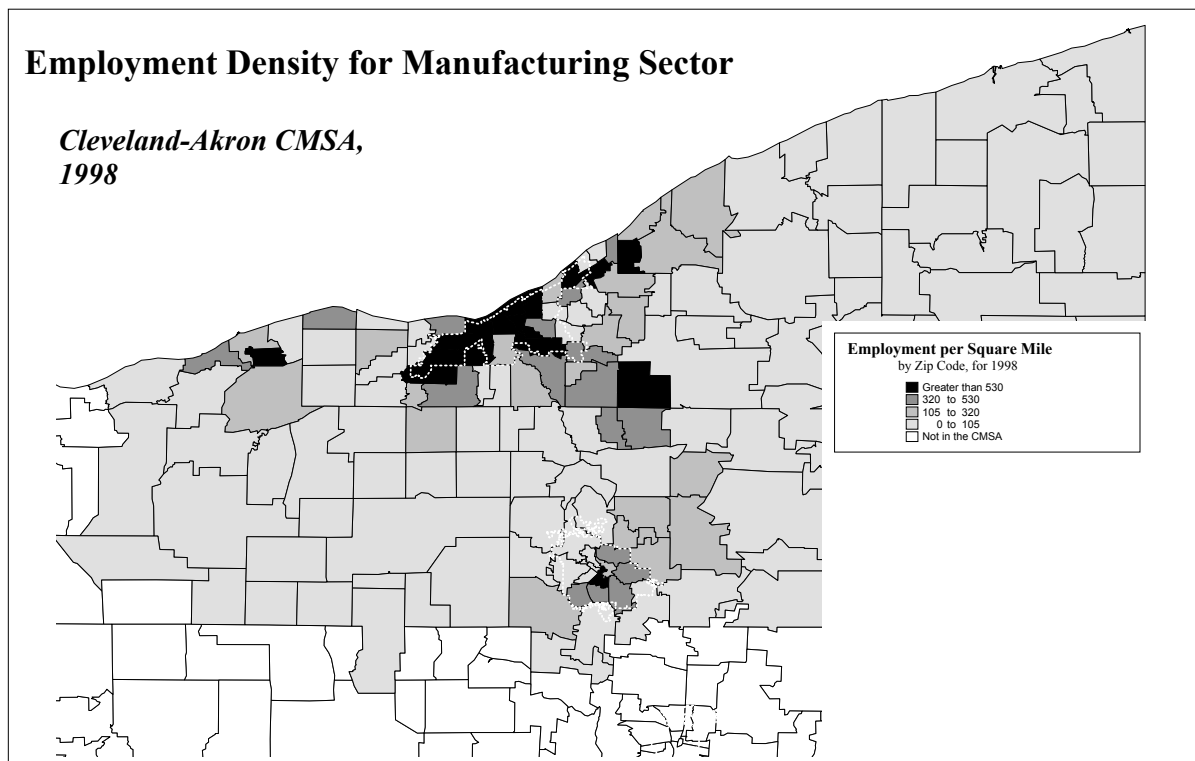
The data in Table 3 and in Map 2 show that portions of Cleveland and Akron's central cities outside of the central business districts are important nodes of employment in their own right. Both Cleveland and Akron have large manufacturing and distribution employment bases within their borders. Additionally, not all suburbs are well off. Nearly 10 percent of the region's employment is located in distressed suburbs. One of

<sup>14</sup> The data are from Brennan, John and Edward W. Hill "Employment Specialization Within Ohio's Metropolitan Areas," in Brennan and Hill (Eds.) *Where Is The Renaissance? Examining the Competitive Advantage of America's Cities in the Competition for Work* (Washington, DC: The Brookings Institution, forthcoming). These data are from unemployment compensation tax payments made by employers to the state of Ohio. The data are aggregated to the zip code level so that the identity of specific establishments are not be revealed.

these suburbs is a low-income inner-ring suburb that is an extension of Cleveland's African-American poverty area. Two are older industrial cities in the Cleveland PMSA that have been engulfed by the spread of the region's geography.

Maps 3 to 7 depict the employment densities of the major private industrial sectors in the region. Map 3 is of the density of manufacturing employment. The densest concentrations are in the city of Cleveland, where the density is in excess of 530 jobs per square mile. This density is maintained in the eastern suburbs of Solon and Euclid and in the western city of Elyria and a portion of Akron. The next level of density is between 320 and 530 jobs per square mile. These zip codes are concentrated in the southeastern suburbs of Cleveland and parts of Akron. Capital and technology-intensive manufacturing is the competitive advantage of the Cleveland-Akron regional economy.

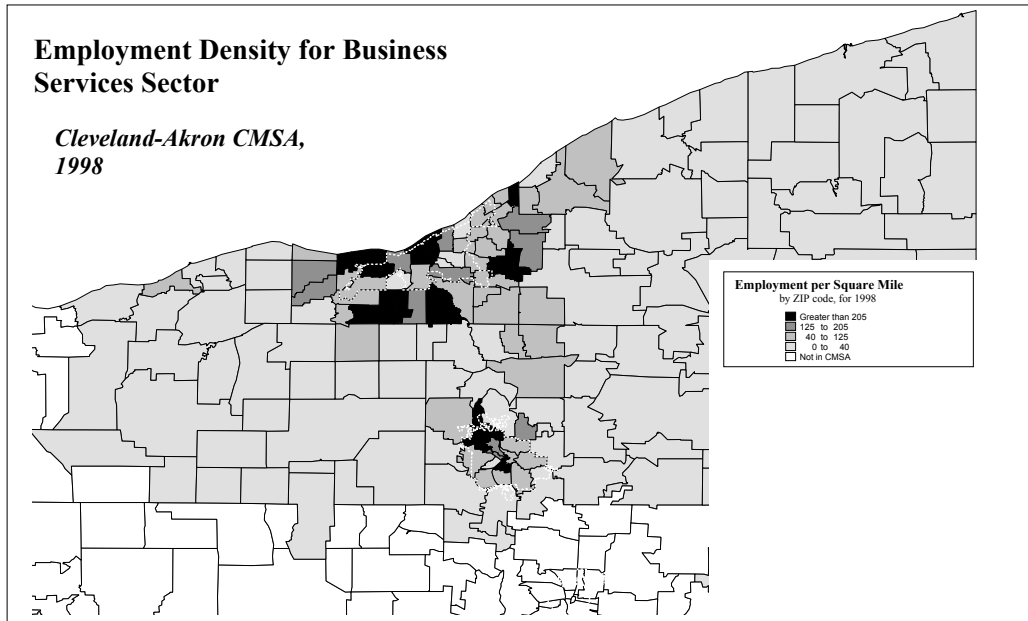
Map 3



Source: ES-202, The Urban Center, Cleveland State University

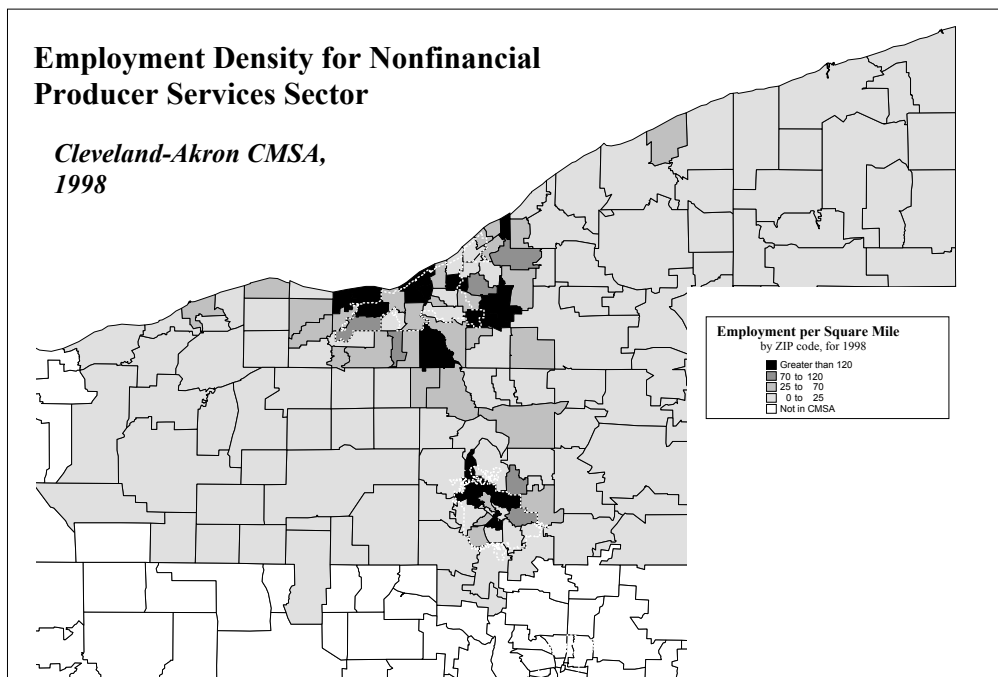


Map 4



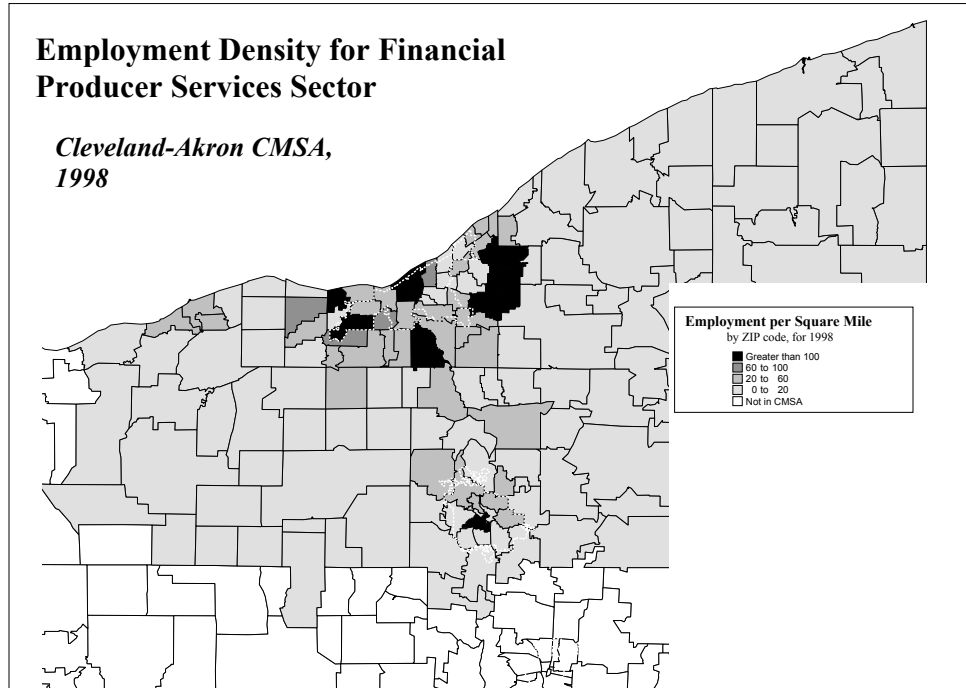
Source: ES-202, The Urban Center, Cleveland State University

Map 5



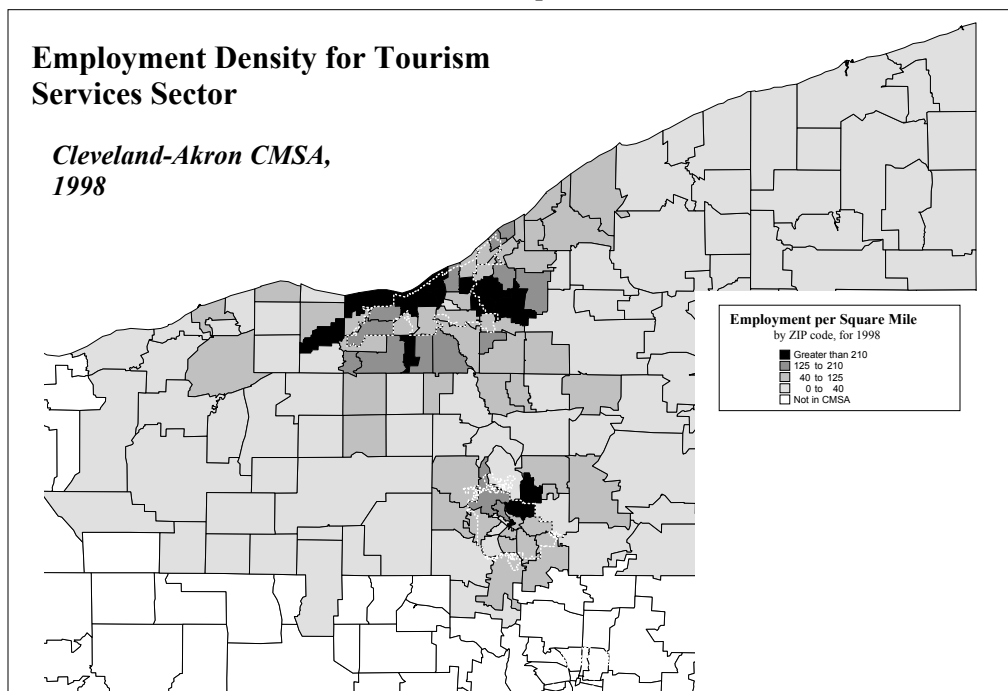
Source: ES-202, The Urban Center, Cleveland State University

Map 6



Source: ES-202, The Urban Center, Cleveland State University

Map 7



Source: ES-202, The Urban Center, Cleveland State University

The region is arguably one of the nations' and world's centers of capital and technology-intensive manufacturing excellence. It has demonstrated a competitive advantage in steel and metalworking, specialty chemicals (especially paints and coatings), automotive parts and assembly, plastic products, and insurance.<sup>15</sup> Local economic development efforts have identified emerging areas of competitive advantage in the instruments and industrial controls industry (especially in the area of factory automation), the medical implements and device industry (an industry with an established corporate base that utilizes the region's machining tradition and the new-found prominence of several of the region's hospital complexes in medical research), and possibly in the lighting industry. A common technological thread tying together the plastics products industry with paints, coatings, and roofing is basic research in polymer chemistry. It is important to understand that the competitive foundation of the economy is region wide. Research and development efforts in the polymer industry are concentrated near the city of Akron because of the historical legacy of the region's tire and rubber companies and the research prominence of the University of Akron's Edison Program in Polymer Research. The metals industry, along with associated machining and tool and die plants are scattered throughout the region—as are plastics products industries. Paints and chemicals industries and corporate headquarters are disproportionately located in Cleveland and its suburbs.

Interviews conducted with industrial site location consultants led to the conclusion that the region is viewed as an integrative whole by the business, or facility, location market. The excellence of highway and rail transport networks shifts the locational calculus to the availability of land and buildings along with a supply of labor and away from access to any particular place within the region. This means that local governments are very competitive when it comes to attracting industry from both inside and outside of the region because none can expect to have an advantage in the competition. The competitive nature of recruiting wars is enhanced by the fact that local

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<sup>15</sup> Hill, Edward W. and John Brennan, "A Methodology for Identifying the Drivers of Industrial Clusters: The foundation of regional competitive advantage," *Economic Development Quarterly* (February 2000) 14(1): 65-96.

governments benefit from both municipal income taxes and property taxes that are assessed on buildings, equipment, and inventory.

The density of business service employment (Map 4) shows the competitive position of the central cities. The largest concentrations of zip codes with the highest densities (in excess of 205 employees per square mile) are in the two major cities, but the “edge cities” to south and east of Cleveland and to Akron’s immediate north in the city of Fairlawn are evident. This competitive pattern holds for the density of nonfinancial producer services (Map 5) and financial producer services (Map 6). A break in the dominant pattern is evident in the density of employment in the tourism services sector (Map 7), which is driven to a large extent by restaurant employment. The densest concentration is in Cleveland, with a density that exceeds 210 employees per square mile in the central business district and riverfront entertainment district, with similar densities existing in Akron near its university.

### **Employment Market Share**

One way of gauging the competitive position of cities is to examine the share of the metropolitan market for private sector employment that is located within their borders.<sup>16</sup> The city of Cleveland contained 28 percent of the private sector employment in the Cleveland PMSA in 1997 and Akron accounted for nearly 36 percent of employment in its PMSA. (Table 4) The two cities account for nearly 30 percent of total employment in the CMSA. However, their share of the regional employment market has dropped during the recent business cycle recovery. Northeast Ohio’s two major central cities compare favorably with similar cities in the northeastern and midwestern United States.

The data in Table 4 are listed for most of the metropolitan areas in the Northeast and Midwest that have a central city that is among the 100 largest in the nation. The metropolitan areas are arrayed in the table according to their 1997 employment market share. If the data system lists two central cities in the same metropolitan area, then both

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<sup>16</sup> We use private sector employment for two reasons. The first is practical. The special abstract from County Business Patterns that is part of the State of the Cities Data System (SOCDS) covers only private sector employers who pay Social Security taxes. The second reason is that private sector jobs are located for competitive reasons while public sector jobs locate due to a mix of market and political influences.

Table 4  
**Central City Market Share of the Metropolitan Private Employment  
Market in 1992 and 1997 for Large Northeast-Midwestern Cities**  
**Ranked by 1997 Market Share**

Central City	State	Central City Share of Private Employment		Change in Share 1992-1997
		1992	1997	
Indianapolis	IN	69.7	69.9	0.19
Madison	WI	67.9	64.2	-3.69
Columbus	OH	55.7	54.4	-1.27
Fort Wayne	IN	56.7	53.9	-2.86
Toledo	OH	55.9	51.9	-3.99
<b>Kansas City-Kansas City</b>	<b>MO-KS</b>	48.2	44.4	-3.81
Kansas City	MO	39.5	36.9	-2.63
Kansas City	KS	8.6	7.5	-1.18
Louisville	KY	46.5	41.2	-5.27
Rochester	NY	42.9	39.9	-3.03
Milwaukee	WI	41.1	36.9	-4.12
Cincinnati	OH	40.4	33.6	-6.71
Chicago	IL	35.0	32.1	-2.86
Wilmington	DE	27.3	31.8	4.50
Buffalo	NY	35.2	31.7	-3.56
Pittsburgh	PA	31.8	30.9	-0.94
Baltimore	MD	32.9	30.5	-2.44
<b>Minneapolis-St. Paul</b>	<b>MN</b>	35.3	30.5	-4.75
Minneapolis	MN	22.0	19.0	-3.03
St. Paul	MN	13.3	11.6	-1.72
<b>Cleveland-Akron CMSA</b>	<b>OH</b>	<b>32.0</b>	<b>29.8</b>	<b>-2.20</b>
<b>Cleveland</b>	<b>OH</b>	<b>29.8</b>	<b>28.0</b>	<b>-1.80</b>
<b>Akron</b>	<b>OH</b>	<b>39.7</b>	<b>35.8</b>	<b>-3.84</b>
Philadelphia	PA	30.0	27.9	-2.04
Providence	RI	27.6	26.6	-1.05
Grand Rapids	MI	31.6	25.9	-5.67
Dayton	OH	29.0	25.9	-3.10
<b>Boston NECMA</b>	<b>MA-NH</b>	23.6	23.4	-0.21
Boston	MA	18.0	18.0	-0.03
Worcester	MA	3.5	3.3	-0.15
Manchester	NH	2.1	2.1	-0.04
St. Louis	MO	24.6	23.3	-1.34
Hartford	CT	22.8	20.2	-2.62
Detroit	MI	16.2	13.8	-2.39

Source: U.S. Department of Housing and Urban Development, SOCDs

are shown and their employment is totaled to reflect major central city employment in that metropolitan area. This is the case for the Boston region, Kansas City, and Minneapolis-St. Paul. The data for the Cleveland and Akron PMSAs are reported separately and then totaled to reflect the CMSA. In most cases there are other central cities in the metropolitan areas. Employment in these smaller central cities is not reported because these are not among the 100 largest in the United States.<sup>17</sup>

The three central cities with the largest market shares of employment in the Midwest are state capitals and they also have large portions of their metropolitan area's land areas. Yet even Madison, Wisconsin and Columbus, Ohio lost market share over the past five years to their suburbs. Most of the other central cities on the list contain between 30 and 40 percent of their region's employment. Cleveland and Akron appear to be representative of these cities.

The low rate of employment creation over this five-year period is of greater concern than declining market share. Table 5 lists the private sector employment growth rates in the central cities and suburbs of the same metropolitan areas as listed in Table 4. The metropolitan areas are listed in order of the differences in their central city and suburban employment growth rates. The city listed first, Wilmington, Delaware, experienced a 32.2 percent central city employment growth rate and a 6.4 percent suburban rate, for a city-suburban differential of 25.7 percentage points. The city of Cleveland had a city growth rate of 2.9 percent over the five-year period, and a suburban rate of 12.3 percent for a negative 9.4 percentage point differential. This placed it eighth among the cities listed. Akron fared much less well. Its central city employment growth rate was similar to that of Cleveland's, at 2.5 percent, but its suburbs grew at a much faster rate than did Cleveland's suburbs. As we mentioned earlier this reflects the regionalization of the economy.

During the most recent stage of the business cycle, Akron and Cleveland have managed to stabilize their population losses and remain competitive in the regional

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<sup>17</sup> Employment for these smaller central cities is included in the suburban employment total for the metropolitan area. For example, the Cleveland PMSA has two additional central cities, Elyria and Lorain; their employment figures are part of the suburban totals. Additionally, Cleveland has one extremely poor suburb, East Cleveland, and the city of Euclid, which was once considered to be a central city. Employment in both of these places is part of the "suburban" totals. New York City, Newark, and Jersey City were omitted from Table 4 because data for other PMSAs in the New York CMSA are not available.

Table 5  
**Suburban and Central City Private Employment Growth Rates for  
Large Northeast-Midwestern MSAs: 1992 to 1997**  
**Ranked by the Size of the Difference in City and Suburban Rates**

Central City	State	Employment Percentage		Percentage Point Difference (City - Suburb)
		Growth Rates 1992 to 1997		
		Central City	Suburb	
Wilmington	DE	32.2	6.4	25.7
Indianapolis	IN	14.0	12.9	1.0
Boston NECMA	MA-NH	11.3	12.6	-1.3
Boston	MA	12.1		
Worcester	MA	7.4		
Manchester	NH	10.3		
Pittsburgh	PA	3.1	7.7	-4.6
Providence	RI	1.8	7.3	-5.5
Columbus	OH	14.1	20.2	-6.0
St. Louis	MO	4.9	12.9	-8.0
<b>Cleveland</b>	<b>OH</b>	<b>2.9</b>	<b>12.3</b>	<b>-9.4</b>
Philadelphia	PA	0.5	11.0	-10.5
Rochester	NY	-4.5	8.2	-12.7
Baltimore	MD	1.4	13.5	-12.1
Fort Wayne	IN	7.4	20.6	-13.2
Chicago	IL	0.6	14.4	-13.8
Hartford	CT	-11.5	3.3	-14.8
Buffalo	NY	-8.7	7.1	-15.9
Dayton	OH	-1.4	15.3	-16.6
Kansas City-Kansas City	MO-KS	5.8	23.3	-17.5
Kansas City	MO	7.2		
Kansas City	KS	-0.7		
Toledo	OH	4.3	22.5	-18.2
<b>Akron</b>	<b>OH</b>	<b>2.5</b>	<b>20.7</b>	<b>-18.2</b>
Milwaukee	WI	-1.4	17.2	-18.6
Detroit	MI	-1.5	18.9	-20.4
Madison	WI	13.9	34.3	-20.4
Louisville	KY	2.9	27.5	-24.6
Minneapolis-St. Paul	MN	2.3	26.9	-24.6
Minneapolis	MN	1.9		
St. Paul	MN	2.9		
Cincinnati	OH	-6.3	25.1	-31.4
Grand Rapids	MI	0.6	32.7	-32.2

Source: U.S. Department of Housing and Urban Development, SOCDS

competition for employment, but much of the region's meager employment growth is locating in a series of "edge cities" at the intersection of interstate highways. The economy is spreading across larger portions of the landscape; however, in so doing it may be gaining production efficiencies because the region's competitive advantage lies in high value-added manufacturing.

### **Technologically Intensive Employment**

Much local commentary about the economy bemoans the weakness of the region's "high-technology" sector. Part of this keening is economically rational, because rapid employment growth and new spurts of wealth creation take place more easily in an economy that is generating new products—goods and services that are in the early stages of the product life cycle. The products and the companies of Northeast Ohio are in the middle of their product life cycles. However, there is a confusion in these "high tech" arguments that is common in "pop economics." In today's excitement over the prospects and realities of the "new economy" and the frenzy over the impact of high technology industries on society, an important analytical step has been missing—agreement about the phenomena being discussed. There appear to be as many definitions of high technology industries as there are analysts. The common conception of high technology is an amalgam of information technology industries, computer and software industries, and pharmaceutical and biotechnology industries. This definition is clearly too limited. A second common mistake in conceptualizing high technology industries is to confuse the technological content of the product with new products—goods and services that have been recently created and are in the early stages of the product life cycle. Both of these approaches leave out products that are intense users of technology but lie outside of these common frames of understanding, such as chemicals, petroleum, and automobile production. In the case of Northeast Ohio and its core cities of Akron and Cleveland, the challenge is to adopt information technologies into existing products and processes to reinvigorate products and to increase the value of these products.



Daniel Hecker defined high tech industries according to the characteristics of an industry's work force.<sup>18</sup> An industry was considered to be high tech if "employment in both research and development and in all technology-oriented occupations accounted for a proportion of employment that was at least twice the average for all industries in the Occupational Employment Statistics survey... These industries have at least 6 research and development workers per thousand workers and 76 technology-oriented workers per thousand workers." Hecker identifies two groups of high technology industries. The first is a set of 10 high-technology intensive industries where both ratios are at least five times the national average. These include eight manufacturing industries and two service industries: industrial chemicals; drugs; computer and office equipment; electronic components; aerospace; search and navigation equipment; measuring and control devices; computer and data processing services; and research and development testing services. The next set of two service industries and 17 manufacturing industries meet his criteria but are rarely part of any list of "new economy" companies or products.<sup>19</sup> The importance of Hecker's research for the Cleveland-Akron CMSA is that a large portion of this second list of industries is contained in the region's demonstrated competitive advantage.<sup>20</sup> There is reason to believe that the region specializes in products that are intense users of technology, but the products in these industries are not infant products.

Kurt Usowski, of the Office of Policy Development and Research of the U.S. Department of Housing and Urban Development, has made an important step in cutting through the analytical clutter by providing a definition of a high technology industry that is both rigorous and driven by revealed preferences—high technology industries are defined by the way narrowly defined industries use specific types of occupations that are the developers and users of technology. Usowski builds upon Hecker's research, but the

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<sup>18</sup> Hecker, Daniel, "High-technology Employment: A Broader View," *Monthly Labor Review* (June, 1999): 18-28.

<sup>19</sup> These industries are: plastics materials and synthetics; soaps, cleaners and toilet goods; paint and allied products; agricultural chemicals; miscellaneous chemical processes; petroleum refining; ordnance and accessories; engines and turbines; construction and related machinery; special industrial machinery; general industrial machinery; electric distribution equipment; household audio and video equipment; motor vehicles and equipment; medical equipment, instruments and supplies; photographic equipment and supplies; engineering and architectural services; and management and public relations services.

<sup>20</sup> See Hill and Brennan, *Economic Development Quarterly*, op. cit.

data he uses allows for the estimation of technology-intense production at the city and metropolitan level. Usowski examined the *Dictionary of Occupational Titles* for detailed occupational descriptions that contained key words associated with rapidly evolving technology (he examined more than 12,700 titles).<sup>21</sup> He then aggregated the data into nearly 500 non-governmental occupations. If more than half of the detailed occupations in each of the 500 aggregated occupation category contained one of the technology key words then the aggregated occupation was classified as being technology intensive. These occupations were used with an industry-occupation matrix to determine the proportion of each industry's work force that is technology intensive. This estimated "technological proportion of employment" was then used to compute the number of technologically intense workers in each industry in each location in the County Business Patterns extract in the State of the Cities Data System (SOCDS), assuming that the proportion was constant across all metropolitan areas. Even though healthcare employment is technologically intense, the health services industry (SIC 80) was excluded because it serves a predominantly local population and the implicit interest in high technology industries is to promote a set of industries that can become part of the region's export base.

Table 6 replicates a portion of the output from Usowski's work, as modified by the Urban Center at the Levin College of Urban Affairs at Cleveland State University. The table reports on the fraction of all private sector positions that are technologically intense in a metropolitan area and then in the central city of the metropolitan area. We next calculated the central city's share of metropolitan private employment and of technological employment, and then the central city's location quotient (LQ) of technological employment. The LQ was calculated to determine if technologically intense work is disproportionately located in central cities or not. If the LQ is greater than 1.0, then technologically intense work is disproportionately city-based; if it is equal to 1.0 it is proportionate to the city's market share of private employment; and if it is less than 1.0 the city's share of technologically intense employment is less than its share of total private employment.

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<sup>21</sup> The key words are: tech, engineer, architect, data, computer, communication, analyst, network, electro, aero, math, design, programmer, drafter, research, bio, chemist, and science and its derivatives. (Usowski, May 23, 2000, personal communication).

Table 6

**The Specialization of Central Cities in Technologically Intensive Employment  
(technologically intensive does not include employment in the medical industries, SIC 80)**

Metropolitan Area	Technology-Intensive Share of Private Employment		1997 City Market Share		Location Quotient
	Metro Area	Central City	Private Employment	Technology	Technology Employment
				Intensive Employment	
Cleveland-Akron	6.7%	6.3%	29.7%	28.0%	0.94
Akron	6.1%	5.1%	35.8%	30.1%	0.84
Cleveland	6.9%	6.8%	28.0%	27.5%	0.98
All Areas Total	7.0%	6.9%	43.0%	41.9%	0.97
Atlanta	6.5%	6.9%	19.9%	21.1%	1.06
Austin-San Antonio	7.6%	7.5%	79.3%	78.2%	0.99
Austin	9.5%	9.5%	73.7%	73.6%	1.00
San Antonio	6.1%	6.1%	83.8%	84.0%	1.00
Boston NECMA	8.6%	8.0%	18.0%	16.8%	0.93
Minneapolis-St. Paul	7.0%	7.0%	19.0%	19.0%	1.00
San Francisco CMSA	8.9%	8.1%	36.8%	33.3%	0.90
Oakland	7.4%	5.8%	17.2%	13.5%	0.78
San Francisco	7.0%	6.9%	55.3%	54.1%	0.98
San Jose	12.3%	11.0%	36.3%	32.3%	0.89
Portland, Oregon	7.0%	6.8%	43.5%	42.0%	0.97
Baltimore	6.8%	6.8%	30.5%	30.4%	1.00
Buffalo	6.4%	6.0%	31.7%	29.7%	0.94
Charlotte	6.5%	7.0%	52.9%	57.2%	1.08
Chicago	7.3%	7.3%	32.1%	32.2%	1.00
Cincinnati	6.6%	6.8%	33.6%	35.0%	1.04
Columbus, Ohio	6.0%	5.9%	54.4%	53.2%	0.98
Dayton	7.4%	7.2%	25.9%	25.1%	0.97
Detroit	6.4%	6.4%	13.8%	13.8%	1.00
Fort Wayne	7.5%	6.7%	53.9%	47.8%	0.89
Grand Rapids	6.7%	6.8%	25.9%	26.0%	1.01
Hartford	7.2%	7.0%	20.2%	19.8%	0.98
Indianapolis	6.1%	6.0%	69.9%	67.8%	0.97
Louisville	6.1%	5.9%	41.2%	39.9%	0.97
Milwaukee	7.7%	7.7%	36.9%	37.1%	1.00
Philadelphia	7.5%	7.6%	27.9%	28.6%	1.02
Pittsburgh	6.8%	7.6%	30.9%	34.7%	1.12
Providence	6.7%	7.7%	26.6%	30.4%	1.15
Rochester, New York	8.9%	11.0%	39.9%	49.3%	1.24
St. Louis	6.7%	7.5%	23.3%	25.9%	1.11
Toledo	6.4%	5.9%	51.9%	48.1%	0.93
Wilmington, DE	6.1%	5.2%	31.8%	26.9%	0.85

Source: U.S. Department of Housing and Urban Development, State of the Cities Data Systems.

The table is divided into three sections. The first reports the results of the calculations for the Cleveland-Akron CMSA, the Cleveland PMSA, and the Akron PMSA. Most of the results are for MSAs or PMSAs. In a few cases where all of the components of the CMSA were reported in the database and the consolidated metropolitan area is relevant to Northeast Ohio, they are reported in Table 6. The second section of the table consists of the national average across all of the 114 metropolitan areas in the SOCDS and of a group of metropolitan areas that have a reputation of being hot beds of “high technology” employment: Atlanta, Austin-San Antonio, Boston, Minneapolis-St. Paul, the San Francisco CMSA, and Portland, Oregon. The third section of the table reports the results for metropolitan areas located in the Northeast and Midwest that are similar to the Akron or Cleveland PMSAs.

Concerns that Northeast Ohio is not a high technology economy are misplaced. It is not a new product economy and the industries in which it has a competitive advantage are intense users of technological occupations. This is evidenced by the close correspondence between the industries in the region’s competitive clusters and the industries in Hecker’s list of “other high technology” industries. The region is lacking in a competitive base of industries that Hecker identifies as “high technology intense.”

The SOCDS data show that both the Cleveland PMSA and the city of Cleveland are near the U.S. average for large metropolitan areas in the proportion of the private sector workforce employed in non-medical, technologically intense industries. The location quotient for the city of Cleveland is 0.98, which is near the national average LQ of 0.97 and is higher than a number of central cities in metropolitan areas that have achieved reputations as high technology hot spots—the three central cities in the Boston region have an LQ of 0.93 and San Jose has a technology LQ of 0.89. The only central city with a LQ much higher than Cleveland’s is Atlanta, even though Atlanta has a smaller share of its metropolitan and central city employment in technologically intense industries. The major difference between the Cleveland PMSA and the other high technology hot spots is the share of metropolitan private employment in technology intensive industries. Only four of the technological hot spots have much larger proportions of metropolitan private employment in technologically intense industries than does the Cleveland PMSA—Austin at 9.5 percent, Boston at 8.5 percent, Oakland at 7.4

percent, and San Jose at 12.3 percent. Only seven of the 21 metropolitan areas in the third section of Table 6 have seven percent or more of their employment in technologically intense industries: Chicago, Dayton, Fort Wayne, Hartford, Milwaukee, Philadelphia, and Rochester, New York. Ten of these central cities have larger shares of their employment base in technologically intense industries than does the city of Cleveland.

An inspection of the data in the lower portion of Table 6 reveals an unexpected result, assuming that the conventional wisdom is correct that a concentration of employment in technologically intense industries is unambiguously desirable: Many of the metropolitan areas and central cities with greater concentrations of employment in technologically intense industries have performed worse than Cleveland in terms of employment generation. The lesson to be learned is that technological intensity does not drive economies—products, product innovation, business strategies, and sales are the drivers.<sup>22</sup>

The technological drag on the Cleveland-Akron CMSA is located in the fastest growing portion of the region—Akron's PMSA. The city of Akron's share of employment in technological industries is 5.1 percent and the PMSA's share is 6.1 percent. Akron's technology LQ is 0.84, which is the lowest of any MSA listed in Table 6. One of the reasons for this result is the size of the city and PMSA and the degree to which it is integrated into the CMSA. The data indicate that in metropolitan areas with multiple large central cities one will lag substantially behind the other in terms of its technological specialization. Given the nature of industrial clustering behavior this should be expected. The shares of employment in technological positions in San Antonio city and its MSA are three percentage points lower than in Austin. Boston's share of technology employment is much higher than that of Worcester and Manchester.

The real issue for the Akron PMSA, as the smaller metropolitan area in the region, is its competitive role in the region and the full integration of its resources into the regional economy. The region as a whole should be concerned about the ability of its businesses to stimulate new product development off of its rich industrial base and

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<sup>22</sup> "When Economies Converge: Boss Talk with Eaton Corporation's Chairman Stephen R. Hardis," *Wall Street Journal*, June 22, 2000, p. B1.

heritage. Northeast Ohio is a technologically dependent economy, one that adapts technologies to a mature existing product base. One of the major barriers the region confronts is a change in the way it makes economic investments and stimulates innovation.

When the Cleveland economy crashed in the late 1970s and early 1980s, an organization formed by the business community, Cleveland Tomorrow, led a concerted regional effort to reinvest and reinvigorate the regional economy. A large portion of Cleveland Tomorrow's energy was focused on the city of Cleveland, but they also formed a number of subsidiary organizations that focused on specific regional economic problems. These organizations included the Edison Biotech Institute in Cleveland, the Edison Polymer Institute in Akron, the Cleveland Advanced Manufacturing Program (which is region-wide in mission), and a very practical labor-management body known as the Work in Northeast Ohio Council. Cleveland Tomorrow spun these subsidiaries off as they matured and achieved independent funding and constituency bases. Cleveland Tomorrow worked closely with elected officials, particularly the Governor, the Mayor of Cleveland, the regional delegation in the state legislature—who held a number of politically powerful leadership positions—throughout the 1980s, Cuyahoga County's Board of Commissioners, and the region's Congressional Delegation—which also had senior positions in the majority party in the early 1980s. Unfortunately, the heritage of cooperation and partnership has tattered over the past twenty years and regional political relationships have frayed, driven in no small measure by the confrontational political style of Cleveland's current mayor.

### **Public Sector Competition and Cooperation**

The federal system of government in the United States does not encourage or facilitate intergovernmental cooperation.<sup>23</sup> Local governmental authority derives from state government, and the Constitution of Ohio and its legislative history provide few provisions to promote coordinated action among or between local governments. The independence of local government in matters of zoning, land use, and local decision-

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<sup>23</sup> Barnes, William R. and Larry C. Ledebur, *The New Regional Economies: The U.S. Common Market and the Global Economy*, Thousand Oaks, CA: Sage Publications, 1998).

making is enshrined in the Home Rule provision of the State Constitution, making regional cooperation especially difficult, limiting the state's ability to intercede on these matters. State economic development programs take little or no cognizance of regions or regional economies and, most often, promote competition among jurisdictions even within a single regional economy rather than coordinated economic development strategies and program implementation. Where the state provides authority to localities for economic development, such as the state tax abatement program, these tools promote inter-jurisdictional competition even when it simply moves existing economic activity within the economic region.

There is no tradition and very little experience with cooperation between or among local governments in the metropolitan region. The political culture of the region and, particularly, that of the city of Cleveland, does not reflect or support a regional orientation or even recognition that the economy is regional rather than jurisdictional. Rhetoric and action of the city's political leadership has long reflected the view that Cleveland is dominant within the region, an orientation generating resentment throughout the rest of the metropolitan region and its political jurisdictions.

Elected political leadership of Cleveland has not supported, and often opposed, efforts to promote regional strategies or solutions to development problems. The prevailing view is that the city will participate in regional initiatives only if it can exercise significant control and if the benefits accrue primarily to Cleveland. This indifference and, at times, opposition to regional approaches has discouraged the search for regional and cooperative strategies to build the economy of the metropolitan region.

The region now confronts the need to develop a "world class" international airport.<sup>24</sup> Currently Cleveland Hopkins International Airport serves as a hub for Continental Airlines, which has indicated that current facilities are inadequate to support expansion of service and international flights. Proposals to develop the array of airports in Northeast Ohio into a regional air system or network have been rejected or ignored by

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<sup>24</sup> Hill, Edward W. "The Air Services Hierarchy in North America: A regional perspective on air services and economic development," *Economic Development Commentary*, (Fall 1998) 22(3): 30-38 and Hill, Edward W. *The Future of Northeast Ohio's Airports: Framing the Coming Debate* (Cleveland: The Urban Center, October 14, 1997) <http://cua6.csuohio.edu/~ucweb/pubs/airport.pdf>

the political leadership of the city of Cleveland, which owns and operates Cleveland Hopkins. This posture has effectively paralyzed and perhaps polarized regional discussions of alternative strategies, forcing other air facilities in the region, including the Akron-Canton Airport, to develop “go-it-alone” strategies. This regional course of action will ultimately result in non-complementary investments in the wider region and, in all probability, a more limited array of uncoordinated air services for the region.

In general, public sector organization for economic development is through political jurisdictions. Within the Cleveland-Akron metropolitan region Summit County, the city of Akron, Cuyahoga County and the city of Cleveland operate separate economic development departments with little evidence of coordination or cooperation. In Cuyahoga County, the primary public sector actor in the city is the Cleveland city government. The county economic development effort focuses more on jurisdictions of the County beyond the City of Cleveland. The only real regional development entity is the regional chamber of commerce—the Greater Cleveland Growth Association. The Growth Association often takes the lead in putting together the financing on complicated business location deals.

The exception to the fragmentation of public sector economic development programs is the Northeast Ohio Trade and Economic Consortium (NEOTEC).<sup>25</sup> This economic partnership, founded in 1996, seeks to “promote trade, business growth and economic opportunities throughout Northeast Ohio.” The organizing partners were six counties. Two, Summit and Portage, are in the Cleveland-Akron CMSA. Two others [Mahoning and Trumbull] are in the Youngstown MSA. The other two counties lie to the south of Summit County and Mahoning County. This geographical configuration reflects what is often considered the greater region of Northeast Ohio, with the exception of Cuyahoga County. Whether by choice or exclusion, Cuyahoga County is conspicuous by its absence from this regional economic development initiative.

NEOTEC emphasizes a regional approach based on cooperation rather than competition. Its mission includes building strategic partnerships with economic development organizations and public agencies. These include the Ohio Departments of Development and Transportation, major energy companies in the area, the Akron-Canton

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<sup>25</sup> <http://www.neotec.org/home.shtml>



Regional Airport, the Youngstown-Warren Airport, and the port authorities of each of the participating counties.

The consortium was founded around three guiding principles: enhancing rather than duplicating existing development efforts; defining county interests within regional goals; and one county, one vote.

NEOTEC has adopted these goals:

1. To develop Northeast Ohio's inter-modal infrastructure resources into a seamless transportation system that offers time, cost, and flexibility options to firms shipping to and from Northeast Ohio;
2. To promote the resources of Northeast Ohio on a national and international basis to improve the region's position and participation in the global economy;
3. To work with entities in the region to improve the competitive position of the region and enhance the region's capability to support business.

### **Business Networks for Regional Cooperation**

Chambers of Commerce are important organizations in economic development in Northeast Ohio. The Greater Cleveland Growth Association, the largest chamber in the United States when measured by the number of member companies, played a critical role in efforts to revitalize both the image and reality of Cleveland after the fiscal default of city government and the pervasive national notoriety surrounding the decline of manufacturing employment and the fire on the Cuyahoga River. The region's 50 largest corporations created a second business organization focused on the renaissance of Cleveland, Cleveland Tomorrow. The primary emphasis of Cleveland Tomorrow has been, and continues to be, the development of the city of Cleveland. Its most visible work has been on the downtown through large-scale projects, such as professional sports stadiums, and waterfront development projects such as the Great Lakes Science Center and the Rock and Roll Hall of Fame. Recently the organization has focused equal energy and financial resources on recreating housing markets in Cleveland's neighborhoods. In so doing, Cleveland Tomorrow has replicated the strategy it used in the arena of regional development—establishing intermediaries, sheltering them, and once they become viable spinning them off as independent entities.

Both the Greater Cleveland Growth Association and Cleveland lay claim to being regional organizations. This claim is accurate in terms of membership, but not in actions other than those providing constituency services to business membership and in the case of Cleveland Tomorrow supporting the organizations it spun off in the mid-1980s.

The Akron Regional Development Board [ARDB], the chamber for what they term the Greater Akron Region, encompasses the three southern counties of the metropolitan region, Summit, Portage, and Medina. ARDB has historically emphasized business development services and economic development.

Neither the Greater Cleveland Growth Association nor Cleveland Tomorrow have a rich history of collaboration with ARDB. Recently the three organizations plus the Cleveland Port Authority jointly sponsored a major study of industrial clusters and industry drivers in Northeast Ohio.<sup>26</sup> On one level this collaboration reflects a growing understanding that the economy is regional, not jurisdictional.

A new private sector organization was created in 1999, The Northeast Ohio Regional Business Council [RBC]. This organization was expressly established to create a regional focus for addressing critical development issues. The drivers behind this new entity are the Chief Executive Officers (CEOs) of major corporations in the region. Through their leadership and influence, chambers of commerce and other business organizations were brought to the table, with greater or lesser degrees of enthusiasm, as major partners and constituents of the Regional Business Council. The initial priorities established by RBC are work force development, regional airport capacity, and technology development. Implementation strategies around these priorities are still in the formative stages.

It is too early to assess the impact or potential impact of this new organization other than its regional emphasis and strong corporate backing. In designing the model for this new organization, the founders explicitly rejected the possibility of creating a public-private partnership to address the needs of the region. The public sector is nowhere represented in RBC. In this way it is the regional complement to Cleveland Tomorrow.

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<sup>26</sup> Kleinhenz, Jack, "An Introduction to the Northeast Ohio Clusters Project," *Economic Development Quarterly* 14(1) (February 2000): 63-64.

It is a private sector organization that is only now turning to develop a partnership with higher education to pursue some objectives.

### **Work Force Issues**

Work force development is serving as a major catalyst for starting the process of thinking about and addressing development issues in a regional context. Throughout most of the last two decades, the primary workforce issue in the Cleveland-Akron metropolitan region was the labor impacts of the industrial restructuring of the manufacturing base of the Midwest. Workforce development initiatives over this industrial watershed focused on political jurisdictions rather than the wider economic region or regional labor market. Until July 1, 2000, the primary federal program was Job Training Partnership Act (JTPA). This program created local public/private boards to administer core federal training dollars organized around political jurisdictions. Some larger city and county governments administered, and continue to administer, workforce development designed primarily to attract and retain industry and, in some cases, to alleviate poverty within their political jurisdictions.

In the mid-1990s, the region confronted a new challenge for which it was ill prepared. The industrial restructuring of the previous decade and a half weeded out weaker firms. The restructuring of surviving firms displaced labor, in part because of reductions in scale of enterprise, but also in part through advancing technology embedded in new capital equipment and production techniques that created a growing demand for skilled labor that could not be met from the existing regional labor pool. The corporate community began to express growing concern about the shortage of skilled workers, as well as the failures of the education [K-12 and higher education] and training systems to generate an adequate supply of workers with requisite skills.

In the second half of the 1990s, welfare reform became a preoccupation of the federal government and many or most state governments. The federal Family Independence Act mandated states, and through them, local governments, to implement aggressive strategies to reduce welfare rolls by preparing those capable of employment to move from “welfare to work.” Counties, the primary jurisdictions responsible for the local implementation of “welfare to work,” were effectively preempted from responding

to the growing cry for higher skilled workers by the monumental challenge posed by welfare reform.

The initial and most focused response in the demand for skilled workers and the criticism to education and training systems was through private sector constituency organizations, in most cases chambers of commerce. The Greater Cleveland Growth Association, primarily focused on Cleveland and Cuyahoga County, launched the Jobs and Workforce Initiative with the support of the Cleveland Foundation and the George Gund Foundation, the two largest local charitable foundations in the region, designed to be a “pioneering effort to build a skilled regional workforce prepared to meet the demands and embrace the opportunities the next century will bring.” The Akron Regional Development Board launched a similar Workforce Development Initiative for Medina, Portage, and Summit Counties. Through a broad-based coalition of public, private, and education partners the Workforce Institute of Lorain County was established as a countywide resource to address current and workforce needs through data and information, evaluation, and collective action. Lake County developed the Workforce Development Initiative focused primarily on facilitating the transition from school-to-work.

These private and quasi-private initiatives constitute the core of the response to the need to increase the supply of skilled workers in the region. They have tended to define their geographical scope in terms of jurisdictions and focus their activities within these boundaries. In 1996, a coalition of higher education institutions established the Northeast Ohio Workforce [NOW] Initiative to promote regional solutions to workforce development needs. NOW, recently renamed the Regional Workforce Partnership, is composed of the primary workforce development initiatives in the larger 14-county region of Northeast Ohio. This partnership has successfully refocused the dialogue about workforce development into a regional context and created a forum for the exploration of collaborative regional strategies for workforce development. The relatively new private sector Regional Business Council has identified workforce development as one of its three priority areas and the Regional Business Partnership as its workforce development initiative.

On July 1, 2000, the federal Workforce Investment Act of 1998 (WIA) replaces the federal Job Training Partnership Act (JTPA). Under this new legislation, the state seeks to create a “vertically integrated workforce investment system with all elements coordinated and complementary to promote Ohio’s economic competitiveness.” This comprehensive workforce system is intended to integrate investments made in welfare, education, economic development, and workforce development. The local expression of WIA is One Stop Centers. These centers are “required partners” of federally funded or mandated employment related programs ranging from welfare reform to trade adjustment assistance under the North American Free Trade Agreement [NAFTA].

The primary focus of One Stop service delivery systems are counties or configurations of counties. There are four One Stop Centers in the Cleveland/Akron Metropolitan Region: Cleveland/Cuyahoga County One Stop, Summit-Medina Employment and Training Connection, Portage-Geauga One Stop Inc., and the Employment Network of Lorain County.

Under WIA, each state had the opportunity to provide special incentives for regional strategies and coordination in the implementation of the one-stop delivery system. Ohio did not avail itself of this option. A regional consortium was created to discuss mutual issues, opportunities, and implementation steps, although the design and implementation of each proceeded independently. The outcome is a set of one-stop service delivery centers that have separate computer software systems that can neither communicate among the different centers of the region, nor share information across the region. Leadership of the centers, however, is in close communication and, hopefully, will develop strategies to coordinate the delivery of one-stop services across the regional labor market.

### **Concluding Observations**

The Cleveland-Akron metropolitan area region has evolved into a region with multiple employment centers, the two largest of which are the cities of Cleveland and Akron. They are in vigorous competition with a number of suburban “edge cities” and belts of employment located along the interstate highway system as places where work can locate. In this political-economic environment economic development coordination

and infrastructure investment takes place through two routes: the market places and higher level of governments. However, governmental coordination is weak, which is consistent with American political tradition.

The real coordination takes place in disaggregated form through the actions of thousands of decision-makers—employers and households—who respond to competitive public service bundles, taxes, and access to transportation infrastructure through the marketplace. Because the region's economic competitive advantage lies predominantly in the manufacturing sector those business locations that are most amenable to supporting manufacturing and the support services required for manufacturing are advantaged in the competition for work. These building sites tend to be large suburban parcels of land that can accommodate one story and two story buildings.

We have shown that political boundaries are largely irrelevant to the regional economy, except in the packages of local services and taxes municipalities provide to residents and businesses. There does not appear to be an economic logic that gives any particular location in the metropolitan area a competitive advantage over another, as long as the location has access to the interstate highway system. We have also documented that the region does not have an overarching formal political structure because the regional economy is larger than any one unit of local government—be it a municipality, county, or special district. Yet, the regional economy appears to be working in terms of producing employment, income, and wealth. This disaggregated approach to governance does have its costs. The largest and most immediate is the failure of government to provide an environment to develop a regional system of air services. (We have not addressed another regional political failure in this paper with economic consequences. This is the concentration of the region's poverty population in its central cities with associated costs in terms of local service delivery. The problem is less severe in Ohio's urban centers than in other places in the United States, however, due to the presence of a wage tax that is assessed on suburban residents who work in the region's cities.)

Local government does have an important role to play in the competitiveness of this economy. First, local government has the responsibility for linking its residents and properties to the regional markets, both physically and economically. The economic connections are the tax costs that are charged for locating in particular political

jurisdictions and the quality of the services that are provided for taxes paid. Second, regional coordination is dependent on interjurisdictional cooperation on issues of economic development infrastructure—this is where local government is failing in Northeast Ohio.

When Northeast Ohio was in a state of profound economic crisis in the early 1980s there was intergovernmental cooperation. This was a pragmatic response to a region-wide economic crisis, by a broad range of elected political leaders at the urgings of the region's business establishment, and a reaction to the political style of Cleveland's then-Mayor Voinovich, the leadership of current-Mayor Michael White during his first term in office, and the consistent political style of Akron's Mayor Donald Plusquellic. Now that the crisis has long past, separate local agendas dominate the local political scene and the state legislature is placing less emphasis on economic development issues and more emphasis on a state wide fiscal and social issues.

A series of metropolitan area case studies is currently being conducted for the Center on Urban and Metropolitan Policy at the Brookings Institution on sprawl. Recent meetings of the researchers has led to the conclusion that regional cooperation within the American political context requires a crisis that allows an external actor—sometimes a court and at other times a higher unit of government—to impose regional coordination. In the case of Northeast Ohio this coordination and cooperation was a reaction to economic crisis that threatened the fiscal well-being of the state and had national political consequences. In the current case of Los Angeles the region is responding to the pressures of development due to the combination of the requirements of the Endangered Species Act and the failure of the Los Angeles basin to meet federal air quality requirements. The state of Georgia has embarked on an ambitious program of coordinated transportation investment and land use controls, again in response to the Atlanta metropolitan region's failure to attain minimal federal air quality standards. Phoenix, Arizona is approaching land use and development investments from a regional perspective due to shortages in infrastructure and the state's role in approving and funding highway and water infrastructure. Metropolitan Chicago is a special case, where the revitalization of inner-city and inner-ring suburban real estate markets appears to be triggered by the fact that the outer suburbs have imposed five acre lot residential zoning

on an nearly uniform basis, increasing real estate development costs that reflect development pressures back into the core of the metropolitan region. In all of these cases, these external actions have triggered scarcity that translates into market forces that stimulate city-based development and regional governmental cooperation.

At the current time, Northeast Ohio is largely absent these pressures. However, there are two events that may trigger some mild form of cooperation—again through external actors. The first is a shortage of skilled labor. Regional businesses have formed a new organization to react to the regional shortage of skilled entry-level labor that is causing some nascent governmental cooperation to take place. The second is the finding of the State Supreme Court that the way the state participates in the financing of its primary and secondary educational system does not meet the standards of the state's constitution. The Court found that the system is too dependent on local sources of property wealth. This ruling will require the state legislature to find some way to pool property wealth for purposes of taxation that flows to schools. The diminution of pressure to accumulate property wealth for purposes of local educational finance may lessen local economic development competition.